

Year 4 Annual Report
Massachusetts Small MS4 General Permit
Reporting Period: July 1, 2021-June 30, 2022

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

Unless otherwise noted, all fields are required to be filled out. If a field is left blank, it will be assumed the requirement or task has not been completed. Please ONLY report on activities between July 1, 2021 and June 30, 2022 unless otherwise requested.

Part I: Contact Information

Name of Municipality or Organization:

EPA NPDES Permit Number:

Primary MS4 Program Manager Contact Information

Name: Title:

Street Address Line 1:

Street Address Line 2:

City: State: Zip Code:

Email: Phone Number:

Stormwater Management Program (SWMP) Information

SWMP Location (web address):

Date SWMP was Last Updated:

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

Part II: Self-Assessment

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

Impairment(s)

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

TMDL(s)

In State:

Assabet River Phosphorus Bacteria and Pathogen Cape Cod Nitrogen
 Charles River Watershed Phosphorus Lake and Pond Phosphorus

Out of State:

Bacteria/Pathogens Metals Nitrogen Phosphorus

Clear Impairments and TMDLs

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

Year 4 Requirements

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

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

To be determined pending discussions with other departments. Estimated June 30, 2027.

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

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

To be determined pending discussions with other departments. Estimated June 30, 2027.

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

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

Members of the Greenscapes North Shore Coalition reviewed all municipal regulations related to impervious cover creation. The Greenscapes team used the MA Audubon bylaw review tool to evaluate all of the regulations in the context of green infrastructure feasibility and compiled a detailed report of their findings, which also includes recommended improvements for each regulation reviewed. The full report and community

specific recommendations can be found here: https://greenscapes.org/wp-content/uploads/2022/08/MS4-Grant-Report-FINAL_reduced.pdf

In connection with the bylaw review efforts conducted by the Greenscapes Coalition, two educational webinars were also conducted. The first webinar was held at the onset of the review process and introduced the project scope while detailing the value of encouraging LID practices in municipal codes. This webinar yielded 70 attendees. The second webinar, held following the completion of the review process, was hosted by EPA's Soak Up the Rain and discussed the project results and lessons learned. This webinar had approximately 300 attendees.

Annual Requirements

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

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

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

Bacteria/ Pathogens (Combination of Impaired Waters Requirements and TMDL Requirements as Applicable)Annual Requirements*Public Education and Outreach**

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

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

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

Phosphorus (Combination of Impaired Waters Requirements and TMDL Requirements as Applicable)Annual Requirements*Public Education and Outreach**

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

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

Good Housekeeping and Pollution Prevention for Permittee Owned Operations

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

Phosphorus Source Identification Report

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

<https://www.town.lynnfield.ma.us/stormwater-management/pages/nutrient-source-identification-report>

Potential structural BMPs

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

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

<https://www.town.lynnfield.ma.us/stormwater-management/pages/draft-nutrient-source-identification-report>

This is included as an appendix to the Nutrient Source Identification Plan.

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:

Street Sweeping - The Town had a change of personnel in the Fall of 2021 and several other large projects in progress that prevented the second sweeping from occurring in the nutrient impaired watershed.

Phosphorus Source Identification Report - The Nutrient Source Identification Report addresses both phosphorus and nitrogen loads to the Saugus River, as it was in progress before nitrogen was removed from the 2018/2020 integrated list of waters. Nitrogen will be excluded in the Year 5 update of the plan.

Solids, Oil and Grease (Hydrocarbons), or Metals

Annual Requirements

Good Housekeeping and Pollution Prevention for Permittee Owned Operations

- Increased street sweeping frequency of all municipal owned streets and parking lots to a schedule that targets areas with potential for high pollutant loads
 - The street sweeping schedule is attached to the email submission
 - The street sweeping schedule can be found at the following website:

<https://www.town.lynnfield.ma.us/stormwater-management/pages/stormwater-management-program-swmp-plan>

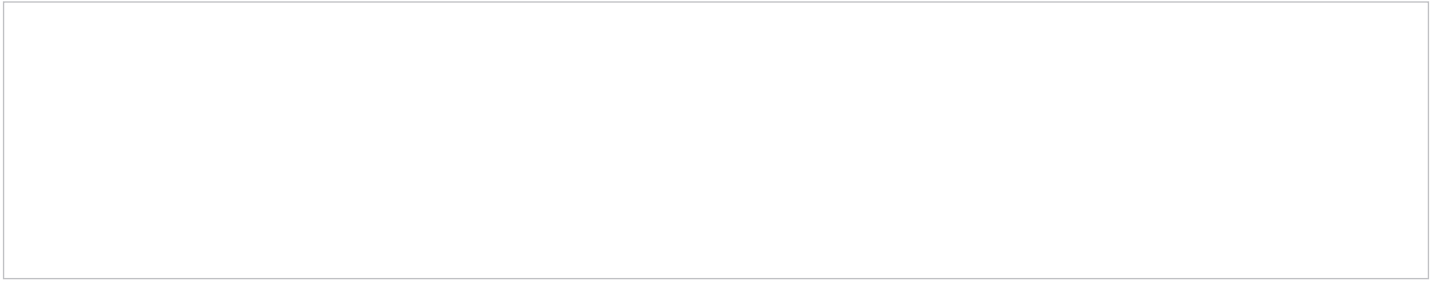
The sweeping schedule is included in the appendix of the SWMP.

- Prioritized inspection and maintenance for catch basins to ensure that no sump shall be more than 50 percent full; Cleaned catch basins more frequently if inspection and maintenance activities indicated excessive sediment or debris loadings

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:

Turbidity impaired watersheds were not observed to accumulate more sediment and debris than other areas within the Town, therefore the current sweeping schedule of once a year in these areas is deemed adequate.

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:

Changes to impairments or TMDLs since NOI:

- Beaverdam Brook (MA93-30): E. Coli impairment added in 2016, covered by existing TMDL
- Hawkes Brook (MA93-32): E. Coli impairment added in 2016, covered by existing TMDL
- Saugus River (MA93-34): Aquatic Plants impairment removed in 2016; E. Coli impairment added in 2016, covered by existing TMDL; dissolved oxygen impairment added in 2018/2020; nitrogen impairment removed in 2018/2019
- Saugus River (MA93-35): Low flow alterations impairment removed in 2016; dewatering impairment added in 2016; E. Coli impairment added in 2016, covered by existing TMDL; fish-passage barrier and benthic macroinvertebrates impairments added in 2018/2020
- Walden Pond (MA93084): Mercury in fish tissue added in 2018/2020
- Wills Brook (MA92-10): Dissolved oxygen and fecal coliform impairments removed in 2016

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:**

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: Vegetated Buffers Outreach

Message Description and Distribution Method:

Tri-fold brochure "Grow a Vegetated Buffer" produced in-house is posted on the Town website and copies are available at the Public Library.

Targeted Audience:

Responsible Department/Parties:

Measurable Goal(s):

Brochure posted online August 9, 2021. Continuously available on Town website and at Public Library.

Message Date(s):

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:

Added as supplemental education materials to raise awareness of water protection and measures that can be taken.

BMP: Proper Lawn Care/ Leaf Management Outreach

Message Description and Distribution Method:

Newsblog "So, What's a Pollinator?" posted on July 6, 2021. Newsblog "Backyard Mosquito Fogging - do we really need to do it?" posted on September 9, 2021. Newsblog "Time to Rake? Maybe not!" posted on October 22, 2021. Newsblog "Thinking about your lawn and gardens? Here's the GreenScapes Guide!" posted on February 9, 2022. Newsblog "GARLIC MUSTARD-This is the time to get rid of it in your yards!" posted on May 6, 2022.

Targeted Audience:

Responsible Department/Parties:

Measurable Goal(s):

Newsblog circulation is approximately 1900 subscribers.

Message Date(s): Newsblogs posted July 6, 2021, September 9, 2021, October 22, 2021, February 9, 2022, May 6, 2022

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: Composting Outreach

Message Description and Distribution Method:

Press release and newsblog "10 More Compost Tumblers - first come-first served!" submitted to local newspapers and posted online October 29, 2021. Press release and news blog "LHS Students showcase Composting Civics Action Project!" submitted to local newspapers and posted online January 19, 2022. Press release and news blog "Sign up for composting and maybe win a free tree!" submitted to local newspapers and posted online February 1, 2022. Press release and newsblog "The FREE 13-Gallon compost kits are in - but going fast!" submitted to local newspapers and posted online March 6, 2022.

Targeted Audience: Residents

Responsible Department/Parties: DPW, Conservation Commission

Measurable Goal(s):

Local newspaper (Lynnfield Weekly News) circulation is 4,520. Local newspaper (The Lynnfield Villager) is a paid subscription and has a circulation of 1,900. Newsblog circulation is approximately 1900 subscribers.

Message Date(s): Newsblogs and press releases posted October 2021, January 2022, February 2022, and March 2022.

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:

Supplemental education materials on benefits of composting.

BMP: Pet Waste Outreach

Message Description and Distribution Method:

Flyer "Dog Waste" was produced and mailed to dog owners with license renewal letters.

Targeted Audience: Residents

Responsible Department/Parties: DPW, Conservation Commission

Measurable Goal(s):

Distributed pet waste education with all dog licenses, 1088 flyers mailed out in 2022 (as of September 14, 2022).

Message Date(s): Ongoing distribution with dog licenses. Materials continuously available on website.

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: Parcel Acquisition & Open Space

Message Description and Distribution Method:

Willis Woods Parcel Acquisition: Community-wide ZOOM forum "A Vision for Willis Woods" was held November 18, 2021 by Lynnfield Conservation Commission, MAPC, Ipswich River Watershed Association, and Greenbelt Essex County Land Trust to present the new open space and recreation opportunity at Willis Woods. News story "Woods, Will, and a Way" was published in the Fall edition of "01940" Area News Magazine on September 20, 2021. Newsblog "Grant Awarded for 'A Vision for Willis Woods'" posted August 2, 2021.

Richardson Green Parcel Acquisition: Newsblog "Lynnfield Awarded \$1.6M MVP grant for Richardson Green 20-acre forestland purchase" by Dan Tomasello published in September 8, 2021 edition of The Lynnfield Villager and online September 10, 2021. Newsblog "ConCom signs P&S for Richardson Green 20-acre forested parcel" posted December 16, 2021. Press release and newsblog "Richardson Green is now LYNNFIELD WOODLOT!" submitted to local newspapers and posted May 27, 2022.

Open Space: Press release and newsblog "State EOEEA Approves Lynnfield Open Space & Recreation Plan - March 31, 2022" submitted to local newspapers and posted March 31, 2022.

Targeted Audience: Residents

Responsible Department/Parties: DPW, Conservation Commission

Measurable Goal(s):

Local newspaper (Lynnfield Weekly News) circulation is 4,520. Local newspaper (The Lynnfield Villager) is a paid subscription and has a circulation of 1,900. Newsblog circulation is approximately 1900 subscribers.

Message Date(s): Newsblogs posted August 2, 2021, September 10, 2021, December 16, 2021, March 31, 2022, and May 27, 2022. News stories published in local magazines September 8, 2021 and September 20, 2021. ZOOM meeting with stakeholders and residents held November 18, 2021.

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:

To raise awareness of Town efforts to preserve and conserve land.

BMP: Benefits of Trees Outreach

Message Description and Distribution Method:

A community-wide photo contest was held by Lynnfield Tree Committee. Press release and newsblog "Tree Committee's Photo Contest kicks off here!" submitted to local newspapers and posted September 2, 2021. An in-person award ceremony for the photo contest was held on October 2, 2021. Newsblog "Tree preservation bylaw overwhelmingly approved by Lynnfield voters" posted October 19, 2021. Press release and newsblog "April 22- 10:30-11:30AM - Family Discovery Walk and Tree Planting" submitted to local newspapers and posted April 13, 2022. In-person Family Discovery Walk and Tree Planting at Lynnfield Historical Center on April 22, 2022. Newsblog and press release "Arbor Day Foundation names Lynnfield a 2021 Tree City USA" submitted to local newspapers and posted June 2, 2022.

Targeted Audience: Residents

Responsible Department/Parties: DPW, Conservation Commission

Measurable Goal(s):

Local newspaper (Lynnfield Weekly News) circulation is 4,520. Local newspaper (The Lynnfield Villager) is a paid subscription and has a circulation of 1,900. Newsblog circulation is approximately 1900 subscribers. 25 contestants in photo contest.

Message Date(s): Combination of newsblogs and press releases posted September 2021, October 2021, April 2022, and June 2022. In person events for residents held October 2021 and April 2022.

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:

Lynnfield continues the education campaign started in 2020 in support of the Tree Protection Bylaw. The campaign highlights the benefits trees provide to the environment.

BMP: Wetland Buffer Plantings Outreach

Message Description and Distribution Method:

Two brochures produced in-house "Recommended Wetland Buffer Shrub Planting List" and "Recommended Wetland Buffer Perennials List" distributed through the Public Library and posted online in 2022.

Targeted Audience: Residents

Responsible Department/Parties: DPW, Conservation Commission

Measurable Goal(s):

Brochures posted online and at library.

Message Date(s): 2022

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:

Supplemental education materials of proper wetlands plantings.

BMP: Conservation/ Open Space/ Recreation Restoration & Improvement Projects Outreach

Message Description and Distribution Method:

Beaver Dam Brook Conservation Area: News story "A breathe of fresh air" published in the July 8, 2021 Summer edition of "01940" Area News Magazine features the Beaver Dam Brook conservation area. Newsblog "Beaver Dam Brook conservation area - photo gallery in the news!" posted July 11, 2021. Press release "Lynnfield Troop 82559 to Complete Spring Beaverdam Brook Restoration Project" submitted to local newspapers and posted April 4, 2022.
Bow Ridge Trail Improvements: Newsblog "Conservation Commission Approves Eagle Scout Candidate Dan West's Proposal for New Bridge and Markings on Bow Ridge Trail" posted February 16, 2022.
Partridge Island Boardwalk Repairs: Newsblog "Partridge Island Boardwalk repairs completed" posted August 28, 2021.

Targeted Audience: Residents

Responsible Department/Parties: DPW, Conservation Commission

Measurable Goal(s):

Local newspaper (Lynnfield Weekly News) circulation is 4,520. Local newspaper (The Lynnfield Villager) is a paid subscription and has a circulation of 1,900. Newsblog circulation is approximately 1900 subscribers.

Message Date(s): Press releases and newsblogs posted July 11, 2021, August 28, 2021, February 16, 2022, and April 4, 2022. Local magazine article published July 8, 2021.

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:

To raise awareness of Town efforts to restore and improve open space, conservation, and recreation areas.

BMP: ConCom Educational Event - Yards, Lawns & Plantings

Message Description and Distribution Method:

Press release and newsblog "Lynnfield joins 60th anniversary celebration of National Natural Landmark Program with its Reedy Meadow landmark!" submitted to local newspapers and posted April 12, 2022. Press release and newsblog "ConCom Participates in Lynnfield Art Guild's Annual Show & Festival" submitted to local papers and posted May 1, 2022. ConCom had educational materials for residents

concerning their yards, lawns, plantings, etc, and held drawing for free composting kits.

Targeted Audience: Residents

Responsible Department/Parties: DPW, Conservation Commission

Measurable Goal(s):

Local newspaper (Lynnfield Weekly News) circulation is 4,520. Local newspaper (The Lynnfield Villager) is a paid subscription and has a circulation of 1,900. Newsblog circulation is approximately 1900 subscribers.

Message Date(s): Press releases and newsblogs posted April 12, 2022 and May 1, 2022 .

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:

To raise awareness of ConCom participation in local events, provides additional education opportunities to residents.

BMP: Workshop - Planning Tools to Promote Natural Resource Stewardship

Message Description and Distribution Method:

Hosted by members of the PIE-Rivers Partnership, this free virtual workshop discussed the latest trends in promoting LID and other forms of Green Infrastructure in North Shore communities.

Targeted Audience: Residents, Businesses, institutions and commercial facilities

Responsible Department/Parties: PIE Rivers Partnership, Greenscapes Coalition

Measurable Goal(s):

82 participants.

Message Date(s): November 9, 2021

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: Northeast MOTUS Collaboration

Message Description and Distribution Method:

Newsblog "Lynnfield Connects to Northeast MOTUS Collaboration" posted July 26, 2021. Blog outlines new receiving station installation at Lynnfield Middle School to track migratory bird activity. Call attention to the importance of Lynnfield's wetlands, as Reedy Meadow, the largest freshwater cattail marsh in New England,

and one of eleven Massachusetts' National Natural Landmarks, is home to a number of important migratory bird species.

Targeted Audience: Residents

Responsible Department/Parties: Conservation Commission

Measurable Goal(s):

Newsblog circulation is approximately 1900 subscribers.

Message Date(s): July 26, 2021

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:

To raise awareness of Town collaborations to benefit both humans and wildlife.

BMP: Septic Maintenance Outreach

Message Description and Distribution Method:

"Do Your Part-Be Septic Smart" EPA flyer is available to Town Hall visitors.

Targeted Audience: Residents

Responsible Department/Parties: DPW, BOH, Town Hall

Measurable Goal(s):

Flyer continuously available at the Town Hall.

Message Date(s): Flyer continuously available.

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: Web Outreach

Message Description and Distribution Method:

Lynnfield developed a stormwater website in 2019. The website contains various education materials available for residents, businesses, institutions, commercial facilities, and developers.

Targeted Audience: Residents, Businesses, institutions and commercial facilities, and Developers

Responsible Department/Parties: DPW

Measurable Goal(s):

Website developed in 2019 and updated periodically.

Message Date(s): Continuously available

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: Video - "Fowl Water"

Message Description and Distribution Method:

The Think Blue Massachusetts "Fowl Water" video defines stormwater and explains the impact that pollution like trash, oil, cigarettes and dog poop can have on stormwater and our waterways. Video available at <https://www.thinkbluemassachusetts.org/>, www.greenscapes.org/resources-videos/ and spread as an advertisement on Facebook, Instagram, & YouTube

Targeted Audience: Residents, Businesses

Responsible Department/Parties: Think Blue MA, Greenscapes Coalition

Measurable Goal(s):

5,167 impressions on Facebook/Instagram
13,533 impressions on YouTube

Message Date(s): May 31, 2022- June 17, 2022

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: Public Lecture - Coastal Communities Talk Water

Message Description and Distribution Method:

This free community event at the Cabot Theater in Beverly MA, featured guest speakers from Salem Sound Coastwatch, the Ipswich River Watershed Association, Green Beverly, Sustainable Marblehead and the EPA, who covered various topics related to water quality, water quantity and general watershed stewardship. Printed

materials were also being passed out by Greenscapes personnel.

Targeted Audience: Residents and Businesses

Responsible Department/Parties: Greenscapes Coalition

Measurable Goal(s):

150 attendees

Message Date(s): March 10, 2022

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: In-Person Exhibit - Culture House

Message Description and Distribution Method:

Salem Sound Coastwatch, a contributing partner to the Greenscapes Coalition, was a resident exhibitor at Salem Culture House, a pilot project that created a community space in Salem's Old Town Hall. At the exhibit, SSCW staff ran two hands on activities that taught visitors about their connection to their watershed. Greenscapes materials were on display and passed out.

Targeted Audience: Residents and Businesses

Responsible Department/Parties: Greenscapes Coalition

Measurable Goal(s):

924 attendees

Message Date(s): April 20 - April 23, 2022

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: Miscellaneous Tabling Events

Message Description and Distribution Method:

Events attended by Greenscapes personnel where printed materials were passed out: Middleton Earth Day, Tri-Town Spring Expo, Boxford Applefest, Topsfield Strawberry Fest, Ipswich STEAM Showcase, Beverly

Earth Day, Salem Farmer's Market, Earth Week at the Peabody Essex Museum

Targeted Audience: Residents

Responsible Department/Parties: Greenscapes Coalition

Measurable Goal(s):

Printed materials passed out.

Message Date(s): Various dates between September 2021 - June 2022

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: Elementary School Program - Keeping Water Clean

Message Description and Distribution Method:

Program engages 5th grade students in several activities designed to raise their stormwater and water conservation awareness. Students learn about what a watershed is, what stormwater, groundwater and wastewater are, how they can negatively or positively impact these water systems, along with more details about each system and how it should be protected/maintained.

Targeted Audience: Residents

Responsible Department/Parties: Greenscapes Coalition

Measurable Goal(s):

2166 students
370 teachers and parents
30 schools

Message Date(s): September 2021 - June 2022

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:**

SWMP Plan for Download - The Town has posted the updated SWMP Plan on Town website along with contact information.

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:**

Lynnfield Troop 82559 conducted a Beaverdam Brook Restoration Project.

A community forum was held for "A Vision for Willis Woods".

MCM3: Illicit Discharge Detection and Elimination (IDDE)

Sanitary Sewer Overflows (SSOs)

Check off the box below if the statement is true.

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

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

Number of SSOs identified:

Number of SSOs removed:

MS4 System Mapping

Optional: Provide additional status information regarding your map:

The Town has identified a number of data gaps in its drainage mapping (e.g., catch basins without piping, disconnected drainage networks, etc.) and has begun investigating these through field efforts. Any new outfalls/interconnections discovered through this process will be mapped and screened for dry weather flow.

Screening of Outfalls/Interconnections

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

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

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

Number of outfalls screened:

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

Percent of outfalls screened:

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

21 potential outfall locations were inspected in Year 4. Of these, outfalls were confirmed to exist at 12 locations, which were screened for dry weather flows either at the outfall or the upgradient structure. Where an outfall could not be located, the upgradient structure was inspected to determine whether the outfall existed and inspected for dry weather flow as a proxy. All known outfalls have been screened. Lynnfield is in the process of mapping data gaps in its drainage system. Any new outfalls/interconnections discovered through this process will be mapped and screened for dry weather flow.

Catchment Investigations

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

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

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

Number of catchment investigations completed this reporting period:

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

Percent of total catchments investigated:

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

IDDE Progress

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

- No illicit discharges were found

- The illicit discharge removal report is attached to the email submission
- The illicit discharge removal report can be found at the following website:

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

Number of illicit discharges identified:

Number of illicit discharges removed:

Estimated volume of sewage removed: gallons/day

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

Total number of illicit discharges identified:

Total number of illicit discharges removed:

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

In addition to the dry weather inspections, the Town looks for evidence of illicit discharges during catch basin cleaning, such as the presence of pet waste, so that actions (e.g., targeted public education) can be taken to address it.

Employee Training

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

IDDE and SWPPP training was performed on November 3, 2021 and included background information on stormwater pollution, MS4 requirements, illicit discharge program requirements and investigations, general good housekeeping practices, and SWPPP/SPCC training specific to the DPW maintenance facility.

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:

Number of inspections completed:

Number of enforcement actions taken:

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

No enforcement actions were taken, only field modifications.

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

Ordinance or Regulatory Mechanism

Date update was completed (due in year 3):

Stormwater bylaw approved in April 2021 Town meeting (continued to June)
Stormwater regulations approved by ConCom in August 2021

As-built Drawings

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

Number of as-built drawings received:

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

Retrofit Properties Inventory

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

1. Lynnfield Common (Main Street)
 2. Rotary Park (Summer Street- Lot 176)
 3. Willow Cemetery (Summer Street)
 4. Fire Department and Post Office (Salem & Summer Streets intersection)
 5. Glen Meadow Park (Trickett Road)

The full list of properties evaluated and identified for retrofit opportunities is included as an appendix to the Nutrient Source Identification Plan.

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:

Number of catch basins cleaned:

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

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

Total number of catch basins:

If applicable:

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

Street Sweeping

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

Number of miles cleaned:

Volume of material removed:

Weight of material removed:

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:

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

No corrective actions this period. Dye testing was performed in the DPW yard catch basins to better map the drainage system.

Additional Information

Monitoring or Study Results

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

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

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

Additional Information

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

- The Town has rebuilt approximately 11 failing catch basins.
- The drainage system on Maple Street has been replaced and expanded.
- Water flow of Hawkes Brooke was improved.
- A portion of the Summer Street drainage system that had failed was rebuilt.
- The severely eroded outfall at the Locksley Road cul-de-sac was repaired.
- The pipe from a Doncaster Circle CB towards Moulton Drive was jetted and the outfall ditch was cleared out to improve flow to the next CB in the woods.
- A major blocking that was causing residential property and road flooding was cleared in the area of Munroe Street and Salem Street (3-4 CBs and a DMH). It saved the Town from having to raise the resident's driveway and additional curbing.
- Coordination with at least 3 residents about draining their pools prior to pumping, following the Town's regulations regarding chlorine and discharging directly into a CB at a lower volume.

COVID-19 Impacts

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

Activities Planned for Next Reporting Period

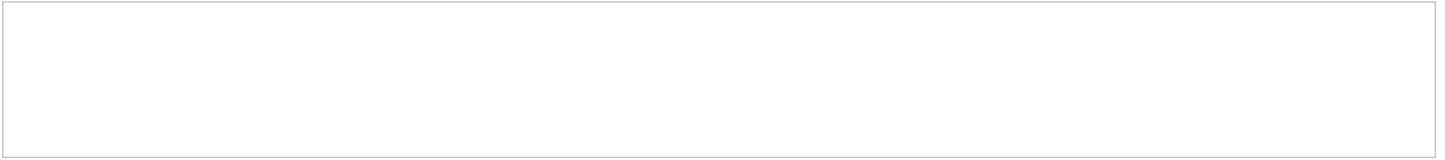
Please confirm that your SWMP has been, or will be, updated to comply with all applicable permit requirements including but not limited to the year 5 requirements summarized below. (Note: impaired waters and TMDL requirements are not listed below)

Yes, I agree

Annual Requirements

- Annual report submitted and available to the public
- Annual opportunity for public participation in review and implementation of SWMP
- Keep records relating to the permit available for 5 years and make available to the public
- Properly store and dispose of catch basin cleanings and street sweepings so they do not discharge to receiving waters
- Annual training to employees involved in IDDE program
- Update inventory of all known locations where SSOs have discharged to the MS4
- Continue public education and outreach program
- Update outfall and interconnection inventory and priority ranking and include data collected in connection with the dry weather screening and other relevant inspections conducted
- Implement IDDE program
- Review site plans of construction sites as part of the construction stormwater runoff control program
- Conduct site inspection of construction sites as necessary
- Inspect and maintain stormwater treatment structures
- Log catch basins cleaned or inspected
- Sweep all curbed streets at least annually
- Continue investigations of catchments associated with Problem Outfalls
- Implemented SWPPPs for all permittee owned or operated maintenance garages, public works yards, transfer stations, and other waste handling facilities
- Review inventory of all permittee owned facilities in the categories of parks and open space, buildings and facilities, and vehicles and equipment; update if necessary
- Review O&M programs for all permittee owned facilities; update if necessary
- Implement all maintenance procedures for permittee owned facilities in accordance with O&M programs
- Implement program for MS4 infrastructure maintenance to reduce the discharge of pollutants
- Enclose all road salt storage piles or facilities and implemented winter road maintenance procedures to minimize the use of road salt
- Review as-built drawings for new and redevelopment to ensure compliance with post construction bylaws, regulations, or regulatory mechanism consistent with permit requirements
- Inspect all permittee owned treatment structures (excluding catch basins)
- Identify additional permittee-owned properties that could potentially be modified or retrofitted with BMPs to reduce impervious areas so that the permittee maintains a minimum of 5 sites in their inventory, until such a time when the permittee has less than 5 sites remaining

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



Part V: Certification of Small MS4 Annual Report 2021

40 CFR 144.32(d) Certification

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, I certify that the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Name:

Title:

Signature:

Date:

[Signatory may be a duly authorized representative]

Note: When prompted during signing, save the document under a new file name.

Annual Report Submission

Please submit the form electronically via email to both EPA and MassDEP by clicking on one of the links below or using the email addresses listed below. Please ensure that all required attachments are included in the email and not attached to this PDF.

EPA: MassDEP:

Paper Signature:
If you did not sign electronically above, you can print the signature page by clicking the button below.

Optional: If you did not sign electronically above, you may lock the form by clicking the "Lock Form" button below which will prompt you to save the locked version of the form. Save this locked version under a new file name.