Year 8 Annual Report
Massachusetts Small MS4 General Permit
Reporting Period: July 1, 2025-June 30, 2026

Please DO NOT attach any documents to this form. Instead, attach all requested documents to an email when submitting the form. Also ensure any websites included on this form are to publicly accessible sites

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, 2025 and June 30, 2026 unless otherwise requested.

Part I: Contact Information

Name of Municipality or Organization: Town of Medway

EPA NPDES Permit Number: MAR041132

Primary MS4 Program Manager Contact Information

Name: Stephanie Carlisle Title: Sustainability Coordinator

Street Address Line 1: 45 Holliston Street

Street Address Line 2:

City: Medway State: MA Zip Code: 02053

Email: scarlisle@medwayma.gov Phone Number: (508) 533-3275

Stormwater Management Program (SWMP) Information

SWMP Location (publicly available web address): https://medwayma.gov/reports/

Date SWMP was Last Updated: Jun 26, 2026

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.*

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 publicly available website:

☐ Updated system map due in year 10 with information from completed catchment investigations

☒ 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:

1. DPW staff and the GIS coordinator have collected GPS data on all outfalls, catch basins, manholes, BMPs and culverts. As new developments are completed, the GIS Coordinator GPS locates the new points which are then added to the base layer. Data on stormwater pipe diameter, material, age, and condition were added to the stormwater map based on field investigations and review of plan sets. During FY26, we continued to refine catchment delineations based on information collected in the field to meet our Year 10 requirements.
3. The DPW maintains all town properties including the school grounds; therefore, training for the DPW employees has been the priority. O&M training for other departments has not been developed at this time.
4. A Phase I Asset Management Plan for stormwater infrastructure was completed in the fall of 2024. Implementation of maintenance measures is ongoing.

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

☐ This is not applicable because there are no septic systems present

** Public education messages can be combined with other public education requirements as applicable (see Appendix F and H 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:

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 permittee 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)

Structural BMPs

☐ Installed a structural BMP as a demonstration project within the drainage area of the water quality limited water or its tributaries (due in Year 6). The type of BMP installed is (*e.g. biofiltration)*:

Total estimated phosphorus removed in **lbs/year** from the installed BMP: 0.39

☒ Any structural BMPs listed in Attachment 3 of Appendix F already existing or installed in the regulated area of the catchment/watershed 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.

- ○ No BMPs were installed
- ◉ The above referenced BMP information is attached to the email submission
- ○ The above referenced BMP information can be found at the following publicly available website:

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:

1. Distributed annual message encouraging the proper use and disposal of grass clippings and encouraging the proper use of slow-release and phosphorus-free fertilizers in June 2026.
2. The biofiltration basin at Burke-Memorial Elementary School, installed in 2019, was the town's first rain garden project and serves as a demonstration site for educating students, staff, and the public about stormwater management. The basin removes approximately 0.39 pounds of phosphorus annually. Since then, the town has implemented additional stormwater BMPs, including two subsurface infiltration basins at Cassidy Field Parking Lot in 2024 and 2025, adjacent to impaired Chicken Brook. BMPs have been installed on private property as a part of typical site development, and while these projects provide important water-quality benefits, municipal sites offer unique opportunities for public education and demonstration. The Middle School Stormwater Project, originally planned for 2025, was delayed due to uncertainty surrounding federal grant reimbursement. The town moved forward with the EPA earmark grant in spring 2026, with bidding anticipated in January 2027 and construction beginning in summer 2027. The project will include three biofiltration basins and two subsurface infiltration basins to treat runoff from the Middle School and a portion of Holliston Street. The Middle School is an ideal demonstration site due to its visibility from a major travel route, use as a polling location, and role as an educational facility. The project will provide an opportunity to demonstrate multiple stormwater BMPs while educating students, residents, and the broader community about

stormwater management and water-quality protection.
3. Attachment A identifies the structural controls that were inspected and maintained during Year 8. The Town is claiming a total of 72.21 lbs/year of phosphorus removal. During FY26, the Town retrofitted three BMPs to increase their storage capacity, resulting in 20.88 lbs/year of phosphorus removal. One of these BMPs had previously been credited with 1.25 lbs/year of phosphorus removal. Therefore, the retrofits resulted in a net increase of 19.63 lbs/year of phosphorus removal. In conjunction with these retrofit efforts, the Town partnered with its engineering consultant to review the phosphorus removal calculations for 29 existing BMPs. Based on this review, and following inspection and/or maintenance to confirm that the BMPs were functioning as intended, the Town was able to claim an additional 36.25 lbs/year of phosphorus removal. The remaining 15.08 lbs/year of phosphorus removal is from continued inspections and maintenance on BMPs identified in previous annual reports.

Charles River Watershed Phosphorus TMDL

Below, calculate your current phosphorus export rate by first filling out the individual phosphorus loading components (labeled [A], [B], [C], and [D]) and then computing your current phosphorus export rate using the equation provided.

Baseline phosphorus export rate from PCP Area, as identified in Appendix F **(lbs/year) [A]**:	882
Total phosphorus reduction from all nonstructural controls implemented **this reporting period (lbs/year) [B]**:	14.93
Total phosphorus reduction from all structural controls installed this reporting period and all previous years **(lbs/year) [C]**:	72.21
Phosphorus load increase due to development incurred since 2005 in **lbs/year [D]**:	107.32
Current phosphorus export rate from the PCP Area in **lbs/year [=A-(B+C)+D** from above]:	902.18

☐ The current phosphorus export rate from the PCP Area is equal to or less than the applicable Allowable Phosphorus Load plus the applicable Phosphorus Reduction Requirement multiplied by 0.8 (the year 8 milestone)

☒ I certify under penalty of law that all source control and treatment Best Management Practices being claimed for phosphorus reduction credit have been inspected, maintained and repaired in accordance with manufacturer or design specification. I certify that, to the best of my knowledge, all Best Management Practices being claimed for a phosphorus reduction credit are performing as originally designed.

☒ All municipally owned and maintained turf grass areas are being managed in accordance with Massachusetts Regulation 331 CMR 31 pertaining to proper use of fertilizers on turf grasses

☒ Implemented all nonstructural control measures in the watershed **during this reporting period** and documented the measures and their phosphorus reduction. The nonstructural control measure information:

- ◉ is attached to the email submission
- ○ can be found at the following publicly available website:

☒ Documented the structural control measures implemented in the watershed during **this reporting period and all previous years**, including location, phosphorus reduction in mass/year, and date of last completed maintenance and inspection for each control. The structural control measure information:

- ○ is not applicable; no structural control measures were implemented
- ◉ is attached to the email submission
- ○ can be found at the following publicly available website:

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:

1. The Town of Medway has been unable to achieve the Year 8 phosphorus removal target established in the Phosphorus Control Plan (PCP). The PCP submitted in FY24 established a Year 8 target of 176 lbs/year. However, after accounting for increases in impervious surface area and updating the GIS data using the 2021 dataset, the revised Year 8 PCP target is 198 lbs/year. For Year 8, the Town is claiming 87.14 lbs/year of phosphorus removal. Attachment D includes a memorandum describing the progress made to date, as well as the additional measures planned to further reduce phosphorus loading. Based on the Town's current progress and projected phosphorus removal, the Town anticipates that it will also be unable to meet the Year 10 phosphorus removal targets established in the PCP. As a result, the Town will need to coordinate with the U.S. Environmental Protection Agency (EPA) to establish an alternative schedule for achieving the required phosphorus reductions.
2. Since implementing the Phosphorus Control Plan (PCP) in FY24, DPW staff have increased the frequency of street sweeping by 20 additional days. The Town swept 620 more lane miles than in FY24 and 240 more lane miles in FY26 than in FY25. During FY26, DPW staff swept streets and parking lots on 90 of the 260 workdays. Crews conducted sweeping activities during every month except February, when snow and winter conditions were not conducive to sweeping. Despite these increased efforts, the Town was unable to meet the sweeping frequency goal established in the PCP, which calls for town-wide sweeping on a monthly basis. The Town was also unable to claim the enhanced leaf litter non-structural control credit because all high-density residential, open and forested spaces, and commercial areas throughout the Town were not swept on a weekly schedule. All catch basins were inspected and cleaned in accordance with the Town's annual maintenance procedures. Attachment B identifies the non-structural controls implemented during Year 8.
3. Attachment C lists the town owned and town managed structural controls that were inspected and/or maintained during Year 8. Only BMPs that had the required maintenance performed are credited towards the phosphorus removal target.

NON-TRADITIONAL AND TRANSPORTATION MS4s ONLY- *municipalities please skip this section:*

Describe the planned phosphorus reduction activities on site and coordination progress with the applicable municipality:

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 DPW updated the outfall inventory to reflect new developments and additional information collected during the IDDE and Catchment Area Investigations.

Chicken Brook (segment 72-34) and Hopping Brook (segment 72-35) were reclassified from Category 2 to Category 5 waters in the 2016 List of Impaired Waters.

In the Draft 2024/2026 List of Impaired Waters, the benthic macro-invertebrate assessment was revised and E.coli was added as a documented impairment Charles River (segment 72-05). Chicken Brook (segment 72-34) and Hopping Brook (segment 72-34) were reclassified from Category 5 to Category 4a waters, indicating that approved TMDLs are in place to address their E.coli 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**: 13

*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:Leaf Litter Management

Message Description and Distribution Method:

Excess phosphorus from leaf litter is a leading cause of toxic algae blooms in our waterways. Keep paved surfaces clear of leaf litter to prevent it from entering drainage systems and polluting our waterways. Message distributed through the DPW Facebook page.

Targeted Audience: Residents

Responsible Department/Parties: DPW

Measurable Goal(s):

671 impressions, 12 engagements, 0 shares, 0 comments, and 7 likes.

Message Date(s): September 25, 2025
September 29, 2025

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:

We want to focus specifically on leaf litter management as it relates to phosphorus loading in our waterways and potential to cause localized flooding as opposed to general landscape management. By using the DPW's social media platforms, we are able to reach a larger audience than what was proposed in the NOI.

BMP:Lawn Maintenance - Fertilizer Use

Message Description and Distribution Method:

We used the updated Think Blue education materials titled "Feeding your Lawn? Feed it Smart" which provides tips on proper fertilizer use. We distributed this material via the DPW's social media accounts.

Targeted Audience: Residents

Responsible Department/Parties: DPW

Measurable Goal(s):

1499 impressions, 53 engagements, 0 shares, 4 comments, and 6 likes.

Message Date(s): June 5, 2026
June 10, 2026

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:

The distribution method is different than what was proposed in the NOI, but the message did not change.

BMP: Lawn Care Tips

Message Description and Distribution Method:

We used the updated Think Blue education materials titled "Spring Lawn Care Tips" which provides tips on lawn watering, fertilizing, and mowing. We distributed this material via the DPW's social media accounts.

Targeted Audience: Residents

Responsible Department/Parties: DPW

Measurable Goal(s):

705 impressions, 10 engagements, 0 shares, 0 comments, and 4 likes.

Message Date(s): September 25, 2025
September 30, 2025

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:

The distribution method is different than what was proposed in the NOI, but the message did not change.

BMP: Septic Smart Week - 2025

Message Description and Distribution Method:

During Septic Smart Week, held September 15–19, 2025, the DPW shared information from the U.S. EPA regarding proper septic system care and maintenance through its social media platforms. Outreach began the week before with a post linking to general information about caring for and maintaining a septic system. Each day during Septic Smart Week, DPW shared a different message highlighting an important aspect of septic system care including:

"Caring for Your Septic System" which explored the five signs that may indicate a septic system is failing;
"Think at the Sink" cautioned against using harsh cleaning chemicals and disposing of fats, oils, and grease

down the drain;
"Keep It Clean" recommended regular testing of drinking water wells located near septic systems;
"Shield Your Field" emphasized keeping the leaching field free of woody vegetation, whose roots can damage the system; and
"Protect It and Inspect It" recommended regular septic system inspections and routine maintenance to help prevent problems and extend the life of the system.

Targeted Audience: Residents

Responsible Department/Parties: DPW

Measurable Goal(s):

2112 impressions, 46 engagements, 0 shares, 4 comments, and 15 likes.

Message Date(s):
September 12, 2025
September 15, 2025
September 16, 2025
September 17, 2025
September 18, 2025
September 19, 2025

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:

Utilizing Septic Smart Week is an additional opportunity to share information about septic system care and was not proposed in the NOI.

BMP: Scoop the Poop

Message Description and Distribution Method:

Message focused on health hazards and water contamination from pet wastes. Message posted on DPW Facebook page.

Targeted Audience: Residents

Responsible Department/Parties: DPW

Measurable Goal(s):

1612 impressions, 27 engagements, 0 shares, 3 comments, and 8 likes.

Message Date(s):
June 3, 2026
June 23, 2026

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:

The message did not change, but the distribution method is different than what was proposed in the NOI.

BMP: Smart Pool Maintenance

Message Description and Distribution Method:

Message explains the importance of safely closing pools down for the season and not allowing chemically treated water to drain into the stormwater system

Targeted Audience: Residents

Responsible Department/Parties: DPW

Measurable Goal(s):

1271 impressions, 21 engagements, 0 shares, 3 comments, and 11 likes.

Message Date(s): September 25, 2025
October 2, 2025
October 9, 2025

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:

This was an additional educational topic that was not proposed in the NOI.

BMP: Low-Impact Development

Message Description and Distribution Method:

Message describes how using low-impact development design principles can protect stormwater by decreasing impervious surface coverage and incorporating stormwater control structures to treat runoff from impervious areas. This message was distributed through the DPW Facebook page.

Targeted Audience: Developers (construction)

Responsible Department/Parties: DPW

Measurable Goal(s):

535 impressions, 12 engagements, 0 shares, 1 comments, and 3 likes.

Message Date(s): June 26, 2026

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:

The message is the same but the method to reach developers is different than what was proposed in the NOI. This was an additional opportunity to reach developers and the general public.

BMP: Pet Waste Management - Dog License

Message Description and Distribution Method:

Distributed messaging to residents during dog license renewal.

Targeted Audience: Residents

Responsible Department/Parties: DPW, Town Clerk

Measurable Goal(s):

1535 dog licenses issued.

Message Date(s): January 1 - March 31, 2026

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: Annual Rain Barrel Sale

Message Description and Distribution Method:

Promote the annual rain barrel sale on DPW Facebook page.

Targeted Audience: Residents

Responsible Department/Parties: DPW

Measurable Goal(s):

11 rain barrels sold in FY26. Social media messaging resulted in 1647 impressions, 117 engagements, 0 shares, 0 comments, and 2 likes.

Message Date(s): February 20, 2026

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: Industrial Properties Best Management Practices

Message Description and Distribution Method:

Mailed "Think Blue Massachusetts" flyer and informational letter referencing Massachusetts Stormwater Handbook Standards 3, 5, and 6 to all industrially zoned properties in Town.

Targeted Audience: Industrial facilities

Responsible Department/Parties: DPW

Measurable Goal(s):

Mailed to 100% of industrial zoned parcels.

Message Date(s): june 23, 2026

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: Landscape Management

Message Description and Distribution Method:

Using the Think Blue Massachusetts graphics, we emailed 40 local landscaping companies a brochure with information on best management practices. We requested delivery and read receipts to measure the number of companies who successfully received and opened the email.

Targeted Audience: Businesses, institutions and commercial facilities

Responsible Department/Parties: DPW

Measurable Goal(s):

40 emails were sent. we received notification that 38 were delivered successfully. 2 companies opened the email.

Message Date(s): June 23, 2026

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:

The distribution method is different than what was proposed in the NOI.

BMP: Developers Best Management Practices

Message Description and Distribution Method:

Distributed a "Think Blue Massachusetts" flyer noting erosion control requirements, proper pet waste management, and low-impact development design guidelines to developers when they apply for a permit with the Community and Economic Development Department (CED) or the Building Department.

Targeted Audience: Developers (construction)

Responsible Department/Parties: DPW, Building Department, CED Department

Measurable Goal(s):

Distribute to developers at the time of permit application.

Message Date(s): ongoing

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: Community Farm Fest - Excess Phosphorus Education

Message Description and Distribution Method:

Hosted a table at the Medway Community Farm Fest on September 13, 2025 and shared information with the public on excess nutrients in the Charles River and ways they can help mitigate this problem.

Targeted Audience: Residents

Responsible Department/Parties: DPW

Measurable Goal(s):

Hosted a table and engaged with residents.

Message Date(s): September 13, 2025

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**:

On June 17, 2026, the Medway Energy and Sustainability Committee held a public meeting to discuss Medway's Stormwater Management Program and review the Year 8 Plan.

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**:

A link to leave public comments on the Stormwater Management Program is made available on the Town's Stormwater Management web page. Residents may also report a violation if observed. These opportunities are available to the public 24 hours a day, 7 days a week.

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: 0

Number of SSOs removed: 0

MS4 System Mapping

Percent of Phase II map complete: 90

Optional: Provide additional status information regarding your map:

Catch basins, sewer and stormwater manholes, outfalls, culverts, and BMPs have been GPS located and mapped. Pipe segment details including diameter, material, and condition have been added. Catchment areas are being individually delineated for greater accuracy. This effort is approximately 50% complete. Previously, catchments were delineated using a GIS analytical tool, which provided a foundational dataset. However, by delineating the catchments manually, it will provide more accurate data.

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 above referenced outfall screening data is attached to the email submission
- ◉ The above referenced outfall screening data can be found at the following publicly available website:

  https://medwayma.gov/reports/

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

Number of outfalls screened: 9

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

Percent of outfalls screened: 100

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

Dry weather outfall screening was completed in Year 3. Outfalls exceeding one or more of the Massachusetts Surface Water Quality Standards were marked "High Priority" for catchment investigations. Outfall screening data is included in the Year 8 Catchment Investigation documentation.

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 publicly available website:

  https://medwayma.gov/reports/

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

Number of catchment investigations completed this reporting period: 356

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

Percent of total catchments investigated: 69

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

During Year 8, 356 catchment areas were determined to have been substantially investigated and were marked as complete. The completed catchments fall into the following categories:
• 109 catchments were substantially investigated and showed no potential for illicit discharges.
• 9 catchments were substantially investigated, and sampling results indicated that flows were below the applicable threshold levels.
• 210 catchments had been previously investigated during dry-weather outfall screening and showed no evidence of flow. These catchments were also less than 800 linear feet in length. Based on the lack of flow observed during previous inspections and the relatively short length of the catchments, they were determined to have been substantially investigated and were marked complete.
• 28 catchments had been previously investigated during dry-weather outfall screening, and sampling results indicated that water quality parameters were below the applicable illicit discharge (ID) thresholds. These catchments were also less than 800 linear feet in length and were therefore determined to have been substantially investigated and marked complete.
The Year 8 Catchment Investigation Report documents the findings from January 2025 through January 2026. It does not include investigation findings from February 2026 through June 2026. A supporting document provides the complete investigation findings, including the additional investigations conducted during this period.

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 publicly available 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: 0

Number of illicit discharges removed: 0

Estimated volume of sewage removed: 0 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: 56

Total number of illicit discharges removed: 18

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

Since the effective date of the permit, the town inspected all 508 outfalls (as well as 39 new outfalls from new

development) and completed dry weather sampling. 104 outfalls showed dry weather flow and were sampled for salinity, temperature, conductivity, pH, surfactants, chlorine, ammonia, E.coli, and phosphorus. During Year 3 and 4, sample results from 57 outfalls exceeded at least one of the pollutant indicator limits; however, no outfalls exceeded all three of the sewage input indicators. During Year 5, 54 outfalls were re-sampled, and 18 outfalls tested clear from contaminants. No new illicit discharges have been identified to date.

Employee Training

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

IDDE and Catchment Investigation training: 10/22/2025 hosted by Environmental Business Council of New England.

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: 135

Number of enforcement actions taken: 10

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

MCM5: Post-Construction Stormwater Management in New Development and Redevelopment

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:

Street Design and Parking Lots Report

Below, describe any changes made or planned to be made to local regulations and guidelines based on the report completed in Year 4:

As the DPW plans for and completes repaving projects, we assess whether there is opportunity to narrow the roadway widths and incorporate green infrastructure.

On April 28, 2026, the Planning and Economic Development Board successfully updated the Subdivision Rules and Regulations to align with Site Plan Rules and Regulations, Land Disturbance Permit Regulations, and the Stormwater and Land Disturbance Bylaw.

Green Infrastructure Report

Below, describe progress towards making green infrastructure practices allowable based on the report completed in Year 4:

We continue to enforce our updated Stormwater and Land Disturbance Bylaw which was updated in November 2023 and included additional guidance on green infrastructure and low impact development.

Additionally, the Subdivision Rules and Regulations were updated to align with current regulations that encourage green infrastructure and low impact design.

Retrofit Properties Inventory

Below, list remaining permittee-owned properties that could be modified or retrofitted with BMPs to mitigate impervious areas (must maintain a minimum of 5 sites in inventory until less than 5 sites remain):

45 Holliston Street
9 Lovering Street
76 Oakland Street
16 Cassidy Lane
123 Holliston Street
158 Main Street
2B Oak Street
0 Choate Park Road
0 Winter Street
0 North Street
26 High Street
44 Milford Street
155 Village Street
315 Village Street

Below, list all properties that have been modified or retrofitted with BMPs to mitigate impervious area that were inventoried as part of 2.3.6.d of the permit and the type of BMP(s) implemented. Non-MS4 owned properties that have been modified or retrofitted with BMPs to mitigate impervious area may also be listed, but must be indicated as non-MS4.

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: 2,260

Number of catch basins cleaned: 2,260

Total volume or mass of material removed from all catch basins: 31.15 tons

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

Total number of catch basins: 2,755

If applicable:

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

Catch basins are cleaned annually. In 2023, the DPW and catch basin cleaning company began collecting data on how full a catch basin is before and after cleaning. Once the data is collected, the DPW addresses the catch basins that are more than 50% full during two consecutive inspections/cleaning events. We assess whether there are land use changes that can be made to prevent sediment accumulation, or if the catch basins need to be to be retrofitted to hold more material, or if green infrastructure could be incorporated upstream for pre-treatment.

Street Sweeping

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

- (●) Number of miles cleaned: 2,245
- ( ) 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: 1

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

No corrective actions were needed.

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 publicly available 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

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.

Year 9

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 9 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 9 below:

1. Continue to update catchment area delineations based on new GPS data on stormwater structures.

2. Continue catchment investigations to meet Year 10 requirements.
3. Continue investigating existing BMPs for retrofit opportunities to improve storage or infiltration properties.
4. Complete retrofit designs for five existing BMPs on Azalea Drive, Hooksett Circle, Willow Crest, Fales St, Bayberry Lane.
5. Continue BMP Reclassification Studies.
6. Begin coordination with privately owned BMPs and assess phosphorus removal calculations.
7. Update GIS land use and land cover data to reflect changes in impervious surfaces and new development.
8. Continue staff training on IDDE and operations and maintenance procedures.
9. Bid and construct five BMPs at the Medway Middle School.
10. Bid and construct BMP at Medway Senior Center.

Part V: Certification of Small MS4 Annual Report 2026

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: Title:

Signature: Date:

[Signatory may be a duly authorized representative]

Part V: Certification of Small MS4 Annual Report 2026

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: Michael E. Boynton

Title: Town Manager

Signature:

Date: 9/29/26

[Signatory may be a duly authorized representative]

APPENDIX E: BATT EXPORT SUMMARY

State	MASSACHUSETTS
Municipality	MEDWAY
Permit Type	MS4
Permit Number	
Major Watershed	CHARLES
TP Load Reduction Target	N/A
TN Load Reduction Target	N/A
TSS Load Reduction Target	N/A

Table 1. Project Summary Credit for MEDWAY, MASSACHUSETTS

Project Type	Removed Phosphorus Load (lb/yr)	Removed Nitrogen Load (lb/yr)	Removed Sediment Load (lb/yr)
Structural	13.18	128.49	3986.49
Non-Structural	0	0	0
Land Use Conversion	0	0	0
Total	13.18	128.49	3986.49

Table 2. Structural Project Summary for MEDWAY, MASSACHUSETTS

Project ID	BMP Type	BMP Storage Capacity (ft^3)/ Filter Depth (in.)	Phosphorus BMP Efficiency (%)	Nitrogen BMP Efficiency (%)	Sediment BMP Efficiency (%)	Removed Phosphorus Load (lb/yr)	Removed Nitrogen Load (lb/yr)	Removed Sediment Load (lb/yr)	Impervious Area Treated (ac)	Runoff Depth (in.)
SCM3 Independence	INFILTRATION TRENCH	2748	98.20	99.73	100	0.89	7.97	243.63	0.49	>1.0
SCM4 Independence	INFILTRATION BASIN	5159	99.04	100	100	1.43	13.51	408.66	0.81	>1.0

SCM5 Independence	INFILTRATION BASIN	320	87.62	95.27	98.18	0.32	3.21	103.07	0.21	>0.3
SCM6 Freedom	INFILTRATION BASIN	2765	97.20	100	100	1.14	10.91	332.74	0.68	>0.9
SCM11 Ash	INFILTRATION BASIN	281	20.35	28.31	30.96	0.62	7.96	265.60	1.75	~0.04
SCM12 Temple	INFILTRATION BASIN	45248	98.80	100	100	7.01	65.42	1983.44	3.57	>0.9
SCM17 Fairway	INFILTRATION BASIN	413	48.14	65.76	77.14	0.71	8.73	324.14	0.83	0.14
SCM18 Police	INFILTRATION BASIN	2643	96.2	99	100	0.49	4.22	108.42	0.28	2.24
SCM19 Daffodil	INFILTRATION BASIN	365	64.1	79.52	85.52	0.57	6.56	216.79	0.54	0.19

Reclassification candidates with retrofit for additional TP removal not included in above total (values below represent potential treatment with retrofit efforts)

SCM11 Ash WITH RETROFIT	INFILTRATION BASIN	18270	98.80	100	100	2.99	28.12	857.78	1.75	>1.0
SCM17 Fairway WITH RETROFIT	INFILTRATION BASIN	8580	96.20	99	100	1.42	13.15	420.172	0.83	>0.8
SCM19 Daffodil WITH RETROFIT	INFILTRATION BASIN	5877	98.80	100	100	0.88	8.25	253.51	0.54	>1.0

SCMs requiring retrofits for TP removal not included in above total (values below represent potential treatment with retrofit efforts)

SCM2 Cedar	INFILTRATION BASIN	5163	88.90	96.12	98.78	2.86	28.57	888.37	1.69	>0.7
SCM13 Applegate	INFILTRATION BASIN	28150	96.63	98.88	100	16.47	163.28	4715.18	6.35	>0.6

APPENDIX F: TREATMENT CALCULATIONS TABLES

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Reclassification Estimated TP Removal Calculations
Town of Medway, MA

Reclassification of Existing SCMs

SCM Number	SCM Location	Town ID Number	Reclassification SCM Type	Total Catchment Area (ac)	Contributing IA (ac)[1]	TP Load Generated (lb/yr)[2]	Estimated WQV Volume (CF)[3,4]	Measured Infiltration Rate (in/hr)[5]	Rawls Rate for Treatment Curve (in/hr)[5,6]	BMP-BATT TP Removal Efficiency[7]	BMP-BATT TP Removal (lb/yr)
3	Independence Lane	BMP-46-3	Infiltration Chambers	1.43	0.50	0.9	2748	--	1.02	98%	0.9
4	Independence Lane	BMP-47-1	Infiltration Basin	2.60	0.81	1.4	5159	1.93	1.02	99%	1.4
5	Independence Lane	BMP-47-2	Infiltration Basin	0.63	0.21	0.4	320	6.75	2.41	88%	0.3
6	Freedom Trail	BMP-47-3	Infiltration Basin	1.88	0.68	1.2	2765	1.72	1.02	97%	1.1
11	Ash Lane	BMP-21-4	Infiltration Basin	4.80	1.75	3.0	281	3.55	2.41	20%	0.6
12	Temple Street	BMP-39-2	Infiltration Basin	16.43	3.58	7.1	45248	4.75	2.41	99%	7.0
17	Fairway Lane	BMP-3-2	Infiltration Basin	2.65	0.83	1.5	413	2.13	1.02	48%	0.7
18	Police Station	BMP-58-1	Infiltration Basin	0.53	0.28	0.5	2643	2.20	1.02	96%	0.5
19	Daffodil Lane	BMP-64-2	Infiltration Basin	2.17	0.54	0.9	365	3.74	2.41	64%	0.6

Notes

[1]Catchment areas were delineated using MassGIS topographic data, Medway drainage network GIS data, and geospatial aerial imagery.

[2]Methodology for calculating TP generated loading described in Attachment 1 Appendix F of Massachusetts MS4 General Permit. Generated TP load calculations based on the 2021 LULC data.

[3]The estimated WQV is based on MassGIS 1-foot topographic data measured from the bottom of basin to the lowest OCS outlet. Prismoidal ponding volumes were calculated at each 1-foot depth interval. Conservatively, the lower 1-foot contour area was used for ponding intervals less than 1 foot of elevation change.

[4]The WQV for the infiltration chambers includes the ponding as well as the subsurface storage. Each chamber is assumed to have 80% void space due to thick concrete walls and supports (30 chambers total). All gravel outside the chambers is assumed to have a stone void space of 40%. Storage estimation based on in-field measurements and As-Built documentation from the Town.

[5]The most conservative infiltration test results were referenced for treatment calculations. The infiltration rate for SCM3 at Freedom Trail could not be measured. The infiltration rate is assumed based on hydrologic soil group data from NRCS Web Soils Survey.

[6]The Rawls Rate closest to and less than the measured infiltration rate is used for treatment calculations. Infiltrating system performance is based on established Rawls Rates.

[7]The provided WQV of SCMs 11, 17, and 19 limit the performance of the SCMs reducing TP removal efficiencies. With additional WQV, larger reductions can be obtained. See Retrofit Estimate TP Removal Calculations for estimated increases.

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Retrofit Estimated TP Removal Calculations

Reclassification of Existing SCMs with Retrofit[1]

SCM Number	SCM Location	Town ID Number	Reclassification SCM Type	Total Catchment Area (ac)	Contributing IA (ac)[3]	TP Load Generated (lb/yr)[4]	Existing OCS Height (ft)[5]	Potential OCS Height (ft)[5]	Potential WQV Volume (CF)[6]	Equivalent Runoff Depth Treated (in)[7]	Measured Infiltration Rate (in/hr)[8]	Rawls Rate for Treatment Curve (in/hr)[8,9]	BMP-BATT TP Removal Efficiency	BMP-BATT TP Removal (lb/yr)	Original BATT TP Removal (lb/yr)	Estimated TP Removal Increase (lb/yr)
11	Ash Lane	BMP-21-4	Infiltration Basin	4.80	1.75	3.0	0.3	3.0	18270	2.87	3.55	2.41	99%	3.0	0.6	2.4
17	Fairway Lane	BMP-3-2	Infiltration Basin	2.65	0.83	1.5	0.2	2.0	8580	2.84	2.13	1.02	96%	1.4	0.7	0.7
19	Daffodil Lane	BMP-64-2	Infiltration Basin	2.17	0.54	0.9	0.5	1.5	5877	2.99	3.74	2.41	99%	0.9	0.6	0.3

Infiltrating SCMs with Retrofit[2]

SCM Number	SCM Location	Town ID Number	Reclassification SCM Type	Total Catchment Area (ac)	Contributing IA (ac)[3]	TP Load Generated (lb/yr)[4]	Existing OCS Height (ft)[5]	Potential OCS Height (ft)[5]	Potential WQV Volume (CF)[6]	Equivalent Runoff Depth Treated (in)[7]	Measured Infiltration Rate (in/hr)[8]	Rawls Rate for Treatment Curve (in/hr)[8,9]	BMP-BATT TP Removal Efficiency	BMP-BATT TP Removal (lb/yr)
2	Cedar Farm Road	BMP-27-2	Infiltration Basin	7.04	1.69	3.2	0.0	1.5	5163	0.84	0.344	0.27	89%	2.9
13	Applegate Road	BMP-32-1	Infiltration Basin	29.72	6.35	13.8	0.0	2.0	28150	1.22	3.15	2.41	97%	16.5

Notes

[1]SCMs 11, 17, and 19 are existing infiltrating SCMs that are candidates for retrofit efforts to provide additional TP removal as calculated above.

[2]SCMs 2 and 13 do not provide any existing WQV; therefore, retrofit efforts are required to provide the estimated WQV indicated to provide TP removal and reclassification to infiltrating SCMs.

[3]Catchment areas were delineated using MassGIS topographic data, Medway drainage network GIS data, and geospatial aerial imagery.

[4]Methodology for calculating TP generated loading described in Attachment 1 Appendix F of Massachusetts MS4 General Permit. Generated TP load calculations based on the 2021 LULC data.

[5]Outlet control structure (OCS) height is measured from bottom of basin to the lowest outlet invert. Existing OCS height was obtained either by in-field measurements or from record drawings. Potential OCS height estimations based on topography and top of basin elevations.

[6]The estimated WQV is based on MassGIS 1-foot topographic data measures from the bottom of basin to the OCS height. Prismoidal ponding volumes were calculated at each 1-foot depth interval. Conservatively, the lower 1-foot contour area was used for ponding intervals less than 1 foot of elevation change.

[7]Equivalent runoff depth is the depth of stormwater runoff over the catchment imperious area (IA) that is equivalent to the basin WQV. The runoff depth is utilized to assess the infiltrating system performance.

[8]The most conservative infiltration test results were referenced for treatment calculations.

[9]The Rawls Rate closest to and less than the measured infiltration rate is used for treatment calculations. Infiltrating system performance is based on established Rawls Rates.

Phosphorus Removal Calculation Review
Medway, MA

SCM ID	SCM Type		Total Acres		HSG		Storage Volume (cubic feet)		TP Produced (lb/yr)	TP Removal (lb/yr)		Notes
	Original	Updated	Original	Updated	Original	Updated	Original	Updated		Original	Update	
19-3	Detention	Extended Dry Detention Pond	-	0.28	C/D	C/D	13,868	-	0.59	0.33	0.08	No changes to Towns original catchment and system assumptions.
19-4	Detention	Extended Dry Detention Pond	-	0.71	C/D	C/D	17,900	-	0.61	0.04	0.09	No changes to Towns original catchment and system assumptions.
19-5	Detention	Extended Dry Detention Pond	-	0.25	C/D	C/D	30,124	-	1.09	0.04	0.15	No changes to Towns original catchment and system assumptions.
19-7	Created Wetlands	Wet Pond / Created Wetlands	20.78	6.91	C/D	C/D or D	240,000	245,167	8.42	6.52	5.28	
29-1	Detention	Extended Dry Detention Pond	36.40	2.80	B	B	2,540	51,329	7.69	-	1.07	Increased storage volume considers SCM 29-2 and SCM 29-5 as components of SCM 29-1 as opposed to standalone systems.
29-2	Extended Dry Detention	NA	7.49	0.29	-	B	65,017	-	0.52	1.16	Credit Ineligible	This appears to be a shallow depression with a Stormceptor inlet unit at the invert of the depression. As this system appears to be more of a pretreatment unit (provided by the Stormceptor) that discharges to SCM 29-1 via SCM 29-5), it should not be considered a SCM achieving TP reduction.
29-3	Infiltration Basin	NA	1.17	0.03	-	B	5,065	-	0.01	2.03	Credit Ineligible	Swale is noted on Volume 1 plans, however W&C is unable to confirm if it was constructed to Stormwater Handbook standards.
29-4	Retention	Wet Pond / Created Wetlands	-	0.88	-	B	-	8,274	1.34	-	0.83	
29-5	Detention	NA	-	0.61	-	B	-	-	1.08	-	Credit Ineligible	This flow received treatment through SCM 29-1, therefore, it is not assigned TP removal.
37-1	Extended Dry Detention	Extended Dry Detention Pond	0.41	0.17	C	C	4,072	5,352	0.30	0.07	0.08	
37-2	Infiltration	Extended Dry Detention Pond	6.82	5.38	-	B	22,901	-	8.60	3.78	1.09	
38-1	Detention	Extended Dry Detention Pond	-	2.26	C	B	-	4,395	3.83	-	0.06	
38-3	Dry Well	NA	-	0.01	-	A/D	-	-	4.91	-	Credit Ineligible	Stormwater Report for Highschool lists this system as a retention stone layer discharging to a level spreader. Input from town notes a dry-well, however plans indicate there is no sump. As such, this SCM is deemed ineligible for credit.
38-4	Swale	NA	-	0.08	-	B	-	-	0.12	-	Credit Ineligible	Storage volume removed as it has the same catchment area as the downstream pond SCM-38-1.
38-5	-	Infiltration Trench	-	2.80	-	B	-	38,001	4.00	-	3.86	Newly added Southern synthetic field.
45-1	Infiltration	Extended Dry Detention Pond	2.21	2.58	B	B	142,352	20,088	2.27	0.43	0.32	
61-1	Infiltration Basin	Infiltration Trench	-	0.57	A	A	7,545	6,740	1.71	0.19	1.65	
									Total	14.59	14.56	

APPENDIX E: BATT EXPORT SUMMARY

BATT EXPORT – EXISTING SCM RECLASSIFICATION TP REMOVAL

Project ID	BMP Type	BMP Storage Capacity (ft^3)/ Filter Depth (in.)	Phosphorus BMP Efficiency (%)	Nitrogen BMP Efficiency (%)	Sediment BMP Efficiency (%)	Removed Phosphorus Load (lb/yr)	Removed Nitrogen Load (lb/yr)	Removed Sediment Load (lb/yr)	Impervious Area Treated (ac)	Runoff Depth (in.)
BMP-5-1[1]	EXTENDED DRY DETENTION POND	29240	29	—	—	2.07	—	—	3.12	1.5
BMP-12-1	WET POND	41640	63	40	86	2.36	14.37	881.49	1.13	2.0[2]
BMP-12-2	WET POND	9580	49.86	31.37	75.11	3.25	18.70	1352.8	2.87	0.87[2]
BMP-12-3	WET POND	17610	63	40	86	2.02	12.14	761.88	1.26	2.0[2]
BMP-18-1	WET POND	53900	63	40	86	6.23	36.32	2415.9	4.52	2.0[2]
BMP-27-3	EXTENDED DRY DETENTION POND	15890	34.02	21.89	48.43	1.62	9.49	642.96	1.87	1.86[2]
BMP-28-2	WET POND	25940	61.44	39.07	85.07	4.75	26.17	1861.5	2.90	1.84[2]
BMP-28-3	EXTENDED DRY DETENTION POND	29080	36	23.13	49	0.81	4.73	319.28	0.77	2.0[2]
BMP-31-2	INFILTRATION BASIN	290	44.84	62.84	71.84	0.50	6.59	222.16	0.55	0.14[2]
BMP-46-7	EXTENDED DRY DETENTION POND	31880	36	23.13	49	0.87	5.01	335.17	1.21	4.23
BMP-48-1	INFILTRATION BASIN	50	43.81	61.66	70.99	0.1	1.24	35.75	0.12	0.11

BMP-48-2	BIOFILTRATION	4200	52.94	31.99	98.99	1.09	5.62	450.07	1.16	0.95
BMP-48-3	INFILTRATION BASIN	200	75.16	87.83	95.44	0.23	2.29	62.41	0.16	0.34
BMP-48-5	INFILTRATION BASIN	50	25.67	36.94	41.95	0.11	1.33	37.92	0.22	0.06
BMP-48-7 & BMP-48-8	INFILTRATION TRENCH	2290	98.43	100	100	1.04	8.82	224.75	0.57	1.0
BMP-53-2	SAND FILTER	1940	48.87	31.17	98.17	0.52	2.44	376.92	0.61	0.83[2]
BMP-57-2	EXTENDED DRY DETENTION POND	17150	36	23.13	49	0.62	3.76	238.56	0.92	2.0[2]

[1]BATT could not calculate SCM performance. Runoff depth, TP removal efficiency, and TP removal estimated manually in accordance with the methods described within Attachment 3 Appendix F of the Massachusetts MS4 General Permit.

[2]Runoff depth estimated based on the reported treatment efficiency as BATT could not export results.

Woodard & Curran

Reclassification Estimated TP Removal Calculations

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Reclassification of Existing Non-Infiltrating SCMs

SCM Number	SCM Location	Town ID Number	Reclassification SCM Type	Total Catchment Area (ac)[1]	Contributing IA (ac)[1]	TP Load Generated (lb/yr)[2]	Estimated WQV (CF)[3,4]	Equivalent Runoff Depth Treated (in)[5]	BMP TP Removal Efficiency[6]	BMP TP Removal (lb/yr)	Assumptions/Notes
1	Cedar Farms Road	BMP-27-1	Dry Detention	12.1	3.1	5.9	7,650	0.6	13%	0.8	Rim of OCS not measured during field investigations. Assumed rim 1ft below spillway based on photos.
7	Newton Lane	BMP-19-3	Dry Detention	0.7	0.3	0.5	11,500	>2.0	36%	0.2	Underdrain observed in OCS. Height difference between bottom of basin and OCS rim measured in field.
8	Newton Lane	BMP-19-4	Dry Detention	1.7	0.7	1.3	18,300	>2.0	36%	0.5	Underdrain observed in OCS. Height difference between bottom of basin and OCS rim measured in field.
9	Newton Lane	BMP-19-5	Dry Detention	2.3	0.6	1.2	17,920	>2.0	36%	0.4	Underdrain observed in OCS. Height difference between bottom of basin and OCS rim measured in field.
10	Broad Acres Farm Road	BMP-19-1	Wet Pond[7]	11.2	2.9	6.2	9,680	0.6	50%	3.1	Outlet control elevation obtained from record plan.
14	Hickory Drive	BMP-16-1	Dry Detention	3.0	0.7	1.2	12,920	>2.0	36%	0.4	Spillway observed in field. Spillway elevation estimated based on GIS contours.
15	Hickory Drive	BMP-10-1	Wet Pond	17.3	3.6	6.9	14,120	0.8	52%	3.5	Outlet pipe observed in field. Ponding depth estimated from photograph.
16	Fairway Lane	Not in GIS	Wet Pond[8]	6.3	1.8	3.2	4,080	0.6	44%	1.4	Outlet control structure observed in field. Ponding depth estimated from photograph.
20	Daffodil Lane	BMP-64-1	Dry Detention	10.8	1.2	3.0	50,600	>2.0	36%	1.1	Underdrain shown in record plans. Outlet control structure high flow bypass and basin elevations obtained from record plan.
21	Tulip Way	BMP-65-1	Dry Detention[7]	7.5	2.9	5.0	24,390	1.6	35%	1.8	Underdrain shown in record plans. Outlet control structure high flow bypass and basin elevations obtained from record plan.
22	Tulip Way	BMP-65-2	Dry Detention	1.7	0.6	1.0	4,590	<1.6	33%	0.3	Outlet control structure high flow bypass and basin elevations obtained from record plan.
23	Alder Street	BMP-53-1	Wet Pond	1.8	1.0	1.9	2,900	0.7	48%	0.9	Outlet pipe observed in field. Ponding depth estimated from photograph.
24	Alder Street	BMP-63-3	Dry Detention	0.5	0.4	0.6	720	0.5	11%	0.1	Spillway observed in field. Spillway elevation estimated based on GIS contours.
25	Alder Street	BMP-63-4	Dry Detention	2.9	1.1	2.1	1,040	0.3	6%	0.1	Spillway observed in field. Spillway elevation estimated based on GIS contours.

Notes

[1]Catchment areas were delineated using MassGIS topographic data, Medway drainage network GIS data, and geospatial aerial imagery.

[2]Methodology for calculating TP generated loading described in Attachment 1 Appendix F of Massachusetts MS4 General Permit. Generated TP load calculations based on the 2021 LULC data.

[3]SCM WQV storage was estimated in accordance with the methodology described in Table 3-5 of Attachment 3 Appendix F of the Massachusetts MS4 General Permit.

[4]Surface SCM WQVs are based on MassGIS 1-foot topographic data from the bottom of basin to the appropriate outlet elevation. Prismoidal ponding volumes were calculated at each 1-foot depth interval. Conservatively, the lower 1-foot contour area was used for ponding intervals less than 1 foot of elevation change.

[5]The equivalent runoff depth is used to estimate BMP treatment efficiency. The runoff depths are estimated using BATT or the methodology described in Attachment 3 Appendix F of the Massachusetts MS4 General Permit. Maximum treatment efficiency is reached at a runoff depth of 2.0 inches; therefore, all runoff depths are capped at 2.0 inches.

[6]The BMP TP removal efficiencies are provided in Attachment 3 Appendix F of Massachusetts MS4 General Permit Performances Curves and are estimated by the equivalent runoff depth.

[7]BMP-19-1 and BMP-65-1 have been identified as MassDEP wetlands and may be considered wetland resource areas subject to protection under the Massachusetts Wetlands Protection Act. These systems were constructed after November 18, 1996; therefore, maintenance may be performed to protect SCM performance.

[8]The unmapped SCM on Fairway Lane has been identified as MassDEP wetlands and was constructed prior to November 18, 1996; therefore, the SCM is subject to protection under the Massachusetts Wetlands Protection Act. These systems should be credited for TP removal at the Town's discretion.

State	MASSACHUSETTS
Municipality	MEDWAY
Permit Type	MS4
Permit Number	
Major Watershed	CHARLES
TP Load Reduction Target	N/A
TN Load Reduction Target	N/A
TSS Load Reduction Target	N/A

Table 1. Project Summary Credit for MEDWAY, MASSACHUSETTS

Project Type	Removed Phosphorus Load (lb/yr)	Removed Nitrogen Load (lb/yr)	Removed Sediment Load (lb/yr)
Structural	14.54	81.83	6460.65
Non-Structural	0	0	0
Land Use Conversion	0	0	0
Total	14.54	81.83	6460.65

Table 2. Structural Project Summary for MEDWAY, MASSACHUSETTS

Project ID	BMP Type	BMP Storage Capacity (ft^3)/ Filter Depth (in.)	Phosphorus BMP Efficiency (%)	Nitrogen BMP Efficiency (%)	Sediment BMP Efficiency (%)	Removed Phosphorus Load (lb/yr)	Removed Nitrogen Load (lb/yr)	Removed Sediment Load (lb/yr)	Impervious Area Treated (ac)	Runoff Depth (in.)
BMP-27-1	EXTENDED DRY DETENTION POND	7650	13.31	8.76	40.31	0.78	4.57	662.52	3.13	0.55
BMP-19-3	EXTENDED DRY DETENTION POND	11500	36.00	23.13	49.00	0.18	1.05	67.11	0.25	>2.0*
BMP-19-4	EXTENDED DRY DETENTION POND	18300	36.00	23.13	49.00	0.46	2.70	176.38	0.70	>2.0*
BMP-19-5	EXTENDED DRY DETENTION POND	17920	36.00	23.13	49.00	0.45	2.67	169.11	0.55	>2.0*
BMP-19-1	WET POND	9680	49.94	31.39	75.17	3.09	17.69	1297.48	2.89	0.6
BMP-16-1	EXTENDED DRY DETENTION POND	12920	36.00	23.13	49.00	0.41	2.33	158.63	0.65	>2.0*
BMP-10-1	WET POND	14120	51.58	31.72	76.15	3.54	19.17	1494.02	3.64	0.78
FAIRWAY	WET POND	4080	43.8	27.85	67.77	1.4	8.13	611.53	1.75	0.56

BMP-64-1	EXTENDED DRY DETENTION POND	50600	36.00	23.13	49.00	1.05	5.39	390.23	1.22	>2.0*
BMP-65-1	EXTENDED DRY DETENTION POND	24390	35.22	22.64	48.78	1.76	10.45	692.08	2.9	1.6
BMP-65-2	EXTENDED DRY DETENTION POND	4590	32.80	21.12	48.09	0.33	1.94	136.42	0.56	<1.6*
BMP-53-1	WET POND	2900	47.51	30.63	73.27	0.89	4.79	319.63	1.03	0.71
BMP-63-3	EXTENDED DRY DETENTION POND	720	11.44	7.44	39.22	0.07	0.36	83.07	0.38	0.52
BMP-63-4	EXTENDED DRY DETENTION POND	1040	6.16	3.72	33.03	0.13	0.59	202.44	1.11	0.26

*Runoff depth estimated based on the reported treatment efficiency as BATT could not export results.

Attachment A – Medway, MA

FY26 – YEAR 8 - Structural BMP Report

The table below summarizes the BMPs that the Town of Medway is claiming credit for due to inspection and maintenance performed. The phosphorus removal credits have been calculated by the Town's engineering consultant during FY25 and FY26. The BATT reports are included as support documents to this summary table. Not all BMPs listed in the BATT reports have been claimed for credit here. Only BMPs that were inspected and maintained during FY26 are claimed. In FY27, the Town A few BMPs need to be reviewed by the engineering consultant to confirm the calculations made by DPW staff.

BMP ID	Location	BMP Type	Acres	Storage Volume (cubic feet)	Phosphorus Load Removal (lbs/year)	FY Completed
BMP-10-1	HICKORY DR	WET POND	3.64	14,120	3.54	FY26 RECLASSIFICATION
BMP-12-1	SUMMIT RD	WET POND	1.13	41,640	2.36	FY26 RECLASSIFICATION
BMP-12-2	STABLE WAY	WET POND	2.87	9,580	3.25	FY26 RECLASSIFICATION
BMP-12-3	SUMMIT RD	WET POND	1.26	17,610	2.02	FY26 RECLASSIFICATION
BMP-16-1	HICKORY DR	EXTENDED DRY DETENTION POND	0.65	12,920	0.41	FY26 RECLASSIFICATION
BMP-18-1	BROAD ACRES FARM RD	WET POND	4.52	53,900	6.23	FY26 RECLASSIFICATION
BMP-19-1	BROAD ACRES FARM RD	WET POND	2.89	9,680	3.09	FY26 RECLASSIFICATION
BMP-19-3	NEWTON LN	EXTENDED DRY DETENTION POND	0.25	11,500	0.18	FY26 RECLASSIFICATION
BMP-19-4	NEWTON LN	EXTENDED DRY DETENTION POND	0.7	18,300	0.46	FY26 RECLASSIFICATION
BMP-19-5	NEWTON LN	EXTENDED DRY DETENTION POND	0.55	17,920	0.45	FY26 RECLASSIFICATION
BMP-21-4	ASH ST	INFILTRATION BASIN	4.8	18,270	2.99	FY26 Retrofit
BMP-27-1	CEDAR FARMS RD	EXTENDED DRY DETENTION POND	3.13	7,650	0.78	FY26 RECLASSIFICATION
BMP-28-3	AZALEA DR	EXTENDED DRY DETENTION POND	0.77	29,080	0.81	FY26 RECLASSIFICATION
BMP-29-4	MEDWAY HIGH SCHOOL	WET POND	0.88	8,274	0.83	FY25 RECLASSIFICATION
BMP-3-1	FAIRWAY LN	WET POND	1.75	4,080	1.4	FY26 RECLASSIFICATION
BMP-31-2	WILLOW CREST WAY	INFILTRATION BASIN	0.55	290	0.5	FY25 RECLASSIFICATION
BMP-3-2	FAIRWAY LN	INFILTRATION BASIN	2.65	8,580	1.42	FY26 Retrofit
BMP-32-1	APPLEGATE	INFILTRATION BASIN	29.72	28,150	16.47	FY26 Retrofit
BMP-37-1	MEDWAY HIGH SCHOOL	EXTENDED DRY DETENTION POND	0.17	5,352	0.08	FY25 RECLASSIFICATION
BMP-42-2	OAKLAND PARK	Infiltration Basin	2.37	44,930	1.76	FY24 – PCP calculation
BMP-42-5	OAKLAND PARK	Grass Swale (Conveyance)	0.88	1,708	0.15	FY24 – PCP calculation

BMP-46-3	INDEPENDENCE LANE	INFILTRATION TRENCH	1.43	2,748	0.89	FY25 RECLASSIFICATION
BMP-46-7	BAYBERRY RD	EXTENDED DRY DETENTION POND	1.21	31,880	0.87	FY26 RECLASSIFICATION
BMP-47-1	INDEPENDENCE LANE	INFILTRATION BASIN	2.6	5,159	1.43	FY25 RECLASSIFICATION
BMP-47-2	INDEPENDENCE LANE	INFILTRATION BASIN	0.63	320	0.32	FY25 RECLASSIFICATION
BMP-47-3	FREEDOM TRAIL	INFILTRATION BASIN	1.88	2,765	1.14	FY25 RECLASSIFICATION
BMP-48-1	OAK ST	INFILTRATION BASIN	0.12	50	0.1	FY26 RECLASSIFICATION
BMP-48-2	CHOATE PARK	BIOFILTRATION	1.16	4,200	1.09	FY26 RECLASSIFICATION
BMP-48-3	OAK ST	INFILTRATION BASIN	0.16	200	0.23	FY26 RECLASSIFICATION
BMP-48-5	OAK ST	INFILTRATION BASIN	0.22	50	0.11	FY26 RECLASSIFICATION
BMP-48-7	CHOATE PARK	INFILTRATION TRENCH	0.57	2,290	1.04	FY26 RECLASSIFICATION
BMP-5-1	HUNTER LN	EXTENDED DRY DETENTION POND	3.12	29,240	2.07	FY26 RECLASSIFICATION
BMP-51-1	BROAD ST	Wet Pond	10,53	750	0.53	FY24 – PCP calculation
BMP-51-2	BROAD ST	Infiltration Basin	6.16	19,640	4.09	FY24 – PCP calculation
BMP-53-1	ALDER ST	WET POND	1.03	2,900	0.89	FY26 RECLASSIFICATION
BMP-53-2	ALDER ST	SAND FILTER	0.61	1,940	0.52	FY26 RECLASSIFICATION
BMP-57-2	FALES ST	EXTENDED DRY DETENTION POND	0.92	17,150	0.62	FY26 RECLASSIFICATION
BMP-58-1	POLICE STATION	INFILTRATION BASIN	0.53	2,643	0.49	FY25 RECLASSIFICATION
BMP-59-5	BURKE-MEMORIAL	Biofiltration	0.82	802	0.39	FY26 RECLASSIFICATION
BMP-61-1	GRAPEVINE WAY	INFILTRATION TRENCH	0.57	6,740	1.65	FY25 RECLASSIFICATION
BMP-62-8	CANDLEWOOD DR	Extended Dry Detention Pond	16.2	53,750	1.22	FY24 – PCP calculation
BMP-63-3	ALDER ST	EXTENDED DRY DETENTION POND	0.38	720	0.07	FY26 RECLASSIFICATION
BMP-63-4	ALDER ST	EXTENDED DRY DETENTION POND	1.11	1,040	0.13	FY26 RECLASSIFICATION
BMP-64-1	DAFFODIL LN	EXTENDED DRY DETENTION POND	50,600	1.22	1.05	FY26 RECLASSIFICATION
BMP-65-1	TULIP WAY	EXTENDED DRY DETENTION POND	24,390	2.9	1.76	FY26 RECLASSIFICATION
BMP-65-2	TULIP WAY	EXTENDED DRY DETENTION POND	0.56	4,590	0.33	FY26 RECLASSIFICATION
		FY26 Total Phosphorus Removal (lbs/year)			**72.21**	

PLER_Category	PLER_ExportRate	Townwide SUM_PLER_Acres	Townwide SUM_TP_Load	Catch Basin Drainage Area SUM_PLER_Acres	Catch Basin Drainage Area SUM_TP_Load
(Impervious - Agriculture)	1.52	29.03	44.13		
(Impervious - Commercial)	1.78	124.37	221.38		
(Impervious - Forest)	1.52	77.67	118.06		
(Impervious - HDR)	2.32	88.98	206.43		
(Impervious - Industrial)	1.78	76.89	136.86		
(Impervious - LDR)	1.52	407.03	618.69		
(Impervious - MDR)	1.96	104.12	204.08		
(Impervious - Open Land)	1.52	61.39	93.31		
(Pervious - Agriculture)	0.45	341.11	153.50		
(Pervious - Forest)	0.13	3734.69	485.51		
(Pervious - Commercial)		66.96	9.78		
(Pervious - HDR)		177.06	24.37		
(Pervious - Industrial)		55.36	4.88		
(Pervious - LDR)		1409.72	215.78		
(Pervious - MDR)		295.05	49.77		
(Pervious - Open Land)		362.28	48.37		
	Total	**7411.72**	**2634.90**	**1922.92**	**1086.72**

$$Credit_{P\,CB} = IA_{CB} \times PLER_{IC\text{-}land\ use} \times PRF_{CB}$$ **(Equation 2-3)**

PLER	=	1.95	Aggregate
PRF	=	0.01	Once per year
IA	=	491.59	Total Impervious CB Drainage Area
Phosphorus Credit	=	**9.59**	lbs

*I'm using the aggregate land use export rate
*I'm giving us partial credit for 1x per year cleaning
*I'm only using the impervious drainage area

PLER_Category	PLER_ExportRate	SUM_PLER_Acres	SUM_TP_Load	
Roadway (Impervious - Agriculture)	1.52	6.52	9.91	
Roadway (Impervious - Commercial)	1.95	12.25	23.89	
Roadway (Impervious - Forest)	1.52	44.00	66.87	
Roadway (Impervious - HDR)	1.95	27.01	52.67	
Roadway (Impervious - Industrial)	1.95	7.68	14.97	
Roadway (Impervious - LDR)	1.95	139.15	271.34	
Roadway (Impervious - MDR)	1.95	38.71	75.49	
Roadway (Impervious - Open Land)	1.95	9.76	19.04	
Roadway (Pervious - Agriculture)	1.52	2.05	3.11	
Roadway (Pervious - Commercial)	1.95	0.30	0.58	
Roadway (Pervious - Forest)	1.52	7.10	10.79	
Roadway (Pervious - HDR)	1.95	1.54	2.99	
Roadway (Pervious - Industrial)	1.95	0.79	1.54	
Roadway (Pervious - LDR)	1.95	11.53	22.49	
Roadway (Pervious - MDR)	1.95	2.70	5.27	
Roadway (Pervious - Open Land)	1.95	0.63	1.24	
	Total	311.72	582.20	
	impervious	285.09	**534.19**	(IA swept x PLER IC-Land use)
	pervious	26.64		

Phosphorus Credit $_{P\ sweeping}$ = IA $_{swept}$ x PLER $_{IC\text{-}land\ use}$ x PRF $_{sweeping}$ x AF **(Equation 2-1)**

PRF	=	0.01	(2/year spring and fall) Mechanical Broom
AF	=	1.0	Year Round Sweeping.
Phosphorus Credit OPTION #1	=	**5.34**	lbs

PLER_Category	PLER_ExportRate	SUM_PLER_Acres	SUM_TP_Load		MAX Credit
Roadway (Impervious - Agriculture)	1.52	6.52	9.91	0.05	0.495383249
Roadway (Impervious - Commercial)	1.78	12.25	21.81	0.05	1.090505818
Roadway (Impervious - Forest)	1.52	44.00	66.87	0.05	3.343706507
Roadway (Impervious - HDR)	2.32	27.01	62.67	0.05	3.133355455
Roadway (Impervious - Industrial)	1.78	7.68	13.67	0.05	0.683403554
Roadway (Impervious - LDR)	1.52	139.15	211.51	0.05	10.57547465
Roadway (Impervious - MDR)	1.96	38.71	75.88	0.05	3.793987459
Roadway (Impervious - Open Land)	1.52	9.76	14.84	0.05	0.741948314
	TOTAL	**285.09**	**477.16**	**(la_{swept} x PLER $_{IC\text{-}Land\ use}$)**	23.857765
Roadway (Pervious - Agriculture)	1.52	2.05	3.11		
Roadway (Pervious - Commercial)	1.95	0.30	0.58		
Roadway (Pervious - Forest)	1.52	7.10	10.79		
Roadway (Pervious - HDR)	1.95	1.54	2.99		
Roadway (Pervious - Industrial)	1.95	0.79	1.54		
Roadway (Pervious - LDR)	1.95	11.53	22.49		
Roadway (Pervious - MDR)	1.95	2.70	5.27		
Roadway (Pervious - Open Land)	1.95	0.63	1.24		

$$Credit_{P\ leaf\ litter} = (IA_{leaf\ litter}) \times (PLER_{IC\text{-}land\ use}) \times (0.05) \qquad \textbf{(Equation 2-5)}$$

AF	=	0.05	September 1 through December 1
Phosphorus Credit	=	NA	lbs

Attachment E - FY26 Catchment Investigation Summary

Outfall	Street	Total Points from SVF Analysis	Historical Flow	Priority Ranking	Investigation Complete Per Permit	DPW Notes	W&C Table 1 Notes	Fiscal Year Inspected
OF-10-2	Puddingstone Ln	11	3	High	complete	DPW Investigated	Substantially investigated - No Potential ID	FY26
OF-10-3	Hickory Dr	2	0	Low	complete	DPW Investigated	Substantially investigated - No Potential ID	FY26
OF-10-4	Hickory Dr	10	3	High	complete	DPW Investigated	Substantially investigated - No Potential ID	FY26
OF-10-5	Broken Tree Rd	10	3	High	complete	under WQ thresholds, under 800ft		FY26
OF-10-6	Hickory Dr	2	0	Low	complete	DPW Investigated	Substantially investigated - No Potential ID	FY26
OF-12-11	Olde Surrey Ln	2	0	Low	complete	DPW Investigated	Substantially investigated - No Potential ID	FY26
OF-12-13	Olde Surrey Ln	2	0	Low	complete	DPW Investigated	Substantially investigated - No Potential ID	FY26
OF-12-14	Olde Surrey Ln	2	0	Low	complete	DPW Investigated	Substantially investigated - No Potential ID	FY26
OF-12-16	Summer st	12	3	High	complete	FY26 SDE INVESTIGATE	Substantially investigated - ID below threshold	FY26
OF-12-5	olde Surrey Ln	2	0	Low	complete	DPW Investigated	Substantially investigated - No Potential ID	FY26
OF-12-7	Claybrook Farm Rd	10	3	High	complete	FY26 SDE INVESTIGATE	Substantially investigated - No Potential ID	FY26
OF-12-8	Longmeadow Ln	3	0	Low	complete	DPW Investigated	Substantially investigated - No Potential ID	FY26
OF-12-9	Stable Way	20	3	High	complete	FY26 SDE INVESTIGATE	Substantially investigated - No Potential ID	FY24 & FY25 & FY26
OF-13-2	Musquit Rd	5	0	Low	complete	DPW Investigated	Substantially investigated - No Potential ID	FY26
OF-13-4	Iarussi Way	3	0	Low	complete	DPW Investigated	Substantially investigated - No Potential ID	FY26
OF-13-7	Lovering St	3	0	Low	complete	DPW Investigated	Substantially investigated - No Potential ID	FY26
OF-14-3	Lovering St	3	0	Low	complete	DPW Investigated	Substantially investigated - No Potential ID	FY26
OF-15-4	Sun Valley Dr	3	0	Low	complete	DPW Investigated	Substantially investigated - No Potential ID	FY26
OF-16-1	Hickory Dr	3	0	Low	complete	DPW Investigated	Substantially investigated - No Potential ID	FY26
OF-16-2	Broken Tree Rd	15	3	High	complete	DPW Investigated	Substantially investigated - No Potential ID	FY24 & FY25 &FY26
OF-16-3	Maple Leaf Ln	6	0	High	complete	no flow, less than 800 ft		FY26
OF-16-4	Pine Needle Dr	6	0	High	complete	no flow, less than 800 ft		FY26
OF-16-6	Saddle Hill Rd	4	0	Low	complete	DPW Investigated	Substantially investigated - No Potential ID	FY26
OF-16-7	Walnut Ln	2	0	Low	complete	no flow, less than 800 ft		FY26
OF-16-9	Broken Tree Rd	2	0	Low	complete	DPW Investigated	Substantially investigated - No Potential ID	FY26
OF-18-1	Mallard Dr	8	3	High	complete	under WQ thresholds, under 800ft		FY26
OF-18-4	Broad Acres Farm Rd	10	3	High	complete	FY26 SDE INVESTIGATE	Substantially investigated - ID below threshold	FY26
OF-19-1	Stanley Rd	1	0	Low	complete	DPW Investigated	Substantially investigated - No Potential ID	FY26
OF-19-10	Newton Ln	2	0	Low	complete	DPW Investigated	Substantially investigated - No Potential ID	FY26
OF-19-11	Newton Ln	0	0	Low	complete	DPW Investigated	Substantially investigated - No Potential ID	FY26
OF-19-12	Newton Ln	1	0	Low	complete	DPW Investigated	Substantially investigated - No Potential ID	FY26
OF-19-13	Stanley Rd	1	0	Low	complete	DPW Investigated	Substantially investigated - No Potential ID	FY26
OF-19-14	Stanley Rd	1	0	Low	complete	DPW Investigated	Substantially investigated - No Potential ID	FY26
OF-19-15	Broad Acres Farm Rd	3	0	Low	complete	DPW Investigated	Substantially investigated - No Potential ID	FY26
OF-19-2	Blueberry Hill Rd	5	3	Low	complete	DPW Investigated	Substantially investigated - No Potential ID	FY26
OF-19-3	Stanley Rd	8	3	High	complete	FY26 SDE INVESTIGATE	Substantially investigated - No Potential ID	FY26

OF-19-7	Broad Acres Farm Rd	2	0	Low	complete	DPW Investigated	Substantially investigated - No Potential ID	FY26
OF-19-9	Broad Acres Farm Rd	0	0	Low	complete	DPW Investigated	Substantially investigated - No Potential ID	FY26
OF-20-1	Iarussi Way	5	0	Low	complete	DPW Investigated	Substantially investigated - No Potential ID	FY26
OF-2-1	Winthrop St	1	0	Low	Complete	DPW Investigated	Substantially investigated - No Potential ID	FY26
OF-21-12	Lovering St	2	0	Low	complete	DPW Investigated	Substantially investigated - No Potential ID	FY26
OF-21-13	Howe St	2	0	Low	complete	DPW Investigated	Substantially investigated - No Potential ID	FY26
OF-21-14	Winthrop St	9	0	High	complete	no flow, less than 800 ft		FY26
OF-21-3	Clover Ln	6	0	High	complete	no flow, less than 800 ft		FY26
OF-21-4	Clover Ln	12	3	High	complete	FY26 SDE INVESTIGATE	Substantially investigated - ID below threshold	FY26
OF-2-2	Alexsandria Dr	2	0	Low	Complete	DPW Investigated	Substantially investigated - No Potential ID	FY26
OF-22-1	Howe St	2	0	Low	complete	DPW Investigated	Substantially investigated - No Potential ID	FY26
OF-22-10	Field Rd	0	0	Low	complete	DPW Investigated	Substantially investigated - No Potential ID	FY26
OF-22-11	Field Rd	0	0	Low	complete	DPW Investigated	Substantially investigated - No Potential ID	FY26
OF-22-13	Redgate Dr	0	0	Low	complete	DPW Investigated	Substantially investigated - No Potential ID	FY26
OF-22-18	Overlook Dr	3	0	Low	Complete	DPW Investigated	Substantially investigated - No Potential ID	FY26
OF-22-19	Holliston St	1	0	Low	Complete	DPW Investigated	Substantially investigated - No Potential ID	FY26
OF-22-3	Fern Path	0	0	Low	Complete	DPW Investigated	Substantially investigated - No Potential ID	FY26
OF-22-4	Fern Path	0	0	Low	complete	DPW Investigated	Substantially investigated - No Potential ID	FY26
OF-22-6	Holliston St	6	0	High	complete	SDE lab samples FY25	Substantially investigated - ID below threshold	FY25 & FY26
OF-22-7	Holliston St	2	0	Low	Complete	DPW Investigated	Substantially investigated - No Potential ID	FY26
OF-22-9	Field Rd	0	0	Low	complete	DPW Investigated	Substantially investigated - No Potential ID	FY26
OF-2-3	Alexsandria Dr	2	0	Low	complete	DPW Investigated	Substantially investigated - No Potential ID	FY26
OF-23-4	Spruce Rd	12	3	High	complete	under WQ thresholds, under 800ft		FY26
OF-23-5	Cardinal Cir	8	3	High	complete	FY26 SDE INVESTIGATE	Substantially investigated - No Potential ID	FY26
OF-23-6	Bridle Path Way	11	3	High	complete	under WQ thresholds, under 800ft		FY26
OF-23-7	Ellis St	3	0	Low	complete	DPW Investigated	Substantially investigated - No Potential ID	FY26
OF-23-8	Goldenrod Dr	0	0	Low	complete	DPW Investigated	Substantially investigated - No Potential ID	FY26
OF-2-4	Colonial Rd	3	0	Low	Complete	DPW Investigated	Substantially investigated - No Potential ID	FY26
OF-24-1	Indian Creek Rd	6	0	High	complete	no flow, less than 800 ft		FY26
OF-26-2	Cedar Farms Rd	2	0	Low	complete	DPW Investigated	Substantially investigated - No Potential ID	FY26
OF-26-3	Stone End Rd	5	0	Low	Complete	DPW Investigated	Substantially investigated - No Potential ID	FY26
OF-27-1	Summer Hill Rd	0	0	Low	Complete	DPW Investigated	Substantially investigated - No Potential ID	FY26
OF-27-2	Dogwood Ln	3	3	Low	Complete	DPW Investigated	Substantially investigated - No Potential ID	FY26
OF-27-4	Autumn Rd	1	0	Low	Complete	DPW Investigated	Substantially investigated - No Potential ID	FY26
OF-27-5	Autumn Rd	3	3	Low	Complete	DPW Investigated	Substantially investigated - No Potential ID	FY26
OF-27-6	Cedar Farms Rd	0	0	Low	Complete	DPW Investigated	Substantially investigated - No Potential ID	FY26
OF-27-7	Cedar Farms Rd	0	0	Low	Complete	DPW Investigated	Substantially investigated - No Potential ID	FY26
OF-27-8	Cedar Farms Rd	2	0	Low	Complete	DPW Investigated	Substantially investigated - No Potential ID	FY26
OF-28-11	Summer St	3	0	Low	complete	DPW Investigated	Substantially investigated - No Potential ID	FY26
OF-28-12	Summer St	1	0	Low	Complete	DPW Investigated	Substantially investigated - No Potential ID	FY26
OF-28-13	Summer St	2	0	Low	Complete	DPW Investigated	Substantially investigated - No Potential ID	FY26
OF-28-4	Azalea Dr	10	3	High	complete	under WQ thresholds, under 800ft		FY26
OF-28-5	Dogwood Ln	0	0	Low	Complete	DPW Investigated	Substantially investigated - No Potential ID	FY26

OF-28-7	Summer St	5	3	Low	Complete	DPW Investigated	Substantially investigated - No Potential ID	FY26
OF-28-9	Summer St	1	0	Low	complete	no flow, less than 800 ft		FY26
OF-29-1	Summer st	1	0	Low	complete	no flow, less than 800 ft		FY26
OF-29-2	Summer st	1	0	Low	complete	no flow, less than 800 ft		FY26
OF-29-4	Summer St	1	0	Low	complete	no flow, less than 800 ft		FY26
OF-30-5	Pond St	3	0	Low	complete	DPW Investigated	Substantially investigated - No Potential ID	FY26
OF-3-1	Cider Mill Rd	2	0	Low	Complete	DPW Investigated	Substantially investigated - ID below threshold	FY26
OF-3-10	Fairway Ln	2	0	Low	complete	no flow, less than 800 ft		FY26
OF-3-11	Fairway Ln	2	0	Low	Complete	DPW Investigated	Substantially investigated - No Potential ID	FY26
OF-31-10	Lovering St	2	0	Low	Complete	DPW Investigated	Substantially investigated - No Potential ID	FY26
OF-31-11	Lovering St	1	0	Low	complete	DPW Investigated	Substantially investigated - No Potential ID	FY26
OF-31-12	Lovering St	1	0	Low	complete	DPW Investigated	Substantially investigated - No Potential ID	FY26
OF-31-13	Lovering St	9	3	High	complete	DPW Investigated	Substantially investigated - No Potential ID	FY26
OF-3-12	Fairway Ln	2	0	Low	complete	no flow, less than 800 ft		FY26
OF-3-13	Homestead Dr	6	3	High	complete	under WQ thresholds, under 800ft		FY26
OF-31-4	Willow Crest Way	0	0	Low	complete	DPW Investigated	Substantially investigated - No Potential ID	FY26
OF-3-15	Homestead Dr	11	3	High	complete	under WQ thresholds, under 800ft		FY26
OF-3-16	Homestead Dr				Complete	DPW Investigated	Substantially investigated - No Potential ID	FY26
OF-31-9	Lovering St	2	0	Low	complete	DPW Investigated	Substantially investigated - No Potential ID	FY26
OF-3-2	Hill St	3	0	Low	complete	no flow, less than 800 ft		FY26
OF-33-5	Vernon Rd	6	0	High	complete	no flow, less than 800 ft		FY26
OF-3-4	Hill St	3	0	Low	complete	DPW Investigated	Substantially investigated - No Potential ID	FY26
OF-34-1	Liberty Rd	0	0	Low	Complete	DPW Investigated	Substantially investigated - No Potential ID	FY26
OF-34-2	Liberty Rd	2	0	Low	Complete	DPW Investigated	Substantially investigated - No Potential ID	FY26
OF-34-3	Clark St	11	3	High	complete	DPW Investigated	Substantially investigated - No Potential ID	FY26
OF-34-5	Clark St	3	0	Low	Complete	DPW Investigated	Substantially investigated - No Potential ID	FY26
OF-3-5	Hill St	3	0	Low	complete	no flow, less than 800 ft		FY26
OF-35-1	Fisher St	2	0	Low	Complete	DPW Investigated	Substantially investigated - No Potential ID	FY26
OF-35-2	Deerfield Rd	1	0	Low	Complete	DPW Investigated	Substantially investigated - No Potential ID	FY26
OF-35-3	Deerfield Rd	3	0	Low	Complete	DPW Investigated	Substantially investigated - No Potential ID	FY26
OF-35-7	Deerfield Rd	6	0	High	complete	no flow, less than 800 ft		FY26
OF-36-1	Cedar Farms Rd	2	0	Low	complete	DPW Investigated	Substantially investigated - No Potential ID	FY26
OF-36-3	Deerfield Rd	3	0	Low	Complete	DPW Investigated	Substantially investigated - No Potential ID	FY26
OF-36-4	Fisher St	2	0	Low	Complete	DPW Investigated	Substantially investigated - No Potential ID	FY26
OF-3-7	Hill St	7	3	High	complete	under WQ thresholds, under 800ft	Substantially investigated - ID below threshold	FY26
OF-37-12	Pheasant Run Rd	0	0	Low	complete	no flow, less than 800 ft		FY26
OF-37-13	Pheasant Run Rd	1	0	Low	complete	no flow, less than 800 ft		FY26
OF-37-14	Pheasant Run Rd	8	3	High	complete	under WQ thresholds, under 800ft		FY26
OF-37-15	Pheasant Run Rd	1	0	Low	complete	no flow, less than 800 ft		FY26
OF-37-16	Pheasant Run Rd	1	0	Low	complete	no flow, less than 800 ft		FY26
OF-37-17	Summer St	2	0	Low	complete	no flow, less than 800 ft		FY26
OF-37-18	Summer St	2	0	Low	complete	no flow, less than 800 ft		FY26
OF-37-20	Summer st	2	0	Low	complete	no flow, less than 800 ft		FY26

OF-37-21	Summer st	2	0	Low	complete	no flow, less than 800 ft		FY26
OF-37-22	Summer st	2	0	Low	complete	no flow, less than 800 ft		FY26
OF-37-23	Summer st	1	0	Low	complete	no flow, less than 800 ft		FY26
OF-37-3	Azalea Dr	9	3	High	complete	under WQ thresholds, under 800ft		FY26
OF-37-4	Azalea Dr	4	3	Low	complete	under WQ thresholds, under 800ft		FY26
OF-37-5	Dogwood Ln	0	0	Low	complete	no flow, less than 800 ft		FY26
OF-37-6	Dogwood Ln	0	0	Low	complete	no flow, less than 800 ft		FY26
OF-37-7	Dogwood Ln	1	0	Low	complete	no flow, less than 800 ft		FY26
OF-37-9	Dogwood Ln	1	0	Low	complete	no flow, less than 800 ft		FY26
OF-3-8	Fairway Ln	2	0	Low	complete	no flow, less than 800 ft		FY26
OF-38-1	Summer st	1	0	Low	complete	no flow, less than 800 ft		FY26
OF-38-2	Summer St	1	0	Low	complete	no flow, less than 800 ft		FY26
OF-38-3	Summer St	1	0	Low	complete	no flow, less than 800 ft		FY26
OF-38-4	Summer st	1	0	Low	complete	no flow, less than 800 ft		FY26
OF-38-5	Summer St	1	0	Low	complete	no flow, less than 800 ft		FY26
OF-38-6	Summer St	1	0	Low	complete	no flow, less than 800 ft		FY26
OF-38-7	Summer St	1	0	Low	complete	no flow, less than 800 ft		FY26
OF-3-9	Fairway Ln	2	0	Low	complete	no flow, less than 800 ft		FY26
OF-39-10	Temple St	0	0	Low	complete	no flow, less than 800 ft		FY26
OF-39-11	Grove St	0	0	Low	complete	no flow, less than 800 ft		FY26
OF-39-12	Temple St	0	0	Low	complete	no flow, less than 800 ft		FY26
OF-39-13	Temple St	0	0	Low	complete	no flow, less than 800 ft		FY26
OF-39-14	Temple St	0	0	Low	complete	no flow, less than 800 ft		FY26
OF-39-15	Drybridge Rd	0	0	Low	complete	no flow, less than 800 ft		FY26
OF-39-17	Temple St	0	0	Low	complete	no flow, less than 800 ft		FY26
OF-39-3	Winthrop St	5	0	Low	complete	no flow, less than 800 ft		FY26
OF-39-7	Drybridge Rd	1	0	Low	complete	no flow, less than 800 ft		FY26
OF-39-8	Temple St	0	0	Low	complete	no flow, less than 800 ft		FY26
OF-39-9	Temple St	0	0	Low	complete	no flow, less than 800 ft		FY26
OF-40-1	Holliston St	4	3	Low	complete	under WQ thresholds, under 800ft		FY26
OF-40-3	Holliston St	1	0	Low	complete	no flow, less than 800 ft		FY26
OF-40-9	Main St	5	0	Low	complete	no flow, less than 800 ft		FY26
OF-4-1	Curtis Ln	3	0	Low	Complete	DPW Investigated	Substantially investigated - No Potential ID	FY26
OF-4-2	Holliston St	4	0	Low	Complete	DPW Investigated	Substantially investigated - No Potential ID	FY26
OF-42-10	Oakland St	4	0	Low	complete	no flow, less than 800 ft		FY26
OF-42-2	Vernon Rd	4	0	Low	complete	no flow, less than 800 ft		FY26
OF-42-3	Oakview Cir	6	0	High	complete	no flow, less than 800 ft		FY26
OF-42-4	Oakview Cir	4	0	Low	complete	no flow, less than 800 ft		FY26
OF-42-5	Oakland St	6	0	High	complete	no flow, less than 800 ft		FY26
OF-42-6	Oakland St	6	0	High	complete	no flow, less than 800 ft		FY26
OF-42-7	Oakland St	6	0	High	complete	no flow, less than 800 ft		FY26
OF-42-8	Oakland St	6	0	High	complete	no flow, less than 800 ft		FY26
OF-42-9	Oakland St	4	0	Low	complete	no flow, less than 800 ft		FY26

OF-4-4	Curtis Ln	2	0	Low	Complete	DPW Investigated	Substantially investigated - No Potential ID	FY26
OF-44-1	Milford St	3	0	Low	complete	no flow, less than 800 ft		FY26
OF-44-10	Milford St	6	0	High	complete	no flow, less than 800 ft		FY26
OF-44-2	Liberty Rd	1	0	Low	complete	no flow, less than 800 ft		FY26
OF-44-3	Short St	3	0	Low	complete	no flow, less than 800 ft		FY26
OF-44-4	Liberty Rd	3	0	Low	complete	no flow, less than 800 ft		FY26
OF-44-5	Liberty Rd	1	0	Low	complete	no flow, less than 800 ft		FY26
OF-44-7	Short St	3	0	Low	complete	no flow, less than 800 ft		FY26
OF-44-9	Gray Squirrel Dr	2	0	Low	complete	no flow, less than 800 ft		FY26
OF-4-5	Juniper Rd	6	3	High	complete	under WQ thresholds, under 800ft		FY26
OF-45-1	Fisher St	3	0	Low	complete	no flow, less than 800 ft		FY26
OF-45-10	Milford St	3	0	Low	complete	no flow, less than 800 ft		FY26
OF-45-2	Fisher St	11	3	High	complete	under WQ thresholds, under 800ft		FY26
OF-45-3	Gray Squirrel Cir	2	0	Low	complete	no flow, less than 800 ft		FY26
OF-45-4	Gray Squirrel Cir	3	0	Low	complete	no flow, less than 800 ft		FY26
OF-45-5	Gray Squirrel Cir	3	0	Low	complete	no flow, less than 800 ft		FY26
OF-45-6	Milford St	4	0	Low	complete	no flow, less than 800 ft		FY26
OF-45-7	Fisher St	21	3	High	complete	DPW Investigated & SDE	Substantially investigated - No Potential ID	FY24 & FY25 &FY26
OF-45-8	Milford St	7	0	High	complete	no flow, less than 800 ft		FY26
OF-45-9	Milford St	4	0	Low	complete	no flow, less than 800 ft		FY26
OF-46-1	Bayberry Ln	2	0	Low	complete	no flow, less than 800 ft		FY26
OF-46-10	Summer St	3	0	Low	complete	no flow, less than 800 ft		FY26
OF-46-11	Milford St	1	0	Low	complete	no flow, less than 800 ft		FY26
OF-46-12	Milford St	2	0	Low	complete	no flow, less than 800 ft		FY26
OF-46-2	Little Tree Rd	2	0	Low	complete	no flow, less than 800 ft		FY26
OF-46-3	Milford St	12	3	High	complete	under WQ thresholds, under 800ft		FY26
OF-46-4	Independence Ln	2	0	Low	complete	no flow, less than 800 ft		FY26
OF-46-5	Independence Ln	2	0	Low	complete	no flow, less than 800 ft		FY26
OF-46-6	Independence Ln	3	0	Low	complete	no flow, less than 800 ft		FY26
OF-46-7	Kingson Ln	0	0	Low	complete	no flow, less than 800 ft		FY26
OF-46-8	Kingson Ln	0	0	Low	complete	no flow, less than 800 ft		FY26
OF-46-9	Kingson Ln	0	0	Low	complete	no flow, less than 800 ft		FY26
OF-4-7	Juniper Rd	3	0	Low	Complete	DPW Investigated	Substantially investigated - No Potential ID	FY26
OF-47-1	Brandywine Rd	2	0	Low	complete	no flow, less than 800 ft		FY26
OF-47-11	Oak St	9	0	High	complete	no flow, less than 800 ft		FY26
OF-47-12	Independence Ln	0	0	Low	complete	no flow, less than 800 ft		FY26
OF-47-13	Independence Ln	0	0	Low	complete	no flow, less than 800 ft		FY26
OF-47-14	Independence Ln	0	0	Low	complete	no flow, less than 800 ft		FY26
OF-47-15	Freedom Trail	0	0	Low	complete	no flow, less than 800 ft		FY26
OF-47-2	Daniels Rd	3	0	Low	complete	no flow, less than 800 ft		FY26
OF-47-4	Highland St	3	0	Low	complete	no flow, less than 800 ft		FY26
OF-47-5	Oak St	3	0	Low	complete	no flow, less than 800 ft		FY26
OF-47-6	Oak St	3	0	Low	complete	no flow, less than 800 ft		FY26

OF-47-7	Oak St	3	0	Low	complete	no flow, less than 800 ft		FY26
OF-47-8	Slocumb Pl	0	0	Low	complete	no flow, less than 800 ft		FY26
OF-47-9	Highland St	3	0	Low	complete	no flow, less than 800 ft		FY26
OF-4-8	Skyline Dr	3	0	Low	Complete	DPW Investigated	Substantially investigated - No Potential ID	FY26
OF-48-10	Evergreen St	14	3	High	Complete	FY26 SDE INVESTIGATE	Substantially investigated - ID below threshold	FY25 & FY26
OF-48-12	Balsam Way	0	0	Low	complete	no flow, less than 800 ft		FY26
OF-48-13	Cutler St	3	0	Low	complete	no flow, less than 800 ft		FY26
OF-48-15	Norfolk Ave	12	3	High	complete	under WQ thresholds, under 800ft		FY26
OF-48-17	Oak St	9	0	High	complete	no flow, less than 800 ft		FY26
OF-48-18	Oak St	8	0	High	complete	no flow, less than 800 ft		FY26
OF-48-5	Cottage St	4	0	Low	complete	no flow, less than 800 ft		FY26
OF-48-6	Main St	10	0	High	complete	no flow, less than 800 ft		FY26
OF-48-7	Royal Heights Dr	1	0	Low	complete	no flow, less than 800 ft		FY26
OF-48-8	Main St	10	0	High	complete	no flow, less than 800 ft		FY26
OF-48-9	Main St	10	0	High	complete	no flow, less than 800 ft		FY26
OF-4-9	Skyline Dr	2	0	Low	Complete	DPW Investigated	Substantially investigated - No Potential ID	FY26
OF-49-1	Orchard St	0	0	Low	complete	no flow, less than 800 ft		FY26
OF-49-11	Crestview Ave	0	0	Low	complete	no flow, less than 800 ft		FY26
OF-49-13	Crestview Ave	0	0	Low	complete	no flow, less than 800 ft		FY26
OF-49-14	Crestview Ave	0	0	Low	complete	no flow, less than 800 ft		FY26
OF-49-2	Orchard St	0	0	Low	complete	no flow, less than 800 ft		FY26
OF-49-3	Henry St	0	0	Low	complete	no flow, less than 800 ft		FY26
OF-49-4	Henry St	0	0	Low	complete	no flow, less than 800 ft		FY26
OF-49-9	Gable Way	8	3	High	complete	under WQ thresholds, under 800ft		FY26
OF-50-2	Kenart Rd	8	0	High	complete	no flow, less than 800 ft		FY26
OF-5-1	Juniper Rd	2	0	Low	Complete	DPW Investigated	Substantially investigated - No Potential ID	FY26
OF-51-1	Oakland St	4	0	Low	complete	no flow, less than 800 ft		FY26
OF-51-2	Oakland St	6	0	High	complete	no flow, less than 800 ft		FY26
OF-51-3	Oakland St	4	0	Low	complete	no flow, less than 800 ft		FY26
OF-51-4	Broad St	3	0	Low	complete	no flow, less than 800 ft		FY26
OF-51-5	Broad St	3	0	Low	complete	no flow, less than 800 ft		FY26
OF-51-6	Broad St	3	0	Low	complete	no flow, less than 800 ft		FY26
OF-5-2	Juniper Rd	2	0	Low	Complete	DPW Investigated	Substantially investigated - No Potential ID	FY26
OF-5-3	Hunter Ln	2	0	Low	Complete	DPW Investigated	Substantially investigated - ID below threshold	FY26
OF-53-1	Alder St	8	0	High	complete	no flow, less than 800 ft		FY26
OF-53-2	Alder St	8	0	High	complete	no flow, less than 800 ft		FY26
OF-54-1	Trotter Dr	7	0	High	complete	no flow, less than 800 ft		FY26
OF-54-3	Trotter Dr	10	0	High	complete	no flow, less than 800 ft		FY26
OF-54-4	Blue Ribbon Ln	5	0	Low	complete	no flow, less than 800 ft		FY26
OF-54-5	Stoney Ridge Rd	2	0	Low	complete	no flow, less than 800 ft		FY26
OF-54-7	Alder St	7	0	High	complete	no flow, less than 800 ft		FY26
OF-54-8	Trotter Dr	2	0	Low	complete	no flow, less than 800 ft		FY26
OF-55-1	Granite St	11	3	High	complete	under WQ thresholds, under 800ft		FY26

OF-55-10	Castle Rd	3	0	Low	complete	no flow, less than 800 ft		FY26
OF-55-15	West St	3	0	Low	complete	no flow, less than 800 ft		FY26
OF-55-16	West St	9	0	High	complete	no flow, less than 800 ft		FY26
OF-55-6	Millbrook Rd	5	0	Low	complete	no flow, less than 800 ft		FY26
OF-55-7	Lantern Ln	2	0	Low	complete	no flow, less than 800 ft		FY26
OF-55-9	Lantern Ln	2	0	Low	complete	no flow, less than 800 ft		FY26
OF-56-1	Little Tree Rd	2	0	Low	complete	no flow, less than 800 ft		FY26
OF-56-5	Little Tree Rd	2	0	Low	complete	no flow, less than 800 ft		FY26
OF-57-10	Stagecoach Way	1	0	Low	complete	no flow, less than 800 ft		FY26
OF-57-13	Harmony Village	0	0	Low	complete	no flow, less than 800 ft		FY26
OF-57-6	Village St	2	0	Low	complete	no flow, less than 800 ft		FY26
OF-57-7	Fales St	2	0	Low	complete	no flow, less than 800 ft		FY26
OF-57-8	Knollwood Rd	2	0	Low	complete	no flow, less than 800 ft		FY26
OF-58-10	Village St	5	0	Low	complete	no flow, less than 800 ft		FY26
OF-58-11	Cottage St	4	0	Low	complete	no flow, less than 800 ft		FY26
OF-58-12	Brigham St	1	0	Low	complete	no flow, less than 800 ft		FY26
OF-58-17	Guernsey St	8	3	High	complete	under WQ thresholds, under 800ft		FY26
OF-58-2	Cottage St	2	0	Low	complete	no flow, less than 800 ft		FY26
OF-58-20	Rolling Ln	0	0	Low	complete	no flow, less than 800 ft		FY26
OF-58-21	Village St	2	0	Low	complete	no flow, less than 800 ft		FY26
OF-58-23	Village St	0	0	Low	complete	no flow, less than 800 ft		FY26
OF-58-24	Village St	0	0	Low	complete	no flow, less than 800 ft		FY26
OF-58-3	Wellington St	2	0	Low	complete	no flow, less than 800 ft		FY26
OF-58-4	Village St	1	0	Low	complete	no flow, less than 800 ft		FY26
OF-58-5	Cottage St	5	0	Low	complete	no flow, less than 800 ft		FY26
OF-58-7	Village St	5	0	Low	complete	no flow, less than 800 ft		FY26
OF-59-1	Kings Ln	13	3	High	complete	FY26 SDE INVESTIGATE	Substantially investigated - No Potential ID	FY26
OF-59-12	Cole Ave	1	0	Low	complete	no flow, less than 800 ft		FY26
OF-59-3	Dean St	0	0	Low	complete	no flow, less than 800 ft		FY26
OF-59-5	Village St	6	0	High	complete	no flow, less than 800 ft		FY26
OF-59-8	Forest Rd	1	0	Low	complete	no flow, less than 800 ft		FY26
OF-59-9	Forest Rd	3	0	Low	complete	no flow, less than 800 ft		FY26
OF-60-1	Sanderson St	4	0	Low	complete	no flow, less than 800 ft		FY26
OF-60-2	Village St	6	0	High	complete	no flow, less than 800 ft		FY26
OF-60-3	Village St	6	0	High	complete	no flow, less than 800 ft		FY26
OF-60-4	Lovers Ln	1	0	Low	complete	no flow, less than 800 ft		FY26
OF-60-5	Ridge St	1	0	Low	complete	no flow, less than 800 ft		FY26
OF-60-6	Barber St	4	0	Low	complete	no flow, less than 800 ft		FY26
OF-6-10	Summer St	6	0	High	complete	no flow, less than 800 ft		FY26
OF-61-3	Populatic St	10	0	High	complete	no flow, less than 800 ft		FY26
OF-61-5	Grapevine Way	3	0	Low	complete	no flow, less than 800 ft		FY26
OF-61-6	Walker St	7	0	High	complete	no flow, less than 800 ft		FY26
OF-6-2	Summer St	11	3	High	complete	under WQ thresholds, under 800ft		FY26

OF-62-1	Island Rd	3	0	Low	complete	no flow, less than 800 ft		FY26
OF-63-1	Alder St	9	0	High	complete	no flow, less than 800 ft		FY26
OF-63-2	Alder St	9	0	High	complete	no flow, less than 800 ft		FY26
OF-64-10	Daffodil Ln	2	0	Low	complete	no flow, less than 800 ft		FY26
OF-64-11	Daffodil Ln	3	0	Low	complete	no flow, less than 800 ft		FY26
OF-64-12	Daffodil Ln	11	3	High	complete	under WQ thresholds, under 800ft		FY26
OF-64-14	Lost Hill Rd	10	0	High	complete	no flow, less than 800 ft		FY26
OF-64-17	Paddock Ln	7	0	High	complete	no flow, less than 800 ft		FY26
OF-64-2	Fox Run Rd	5	0	Low	complete	no flow, less than 800 ft		FY26
OF-64-3	Fox Run Rd	5	0	Low	complete	no flow, less than 800 ft		FY26
OF-64-4	Fox Run Rd	5	0	Low	complete	no flow, less than 800 ft		FY26
OF-64-6	Fox Run Rd	5	0	Low	complete	no flow, less than 800 ft		FY26
OF-64-7	Stallbrook Rd	5	0	Low	complete	no flow, less than 800 ft		FY26
OF-64-8	Stallbrook Rd	13	3	High	complete	under WQ thresholds, under 800ft		FY26
OF-64-9	Tulip Way	0	0	Low	complete	no flow, less than 800 ft		FY26
OF-6-5	Summit Rd	3	0	Low	Complete	DPW Investigated	Substantially investigated - No Potential ID	FY26
OF-65-1	Tulip Way	2	0	Low	complete	no flow, less than 800 ft		FY26
OF-65-2	Tulip Way	10	3	High	complete	under WQ thresholds, under 800ft		FY26
OF-6-6	Summit Rd	4	0	Low	Complete	DPW Investigated	Substantially investigated - No Potential ID	FY26
OF-66-1	West St	7	0	High	complete	no flow, less than 800 ft		FY26
OF-66-2	Summer St	4	0	Low	complete	no flow, less than 800 ft		FY26
OF-66-4	Summer St	11	3	High	complete	under WQ thresholds, under 800ft		FY26
OF-66-5	Summer St	8	0	High	complete	no flow, less than 800 ft		FY26
OF-66-6	West St	10	0	High	complete	no flow, less than 800 ft		FY26
OF-66-8	Summer St	5	0	Low	complete	no flow, less than 800 ft		FY26
OF-67-4	Village St	4	0	Low	complete	no flow, less than 800 ft		FY26
OF-67-5	Village St	4	0	Low	complete	no flow, less than 800 ft		FY26
OF-67-6	Franklin St	10	3	High	Complete	FY26 SDE INVESTIGATE	Substantially investigated - ID below threshold	FY26
OF-67-7	Waterview Dr	11	0	High	complete	no flow, less than 800 ft		FY26
OF-67-9	Waterview Dr	14	3	High	complete	FY26 SDE INVESTIGATE	Substantially investigated - No Potential ID	FY25 & FY26
OF-6-8	Summer St	7	0	High	complete	no flow, less than 800 ft		FY26
OF-68-4	Shaw St	9	0	High	complete	no flow, less than 800 ft		FY26
OF-6-9	Summer St	11	3	High	complete	under WQ thresholds, under 800ft		FY26
OF-69-1	Samoset Cir	1	0	Low	complete	no flow, less than 800 ft		FY26
OF-69-2	Samoset Cir	9	3	High	complete	under WQ thresholds, under 800ft		FY26
OF-69-3	Charles River Rd	1	0	Low	complete	no flow, less than 800 ft		FY26
OF-69-4	Riverview St	7	0	High	complete	no flow, less than 800 ft		FY26
OF-69-5	Riverview St	7	0	High	complete	no flow, less than 800 ft		FY26
OF-69-7	Charles View Rd	6	0	High	complete	no flow, less than 800 ft		FY26
OF-70-1	John St	10	0	High	complete	no flow, less than 800 ft		FY26
OF-70-11	Charles View Rd	6	0	High	complete	no flow, less than 800 ft		FY26
OF-70-2	River St	10	0	High	complete	no flow, less than 800 ft		FY26
OF-70-3	Sanford St	1	0	Low	complete	no flow, less than 800 ft		FY26

OF-7-1	Diane Dr	2	0	Low	Complete	DPW Investigated	Substantially investigated - No Potential ID	FY26
OF-71-1	Walker St	10	0	High	complete	no flow, less than 800 ft		FY26
OF-71-3	Village St	13	0	High	complete	no flow, less than 800 ft		FY26
OF-71-4	Island Rd	3	0	Low	complete	no flow, less than 800 ft		FY26
OF-7-2	Kimberly Dr	3	0	Low	Complete	DPW Investigated	Substantially investigated - No Potential ID	FY26
OF-72-1	Cyntha Cir	9	0	High	complete	no flow, less than 800 ft		FY26
OF-7-3	Kimberly Dr	3	0	Low	Complete	DPW Investigated	Substantially investigated - No Potential ID	FY26
OF-8-1	Fairway Ln	2	0	Low	Complete	DPW Investigated	Substantially investigated - No Potential ID	FY26
OF-8-2	Skyline Dr	2	0	Low	Complete	DPW Investigated	Substantially investigated - No Potential ID	FY26
OF-8-3	Fairway Ln	11	3	High	complete	under WQ thresholds, under 800ft		FY26
OF-8-4	Rosewood Dr	2	0	Low	Complete	DPW Investigated	Substantially investigated - No Potential ID	FY26
OF-8-5	Rosewood Dr	2	0	Low	complete	no flow, less than 800 ft		FY26
OF-8-6	Timber Crest Dr	0	0	Low	Complete	DPW Investigated	Substantially investigated - No Potential ID	FY26
OF-9-1	Fairway Ln	2	0	Low	Complete	DPW Investigated	Substantially investigated - No Potential ID	FY26
OF-9-3	Fairway Ln	2	0	Low	Complete	DPW Investigated	Substantially investigated - No Potential ID	FY26
OF-9-4	Fairway Ln	3	0	Low	Complete	DPW Investigated	Substantially investigated - No Potential ID	FY26
OF-9-6	Puddingstone Ln	3	0	Low	Complete	DPW Investigated	Substantially investigated - No Potential ID	FY26
OF-9-7	Puddingstone Ln	11	3	High	complete	under WQ thresholds, under 800ft		FY26
OF-9-8	Woodland Rd	11	3	High	complete	under WQ thresholds, under 800ft		FY26

TOWN OF MEDWAY
COMMONWEALTH OF MASSACHUSETTS

DEPARTMENT OF PUBLIC WORKS

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DPW Director
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To: U.S. Environmental Protection Agency, Region 1
From: Town of Medway, Department of Public Works
Date: September 29, 2026
Re: Attachment D - Memorandum Supporting Request for Additional Time to Develop an Alternative Schedule for Phosphorus Reduction Requirements

The Town of Medway is requesting additional time to meet the phosphorus reduction targets established for Year 8 and subsequent years under the MS4 permit. The Town's ability to meet the current targets has been affected by changing phosphorus reduction requirements, site limitations, limited municipal resources, higher-than-anticipated costs, and the time required to properly identify, design, permit, and construct stormwater control measures (SCMs).

At this time, the Town is not proposing a specific alternative schedule because additional data collection, site assessments, and evaluation of existing BMPs are still necessary to determine what projects are technically feasible and what phosphorus reductions can realistically be achieved.

The Town's current focus is two-pronged. The town is prioritizing three new SCMs for construction as well as ground-truthing existing data, assessing potential sites, evaluating existing SCM performance, and prioritizing engineering designs for projects with the greatest potential phosphorus removal.

The Town is requesting that EPA recognize the substantial work already completed and allow additional time for Medway to complete its ongoing assessments. This additional time would allow the Town to develop a more informed and achievable alternative schedule based on actual site conditions, available phosphorus reduction opportunities, project costs, and implementation timelines.

Section 1: Reasons for an Alternative Schedule Request

1. Site Suitability Has Limited the Ability to Install New SCMs

The Town initially identified potential SCM locations through desktop GIS analysis, the Town's Five-Year Road Plan, and previous analyses conducted in partnership with the Charles River Watershed Association (CRWA).

These analyses considered factors such as:

- Municipal ownership and control of property
- Soil conditions
- Available space
- Proximity to existing drainage infrastructure
- Planned roadway and right-of-way improvements

However, field investigation, including test pits and infiltration testing, showed that several locations identified through desktop analysis were not viable. Common constraints included unsuitable soils, insufficient space, difficult access, unfavorable topography, and lack of connection to existing drainage infrastructure.

This experience demonstrated that GIS and desktop analysis alone cannot reliably identify viable SCM locations. Significant field investigation and engineering evaluation are required before a site can be considered feasible.

2. Limited Staffing and Funding

The Town has limited staff and financial resources available to implement the required phosphorus reductions. The cost of achieving additional phosphorus removal has also been substantially higher than anticipated.

Using a conservative estimated cost of approximately $50,000 per pound of phosphorus removed, even achieving an additional two pounds of annual phosphorus reduction could cost more than the annual salary of many Town employees.

The Town also does not have sufficient funding to hire outside consultants or engineers to develop the required implementation plan. The original PCP was developed in-house using a template provided through CRWA and a consultant. Town staff have subsequently spent approximately three years reviewing data, conducting field assessments, and ground-truthing potential projects.

3. Phosphorus Reduction Requirements Have Increased

The original Year 8 phosphorus reduction target was 80 kilograms per year (176 pounds per year), as identified in Appendix F of the MS4 permit.

Those targets were based on 2005 land use and land cover data. Since then, continued development in Medway has increased the estimated phosphorus load by approximately 107.32 pounds per year. As a result, the total required reduction by Year 20 increased to approximately 989.32 pounds per year.

The updated calculations also increased the Year 8 reduction requirement to approximately 197.86 pounds per year. This effectively required the Town to complete some SCM projects originally planned for Years 9 and 10 in order to meet the revised Year 8 requirement.

The Town was also unable to update its GIS land use and land cover data when the PCP was initially developed due to staffing limitations, meaning the Town began implementation already behind the subsequently revised targets.

4. Implementation Has Identified Additional Challenges

The process of developing and implementing the PCP has provided important information about the limitations of the original assumptions and estimates.

For example, the Town subsequently determined that some SCMs identified for retrofit at the High School were already part of a treatment train. As a result, the Town could not claim additional

phosphorus reduction credit for those individual components and could only claim credit for the treatment train as a whole.

These types of findings have reduced the amount of phosphorus removal credit available from projects originally included in the plan.

5. The Town Continues to Evaluate Existing and New SCM Opportunities

Medway's strategy relies on both enhancing existing SCMs and developing new SCMs.

Over the past three years, the Town has:

- Reviewed existing stormwater control structures for opportunities to increase infiltration and storage capacity.
- Collected field data and evaluated existing BMPs.
- Developed preliminary retrofit plans.
- Conducted site assessments and ground-truthing.
- Continued identifying potential locations for new SCMs.
- Prioritized Town-owned and Town-managed properties, including existing easements.
- Prioritized projects expected to provide the greatest phosphorus reduction.

There are still approximately 141 existing BMPs requiring review, including 95 BMPs located on privately owned property.

The Town also continues to evaluate potential sites for new BMPs. However, identifying a site through GIS does not guarantee that it is feasible. Field conditions such as topography, soil suitability, available space, drainage connectivity, and access must be evaluated before a project can proceed.

6. SCM Implementation Requires a Multi-Year Process

The Town estimates that implementing an SCM project requires a minimum three-year cycle, beginning with site identification and reconnaissance and continuing through:

1. Site investigation and assessment
2. Engineering and design
3. Permitting
4. Bid preparation and procurement
5. Construction

As a result, projects cannot be identified and implemented quickly enough to accommodate continually changing reduction targets without sufficient lead time and resources.

Section 2: Progress on Non-Structural Controls

The Town of Medway has increased its efforts to implement the nonstructural controls identified in the Phosphorus Control Plan (PCP), but staffing, equipment, operational constraints, and weather conditions have prevented the Town from achieving the enhanced phosphorus reduction credits originally anticipated.

- Street sweeping: The PCP anticipated increasing town-wide sweeping from twice annually to monthly from March through November, which was estimated to provide 12.2 lbs/year of phosphorus removal. Limited staff and equipment have made this frequency impractical. However, the Town has substantially increased sweeping since FY24, including 20 additional sweeping days, 620 additional lane miles in FY25 compared with FY24, and another 240 additional lane miles in FY26 compared with FY25. In FY26, crews conducted sweeping on 90 of 260 workdays and swept during every month except February. To reflect actual performance, the Town conservatively claims 4.04 lbs/year for town-wide sweeping.

- Leaf litter collection: The PCP anticipated enhanced weekly sweeping of high-density residential, commercial, open space, and forested areas, with an estimated 8.31 lbs/year of phosphorus removal. Staffing and resource limitations have prevented the Town from consistently meeting the required sweeping frequency. The effectiveness of this credit is also highly dependent on seasonal conditions, including the timing and amount of leaf fall and early snowfall. Consequently, the Town has not claimed the enhanced leaf litter collection credit to date.

- Catch basin cleaning: The PCP proposed increasing catch basin cleaning from annually to twice per year, which was estimated to provide 19.17 lbs/year of phosphorus removal. This approach has proven impractical because many catch basins do not require semi-annual cleaning, specialized cleaning contractors are limited in the region, and additional cleaning requires significant staff coordination and police details, particularly in high-traffic areas. The Town uses its vacuum truck to target basins that consistently exceed the 50% full threshold and has invested in a tracking system to identify basins that repeatedly accumulate sediment. Based on actual implementation, the Town uses the more conservative phosphorus reduction factor of 0.01 rather than 0.02 and currently claims 9.59 lbs/year of phosphorus removal.

Overall, Medway has increased its nonstructural stormwater management efforts but has adjusted its phosphorus reduction credits to reflect actual implementation and documented limitations rather than claiming credits that cannot be consistently achieved.

Section 3: Planned Phase 1 Structural Controls

As discussed, the Town has invested significant time and resources over the past three years evaluating and assessing existing structural BMPs. Through these efforts, the Town has successfully retrofitted three BMPs to provide additional storage capacity and treatment. The town has also been able to reclassify several SCMs from non-infiltrating to infiltrating SCM based on the site investigations. The Town has also completed maintenance on dozens of BMPs that had not received maintenance in decades, allowing the Town to claim additional phosphorus reduction credits associated with restoring and maintaining their intended function.

The following section outlines the Town's next steps for implementing the Phosphorus Control Plan (PCP), including continued BMP maintenance, retrofit design and implementation, new BMP construction, and ongoing site evaluation. These efforts will focus on existing Town-owned and Town-managed BMPs, as well as opportunities to evaluate privately owned and managed BMPs where appropriate.

Table 1 identifies seven BMPs that have been prioritized for maintenance and summarizes the corresponding phosphorus reduction credits available to the Town. Collectively, these maintenance activities are expected to provide an additional 18.68 pounds per year of phosphorus removal.

Table 1. BMP Maintenance Opportunities

FY Reviewed by Woodard & Curran	Phosphorus removal (lbs/yr)	BMP ID	Street Name	Planned FY Completion
FY25	5.28	BMP-19-7	Blueberry Hill Rd	TBD – pending scope and funding
FY25	1.07	BMP-29-1	Summer St	TBD – pending scope and funding
FY25	1.09	BMP-37-2	Summer St	TBD – pending scope and funding
FY25	0.06	BMP-38-1	Summer St	TBD – pending scope and funding
FY25	3.86	BMP-38-5	Summer st	TBD – pending scope and funding
FY25	7.00	BMP-39-2	Temple St	TBD – pending scope and funding
FY25	0.32	BMP-45-1	Lantern Ln	TBD – pending scope and funding
TOTAL	18.68			

Table 2 identifies ten existing BMPs that have been evaluated and determined to have opportunities for retrofit to provide additional phosphorus removal. Five of these BMPs are currently being advanced through the retrofit design process, including surveying and development of construction-ready designs, with completion anticipated by the end of FY27. Subject to the availability of funding, the Town intends to proceed with construction of these retrofits in FY28.

The remaining five BMPs will be proposed for inclusion in the FY28 scope of work for retrofit design, also subject to available funding. The Town will prioritize these projects based on anticipated phosphorus removal, site feasibility, available resources, and the ability to advance projects through design and construction.

Collectively, the ten BMP retrofit opportunities have the potential to provide 14.09 pounds per year of phosphorus removal following modification. However, five of the BMPs are already eligible for phosphorus reduction credit based on their existing conditions. Accordingly, the Town has already claimed a total of 1.56 pounds per year of phosphorus removal credit for these BMPs in its Year 8 report. The remaining retrofit opportunities therefore represent an estimated 12.53 pounds per year of additional phosphorus reduction credit beyond the credits already claimed.

Table 2. BMP Retrofit Opportunities

FY Reviewed by	Phosphorus Removal Post-	BMP ID	Street Name	Design	Construction

Woodard & Curran	modification (lbs/yr)				
FY25	2.90	BMP-27-2	Cedar Farms Rd	TBD	TBD
FY26	1.41	BMP-28-1	Azalea Dr	FY27	TBD
FY26	1.00	BMP-31-2*	Willow Crest Way	FY27	TBD
FY26	3.03	BMP-37-3	Hooksett Circle	FY27	TBD
FY26	2.41	BMP-46-7	Bayberry Lane	FY27	TBD
FY26	0.22	BMP-48-1*	Oak Street	TBD	TBD
FY26	0.30	BMP-48-3*	Oak Street	TBD	TBD
FY26	0.25	BMP-48-5*	Oak Street	TBD	TBD
FY26	1.67	BMP-57-2*	Fales St	FY27	TBD
FY25	0.90	BMP-64-2	Daffodil Ln	TBD	TBD
TOTAL	14.09				

*BMPs were eligible for credit prior to retrofit. The following credits were claimed in the Year 8 Report: BMP-31-2 (0.5lbs/yr), BMP-48-1 (0.1lbs/yr), BMP-48-3 (0.23/lbs/yr), BMP-48-5 (0.11lbs/yr), and BMP-57-2 (0.62lbs/yr). Total claimed 1.56lbs/yr.

Three new BMP projects have been identified, and construction-ready plans have been completed for each project. These projects represent significant opportunities to increase phosphorus removal while improving stormwater management throughout the Town.

The Medway Middle School project includes two biofiltration basins, one enhanced biofiltration basin, and two subsurface infiltration basins. Collectively, the proposed BMPs are expected to provide approximately 17.7 pounds per year of phosphorus reduction. In addition to the anticipated phosphorus reduction benefits, the project provides an opportunity to demonstrate the function and benefits of stormwater control measures to students, staff, and the broader community.

Funding for the Medway Middle School project will be provided in part through a Congressional Earmark Grant, with the Town of Medway providing the required local match.

The Senior Center project is also anticipated to proceed to bid in conjunction with the Middle School project. Subject to the availability of funding, the Town anticipates construction of the Senior Center project in FY28.

The Winter Street project also has construction-ready plans completed. The Town is currently seeking funding to advance the project to construction. Once funding is secured, the Town will proceed with implementation based on project readiness and available resources.

Table 3. New BMP Opportunities

Location	Phosphorus Removal (lbs/yr)	Street Name	Planned FY Completion
Medway Middle School	17.7	Holliston Street	FY28
Medway Senior Center	0.93	Oakland Street	FY28 – pending bid price

Winter Street	19.5	Winter Street	TBD – pending funding
TOTAL	38.13		

If the Town is able to implement the BMP measures identified in Tables 1–3, these projects are expected to provide an additional 69.34 pounds per year of phosphorus removal, increasing Medway's total phosphorus reduction to approximately 156.48 pounds per year.

This projected reduction would leave the Town approximately 19.52 pounds per year below the original PCP Year 8 target of 176 pounds per year. However, following the adjustment of the phosphorus loading calculations to reflect the 2021 Land Use/Land Cover data, the Year 8 target increased to approximately 198 pounds per year. Under the revised target, the Town would be approximately 41.42 pounds per year below the required Year 8 reduction.

These calculations demonstrate the significant progress the Town can achieve through the BMP maintenance, retrofit, and new construction projects identified in Tables 1–3, while also illustrating the remaining gap between the projected phosphorus reduction and the revised Year 8 requirement.

The Town's next step is to continue evaluating existing BMPs that have not yet been reviewed through the reclassification analysis. There are currently 46 existing SCMs within the Town that remain to be evaluated for potential maintenance, retrofit, or other opportunities to increase phosphorus removal.

Using funding available through the FY27 Stormwater Budget, the Town plans to investigate at least 20 of these SCMs during FY27. The remaining 26 SCMs will be evaluated as funding becomes available. The Town will use the results of these investigations to identify additional opportunities for maintenance, retrofit, or enhancement and to determine the associated phosphorus reduction potential.

Table 4. Existing Town Owned and Town Managed BMPs for Retrofit Investigation

BMP ID	Street Name	Planned Investigation
BMP-13-1	Iarussi Way	FY27
BMP-15-1	Howe St	FY27
BMP-15-2	Fern Path	FY27
BMP-19-2	Broad Acres Farm Rd	TBD
BMP-19-6	Stanley Rd	TBD
BMP-20-4	Iarussi Way	FY27
BMP-22-1	Field Rd	FY27
BMP-22-2	Redgate Dr	TBD
BMP-22-3	Morningside	TBD
BMP-23-2	Cardinal Cir	FY27
BMP-23-3	Golden Rod Dr	FY27
BMP-23-4	Golden Rod Dr	FY27
BMP-29-3	Summer St	TBD
BMP-33-7	Oakland Street	TBD
BMP-34-1	Laurelwood Lane	TBD
BMP-38-3	Summer St	TBD
BMP-40-2	Holliston St (APPLETON)	FY27

BMP-4-1	Skyline Dr	FY27
BMP-4-2	Skyline Dr	FY27
BMP-42-1	Oakland St	TBD
BMP-42-2	Oakland Street	TBD
BMP-42-3	Oakland Street	TBD
BMP-42-4	Oakland Street	TBD
BMP-42-5	Oakland Street	TBD
BMP-44-1	Gray Squirrel Dr	FY27
BMP-46-4	Little Tree Rd	FY27
BMP-47-12	Oak Street	TBD
BMP-48-4	Choate Park Road	TBD
BMP-48-6	Royal Heights Dr	TBD
BMP-48-8	Choate Park Road	TBD
BMP-49-1	Henry St	FY27
BMP-49-2	Crestview Ave	FY27
BMP-51-1	Broad St	TBD
BMP-51-2	Broad St	TBD
BMP-54-4	Blue Ribbon Ln	TBD
BMP-56-3	Little Tree Rd	FY27
BMP-56-4	Little Tree Rd	FY27
BMP-58-2	Village Street	TBD
BMP-59-5	Cassidy Lane	TBD
BMP-59-6	Villa Rd	FY27
BMP-60-1	Crooks Street	TBD
BMP-60-5	Village Street	TBD
BMP-62-8	Candlewood	TBD
BMP-64-5	Tulip Way	TBD
BMP-6-6	Summit Road	FY27
BMP-6-7	Wildebrook Road	FY27

Additionally, there are 95 privately owned SCMs within the Town. The Department of Public Works (DPW) is coordinating with the Community and Economic Development Department to collect and review available maintenance reports for these facilities. This effort will allow the Town to better track the maintenance status and performance of privately owned SCMs and identify opportunities to document and claim applicable phosphorus reduction credits for BMPs that are properly maintained and functioning as designed.

As part of this ongoing review, the Town will also consider reclassification opportunities for privately owned SCMs where appropriate. Reclassification efforts will help determine whether these facilities may qualify for additional phosphorus reduction credit or other applicable treatment credit based on their existing conditions, maintenance history, and demonstrated performance.

Table 5. Privately Owned BMPs

BMP ID	Street Name	Ownership
BMP-63-1	Alder St	Private
BMP-63-2	Alder St	Private
BMP-73-1	Alder St	Private

BMP-73-2	Alder St	Private
BMP-73-3	Alder St	Private
BMP-73-4	Alder St	Private
BMP-8-10	Balsam Way	Private
BMP-8-11	Balsam Way	Private
BMP-59-1	Bedelia Ln	Private
BMP-59-2	Bedelia Ln	Private
BMP-59-3	Bedelia Ln	Private
BMP-59-4	Bedelia Ln	Private
BMP-69-1	Charles View Ln	Private
BMP-70-1	Charles View Ln	Private
BMP-70-2	Charles View Ln	Private
BMP-21-3	Cobblestone Terrace Dr	Private
BMP-20-3	FieldStone Dr	Private
BMP-21-2	FlagStone Dr	Private
BMP-57-3	Franklin Creek Ln	Private
BMP-57-4	Franklin Creek Ln	Private
BMP-57-5	Franklin Creek Ln	Private
BMP-57-6	Franklin Creek Ln	Private
BMP-57-10	Harmony Lane	Private
BMP-57-7	Harmony Lane	Private
BMP-57-8	Harmony Lane	Private
BMP-57-9	Harmony Lane	Private
BMP-31-1	Higgins Road	Private
BMP-33-5	Jayar	Private
BMP-33-6	Jayar	Private
BMP-56-2	Knollwood Road	Private
BMP-33-1	Main St	Private
BMP-39-1	Main St	Private
BMP-40-1	Main St	Private
BMP-40-3	Main St	Private
BMP-41-1	Main St	Private
BMP-41-2	Main St	Private
BMP-47-6	Main St	Private
BMP-47-7	Main St	Private
BMP-47-8	Main St	Private
BMP-47-9	Main St	Private
BMP-23-1	Marc Rd	Private
BMP-33-2	Marc Rd	Private
BMP-33-3	Marc Rd	Private
BMP-33-4	Marc Rd	Private
BMP-46-5	Milford St	Private
BMP-56-7	Milford St	Private
BMP-56-8	Milford St	Private

BMP-20-2	Millstone Drive	Private
BMP-21-1	Millstone Drive	Private
BMP-61-2	New city/ Sledding Hill	Private
BMP-62-3	Pine Ridge	Private
BMP-62-4	Pine Ridge	Private
BMP-62-5	Pine Ridge	Private
BMP-62-6	Pine Ridge	Private
BMP-62-7	Pine Ridge	Private
BMP-62-1	Pine Ridge Dr	Private
BMP-62-2	Pine Ridge Dr	Private
BMP-8-1	Rosewood Drive	Private
BMP-8-2	Rosewood Drive	Private
BMP-47-4	Slocumb Place	Private
BMP-7-10	Slocumb Place	Private
BMP-7-11	Slocumb Place	Private
BMP-47-5	Slocumb Place	Private
BMP-5-2	Sorrento Ln	Private
BMP-20-1	Steppingstone Dr	Private
BMP-59-7	Sterling Circle	Private
BMP-59-8	Sterling Circle	Private
BMP-59-9	Sterling Circle	Private
BMP-2-1	Summer St	Private
BMP-56-5	Summer St	Private
BMP-56-6	Summer St	Private
BMP-6-1	Summer St	Private
BMP-6-2	Summer St	Private
BMP-6-3	Summer St	Private
BMP-6-4	Summer St	Private
BMP-6-5	Summer St	Private
BMP-7-1	Summer St	Private
BMP-46-1	Summer Street	Private
BMP-46-2	Summer Street	Private
BMP-66-2	Summer Street	Private
BMP-8-3	Timbercrest	Private
BMP-54-3	Trotter	Private
BMP-54-1	Trotter Dr	Private
BMP-54-2	Trotter Dr	Private
BMP-64-3	Trotter Dr	Private
BMP-64-4	Trotter Dr	Private
BMP-60-2	Village St	Private
BMP-60-4	Village St	Private
BMP-60-6	Village Street	Private
BMP-41-3	Walgreens	Private
BMP-55-1	Williamsburg Way	Private
BMP-55-2	Williamsburg Way	Private
BMP-55-3	Williamsburg Way	Private

BMP-69-2	Willows	Private
BMP-69-3	Willows	Private

During implementation of the Phosphorus Control Plan, the Town reevaluated several SCM locations that had originally been identified for implementation. Subsequent field investigations and further review determined that these locations were not viable due to space constraints, unsuitable soil conditions, lack of proximity or connectivity to existing drainage infrastructure, and revised calculations of phosphorus removal credit.

In some cases, the original PCP identified individual treatment structures as separate opportunities for phosphorus reduction. Through subsequent review, the Town determined that certain structures were components of a larger treatment train. As a result, phosphorus reduction credit can only be assigned to the applicable treatment system as a whole, rather than to each individual structure. Other SCMs were determined to be ineligible for phosphorus reduction credit based on their existing conditions.

The locations identified in Table 6 represent projects that the Town originally anticipated implementing as part of the PCP. Collectively, these projects were estimated to provide 22.39 pounds per year of phosphorus removal.

Table 6. Planned SCMs Determined to Be Non-Viable or Ineligible for Credit

Location	TOWN ID	Type	Estimated Phosphorus Removal (lbs/yr)
Diane Drive, Kimberly Drive, Stephanie Road		2 infiltration basins	5.65
0 North Street		1 Infiltration rain garden	0.4
Oakland Park (west)		Infiltration Basin	0.4
Oakland Park (east)		Infiltration Basin	0.4
Granite Street Corner		infiltration basin	0.4
Public Library		Infiltration chamber	1.4
Laurelwood Lane (north)		Infiltration basin	2.9
Laurelwood Lane (south)		infiltration chamber	0.7
Shaw St, Samoset St		2 enhanced biofiltration basins	8.04
Fire Station #1		4 Infiltration rain gardens	2.1
Medway High School	BMP-29-2	treatment train	
Medway High School	BMP-29-3	credit ineligible	
Medway High School	BMP-29-5	treatment train	
Medway High School	BMP-38-3	credit ineligible	
Medway High School	BMP-38-4	treatment train	

		Total Planned Credit	22.39

The Town's experience evaluating these locations highlights the importance of field verification and detailed site assessment when determining the feasibility and phosphorus reduction potential of proposed SCMs. Although these projects cannot be relied upon to meet the Town's current reduction requirements, the Town continues to evaluate alternative locations and opportunities to identify feasible projects that can provide additional phosphorus reduction.

While the Town continues its evaluation of existing BMPs through reclassification and retrofit studies, it is concurrently working to identify potential locations for new stormwater control measures (SCMs). The locations identified in Table 7 represent potential opportunities identified through preliminary GIS desktop analysis.

Table 7: Potential New BMP Locations

Location	Site Ownership
Holliston Street/Route 109/Richard Road Corridor	Public and Private
McGovern Elementary School	Public
Lower Holliston Street	Public and Private
Evergreen Cemetery	Public
Medway Amphitheater	Public
Medway Canoe Launch	Public
Medway Community Farm	Public and Private
Medway Parks and Recreation	Public

These locations have been identified through GIS-based desktop analysis and have not yet been fully evaluated in the field. Accordingly, identification through the desktop analysis does not guarantee that a site will be technically or operationally viable for installation of a new SCM. Site-specific factors, including soil conditions, topography, available space, drainage connectivity, access, and existing site conditions, must be evaluated before a project can advance to design.

Detailed site investigations also require significant staff time and financial resources. Given these constraints, the Town has prioritized available funding toward sites where more information is currently available and where the potential for successful implementation has been better established through previous investigations. As resources become available, the Town will continue to investigate the locations identified in Table 7 and other potential sites to expand the pool of feasible opportunities for future SCM implementation.

Section 4: Estimated Cost of Planned Phase 1 Structural Controls

The following provides an estimate of the costs associated with continuing the actions described above. These estimates are based on the assumption that identified sites will ultimately be determined to be suitable for the proposed work and that opportunities for retrofit or enhancement will be available. Additional site investigation and analysis are necessary to confirm these assumptions and to determine the actual phosphorus reduction potential of the remaining projects.

This additional investigation is also the reason the Town is not requesting an alternative schedule at this time. The purpose of this memorandum is to document the work completed to date, describe the Town's planned next steps, and inform EPA that the Town is actively working toward developing an achievable and supportable alternative schedule. The Town believes that establishing a schedule

before completing the necessary investigations would be premature and could result in milestones that are not technically or financially achievable.

Based on previously documented project costs, the Town has used the following average cost ranges to estimate the resources required to implement the remaining PCP activities:

- BMP maintenance: $5,000–$50,000 per BMP
- BMP reclassification: $2,850 per BMP
- Survey: $6,000 per BMP
- Design: $17,000 per BMP
- Construction: $10,000–$100,000 per pound of phosphorus removed

These costs are preliminary planning-level estimates and may vary substantially depending on site-specific conditions, project complexity, permitting requirements, and the amount of phosphorus reduction ultimately determined to be available.

Additionally, further investigation is needed to validate the phosphorus removal calculations associated with the remaining projects. As a result, the Town cannot yet determine the total amount of additional phosphorus reduction that could ultimately be achieved through these efforts.

Table 8. Estimated Costs to continue with Phase 1 Structural Controls

Approach	Actions required	# of SCMs	Estimated Total
Table 1 - Maintenance	Tree work and/or excavation	7	$5,000 - $350,000
Table 2 - Retrofit	Survey, Design, Construction	10	$330,000 - $1,330,000
Table 3 - New	Construction	3	$1,885,000
Table – 4 Reclassification of Town Owned and Town Managed SCMs	Reclassification, survey, design, construction	46	$1,649,100 - $5,789,100
Table 5- Reclassification of Privately Owned SCMs	Reclassification, survey, design, construction	95	$3,405,750 - $11,955,750

The estimated costs demonstrate the significant financial commitment that would be required to continue implementing the remaining PCP activities. The Town will continue to prioritize projects based on site feasibility, anticipated phosphorus reduction, project readiness, available funding, and cost effectiveness. As additional investigations are completed and the Town develops a more complete understanding of the available phosphorus reduction opportunities, the Town will be better positioned to establish realistic implementation milestones and develop an achievable alternative schedule for EPA consideration.

Section 5: Affordability of Taxpayers

Implementation of both structural and non-structural stormwater control measures represents a significant financial commitment for the Town of Medway. The Town continues to dedicate available resources toward meeting the MS4 permit and Phosphorus Control Plan (PCP) requirements; however, the cost of implementation, combined with limited municipal staffing and funding, presents a substantial financial constraint.

The Town's ongoing non-structural stormwater management activities alone require significant annual expenditures. For example, town-wide catch basin cleaning costs approximately $65,000 annually. In addition, the administrative effort required to manage catch basin data, analyze inspection and cleaning information, and determine which basins require additional attention throughout the year is estimated to cost approximately $5,000 annually. This measure alone represents nearly 20% of the total annual stormwater budget. Street sweeping is also conducted throughout most of the year, resulting in substantial labor, equipment, and fuel costs. The Town relies on DPW staff to perform this work because utilizing existing municipal staff and equipment is currently the most cost-effective means of meeting these requirements.

In addition to the direct costs of stormwater management, the administrative burden associated with implementing the PCP is substantial. Medway does not have sufficient financial resources to outsource activities such as annual MS4 reporting, GIS analysis, catchment investigations, BMP evaluations, and associated data management. Consequently, these responsibilities are largely performed by Town staff in addition to their existing duties.

When the PCP was originally developed, the estimated cost to implement the plan exceeded $3 million. During the same period, however, the Town's approved stormwater budget was only slightly more than $1.1 million. This funding gap demonstrates the significant disparity between the estimated cost of implementing the PCP and the financial resources available to the Town for stormwater management.

The Town has actively pursued outside funding to supplement local resources. In 2023, Medway was awarded approximately $1.3 million in Congressionally Directed Spending to support construction of planned stormwater control measures. The Town subsequently invested significant staff time in advancing the project, including completing engineering plans and required federal environmental documentation. The Town has applied to multiple state funded grant opportunities for stormwater infrastructure that will provide climate resilience while also helping the Town meet is water quality requirements, but has not been successful in these efforts.

Medway's primary source of municipal revenue is local property taxation, which is subject to the Commonwealth's annual 2.5 percent levy limitation. At the same time, the Town must address substantial capital and operational needs associated with aging roadways, water infrastructure, municipal buildings, and school facilities. Within these competing demands, the Town has continued to dedicate funding toward stormwater engineering, operations, maintenance, and PCP implementation. However, available funding has not kept pace with the increasing requirements and costs associated with the MS4 permit and phosphorus reduction targets. The Town has considered the potential use of a dedicated stormwater utility fee as an additional funding mechanism in the past; however, given the current household pressures on affordability, the Town has paused further investigation into this mechanism.

The Town will continue to pursue available grants and other external funding opportunities and will prioritize local stormwater funds toward projects and activities that provide the greatest environmental benefit. However, the current financial resources available to the Town are not sufficient to implement the PCP at the pace originally anticipated without placing additional financial

demands on local taxpayers or substantially redirecting funding from other essential municipal services.

Accordingly, affordability and financial capability remain important considerations as the Town evaluates future PCP implementation. The Town intends to continue identifying feasible projects, refining cost and phosphorus removal estimates, pursuing outside funding, and prioritizing investments based on available resources and anticipated phosphorus reduction benefits. This information will also inform the development of an achievable alternative schedule once the Town has completed the additional investigations necessary to determine the scope, cost, and feasibility of the remaining PCP requirements.

Section 6: Alternative Schedule Request - Conclusion

As discussed throughout this memorandum, the Town of Medway is not currently in a position to propose an alternative schedule that would be sufficiently feasible, reliable, and actionable. Significant investigative and planning work remains necessary to determine the full extent of feasible phosphorus reduction opportunities, including continued evaluation and reclassification of existing SCMs, site investigations, retrofit assessments, design, cost estimating, and identification of potential new SCM locations.

Developing an alternative schedule before this work is complete would require the Town to establish milestones based on assumptions that have not yet been sufficiently validated. The Town believes that a meaningful alternative schedule should be based on confirmed site conditions, realistic phosphorus reduction estimates, project costs, available funding, and achievable design and construction timelines.

The purpose of this memorandum is therefore to document the substantial efforts undertaken by the Town over the past three years, describe the progress made to date, and identify the additional work necessary to establish a realistic path forward. During this period, the Town has devoted significant staff time and financial resources to evaluating existing BMPs, conducting field investigations, completing maintenance and retrofit activities, identifying new SCM opportunities, increasing non-structural controls, and refining its understanding of the phosphorus reduction potential within the Town.

These efforts have resulted in measurable phosphorus reductions and have provided the Town with a substantially better understanding of the challenges and opportunities associated with implementing the PCP. The Town intends to continue this work, prioritize projects based on feasibility and phosphorus reduction potential, pursue available funding opportunities, and use the results of the ongoing investigations to develop an achievable alternative schedule for meeting the phosphorus reduction requirements identified in Table F-1.

The Town respectfully requests that EPA recognize the significant progress and continued good-faith efforts documented in this memorandum and allow the Town additional time to complete the necessary investigative and planning work before establishing and submitting a formal alternative schedule.