

**Year 3 Annual Report**  
**Massachusetts Small MS4 General Permit**  
**Reporting Period: July 1, 2020-June 30, 2021**

*\*\*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, 2020 and June 30, 2021 unless otherwise requested.*

**Part I: Contact Information**

Name of Municipality or Organization: Chelsea WSD

EPA NPDES Permit Number: MAR041077

**Primary MS4 Program Manager Contact Information**

Name: Shavaun Callahan

Title: Primary Operator/Compliance Manager

Street Address Line 1: 500 Broadway

Street Address Line 2:

City: Chelsea

State: MA

Zip Code: 02150

Email: scallahan@chelseama.gov

Phone Number: 857-205-9571

**Stormwater Management Program (SWMP) Information**

SWMP Location (web address): <https://www.chelseama.gov/public-works/pages/dpw-public-notices-reports>

Date SWMP was Last Updated: July 2021

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

## Part II: Self-Assessment

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

<b>Impairment(s)</b>			
<input checked="" type="checkbox"/> Bacteria/Pathogens	<input checked="" type="checkbox"/> Chloride	<input type="checkbox"/> Nitrogen	<input type="checkbox"/> Phosphorus
<input checked="" type="checkbox"/> Solids/ Oil/ Grease (Hydrocarbons)/ Metals			
<b>TMDL(s)</b>			
<i>In State:</i>	<input type="checkbox"/> Assabet River Phosphorus	<input checked="" type="checkbox"/> Bacteria and Pathogen	<input type="checkbox"/> Cape Cod Nitrogen
	<input type="checkbox"/> Charles River Watershed Phosphorus	<input type="checkbox"/> Lake and Pond Phosphorus	
<i>Out of State:</i>	<input type="checkbox"/> Bacteria/Pathogens	<input type="checkbox"/> Metals	<input type="checkbox"/> Nitrogen
			<input type="checkbox"/> Phosphorus
<b>Clear Impairments and TMDLs</b>			

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 3 Requirements

- ☒ Inspected and screened all outfalls/interconnections (excluding Problem and Excluded outfalls)
- ☒ Updated outfall/interconnection priority ranking based on the information collected during the dry weather inspections as necessary
- ☒ Post-construction bylaw, ordinance, or other regulatory mechanism was updated and adopted consistent with permit requirements

*Optional:* If you would like to describe progress made on any incomplete requirements listed above, provide any additional information, and/or if any of the above year 3 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:

### 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:

- ☒ Properly stored and disposed of catch basin cleanings and street sweepings so they did not discharge to receiving waters
- ☒ Provided training to employees involved in IDDE program within the reporting period
- ☒ All curbed roadways were swept at least once within the reporting period
- ☒ Updated system map due in year 2 as necessary
- ☒ 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, provide any additional information, and/or if any of the above annual 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:

During this reporting period Chelsea did not own any treatment structures. We are in the process of adding at least one tree box.

### **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:

Due to Covid, Chelsea is asking that all dog license applications be submitted on-line, by mail or by drop-box (the green mailbox outside of City Hall on Washington Avenue). Therefore, educational material was not submitted at the time of renewal.

An interactive map showing all 35 dog waste stations and cigarette butlers is located on the city web page along with educational material identifying the importance of using them.

[https://www.chelseama.gov/sites/g/files/vyhlf396/f/news/pet\\_care\\_fact\\_sheet.pdf](https://www.chelseama.gov/sites/g/files/vyhlf396/f/news/pet_care_fact_sheet.pdf)

<https://www.chelseama.gov/public-works/news/keep-our-rivers-lakes-ponds-and-streams-clean-bag-your-leaves>

Chelsea does not allow septic systems.

## Chloride

### Annual Requirements

#### *Public Education and Outreach*

Included an annual message in November/ December to private road salt applicators and commercial

- ☒ industrial site owners on the proper storage and application rates of winter deicing material, along with the steps that can be taken to minimize salt use and protect local waterbodies

*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:

<https://www.chelseama.gov/public-works/pages/stormwater-pollution-prevention>

## 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

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:

Chelsea's streets are swept 2X's per side per month. Broadway and Hawthorne Street along with others are swept each weekend. Street sweeping runs from March 1st through December 31st. It would not be practicable to increase this.

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

Chelsea's busiest dog waste stations have been identified and are emptied every week.

### **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:

Chelsea's total number of outfalls is 24.

As noted in the annual report for Year 1, the total number of outfalls has changed from 27 to 24. One outfall at the Chelsea River was determined not to be owned by Chelsea. One at Island End was determined to not be an outfall. One outfall at Mill Creek was determined to not be owned by Chelsea.

Additionally, the city has no interconnections. Inter-municipal connections originating in Everett and entering Chelsea's MS4 were previously classified as "interconnections" in annual storm water monitoring reports and Chelsea's NOI, despite meeting the MS4 permit's definition of interconnection.

## Part IV: Minimum Control Measures

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

### MCM1: Public Education

Number of educational messages completed during this reporting period: 6

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

#### BMP: City Web Page - Social Media

##### Message Description and Distribution Method:

Stormwater Management Services information including links to information from Mystic River Watershed Association, USEPA [Polluted Runoff: Nonpoint Source (NPS) Pollution], MWRA [A Healthy Environment Starts at Home], Mass.gov [Stormwater Permit info], SSO information, National Pollution System, Discharge Elimination.

Recent additions to Chelsea's web page are:

On May 7, 2021 "Keep Your Rivers, Lakes, Ponds and Streams Clean---Bag Your Leaves"

<https://www.chelseama.gov/public-works/news/keep-our-rivers-lakes-ponds-and-streams-clean-bag-your-leaves>

On July 2, 2021 "Pet Waste Increases Storm-water Pollution-Pet Care Fact Sheet"

<https://www.chelseama.gov/public-works/news/pet-waste-increases-stormwater-pollution>

In December "What You Can Do as a Developer" was posted to Chelsea's facebook page.

Targeted Audience: Chelsea residents

Responsible Department/Parties: DPW Operations

##### Measurable Goal(s):

Chelsea's goal is to centralize all stormwater information in a single web page making the information easier to find.

Message Date(s): The web page is updated frequently throughout the year.

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:

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#### BMP: Mail and Web

**Message Description and Distribution Method:**

<https://www.chelseama.gov/public-works/pages/stormwater-pollution-prevention>  
"STORMWATER POLLUTION PREVENTION FOR INDUSTRIAL SITES" was distributed through Chelsea's Chamber of Commerce to Industrial users and posted to the city of Chelsea web page.

Targeted Audience: Industrial facilities

Responsible Department/Parties: DPW Operations

**Measurable Goal(s):**

The measurement of this goal will be seen in improvements to water quality parameters in the receiving waters.

Message Date(s): May 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:

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**BMP: Meeting and Web****Message Description and Distribution Method:**

Continued partnership program with Chelsea GreenRoots Inc and Mystic River Watershed Association.

Targeted Audience: Residence

Responsible Department/Parties: DPW Operations

**Measurable Goal(s):**

DPW and partners plan to conduct public forums on a yearly basis and track the number of attendees.  
<http://www.greenrootschelsea.org/series-informativas-en-espaol>  
<https://resilient.mysticriver.org/our-work>  
[https://mysticriver.org/news/2021/3/30/stormwater-pollution-what-young-people-are-thinking?](https://mysticriver.org/news/2021/3/30/stormwater-pollution-what-young-people-are-thinking?blm_aid=321763329)  
blm\_aid=321763329

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:



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:**

Chelsea's Storm-water Management Plan is posted to the City's Web Page. Community input is welcome.

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:**

Annual Household Hazardous Waste Day

Event Date: Saturday, July 17, 2021 - 9:00am to 1:00pm

Parking lot at the Mary C. Burke Elementary Complex, 300 Crescent Ave.

dpw collected and disposed of the following items:

anything labeled as Hazardous, Poison, Danger, Warning, or Caution.

Chemicals

Latex and Oil-based paints

Medications

Fluorescent Bulbs

Propane Tanks

Fire Extinguishers

Car Batteries

A great and safe way to clean out your home! Proof of residency is required.

DPW Paint collection is ongoing from April to October on Saturdays between 8 am and 12 pm

Yard waste pickup schedule is posted on the City web page.

<https://www.chelseama.gov/public-works/pages/yard-waste-schedule-2021>

## 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:*

All mapping was done in prior years and is updated as needed.

### **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:*

Chelsea completed its screening per MS4 requirements in previous permit years. In Permit Year 3, Chelsea completed additional screening and sampling, which meet the requirements of the MS4 Permit, as a separate requirement from a Consent Decree with the EPA. That screening and sampling data is attached with this Year 3 Annual Report.

### **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: 0

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

Percent of total catchments investigated: 71

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

The City of Chelsea is reevaluating IDDE work based on annual sampling.

### **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: 26

Number of illicit discharges removed: 20

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: 0

Total number of illicit discharges removed: 0

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

### **Employee Training**

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

All DPW members participated in our annual MS4/ SWMP training in June 2021. The training focused on action items for the DPW crew along with some pertinent information regarding Chelsea's storm water outfalls.

**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: 3

Number of inspections completed: 0

Number of enforcement actions taken: 0

*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**

Describe the status of the street design and parking lots assessment due in year 4 of the permit term, including any planned or completed changes to local regulations and guidelines:

The City will begin work on street design and parking lot assessment in FY2022, as outlined in the NOI. The report will be complete within the 4 years of the permit effective date.

**Green Infrastructure Report**

Describe the status of the green infrastructure report due in year 4 of the permit term, including the findings and progress towards making the practice allowable:

The City will begin work on the green infrastructure report in FY2022, as outlined in the NOI. The report will be completed within 4 years of the permit effective date.

### **Retrofit Properties Inventory**

Describe the status of the inventory, due in year 4 of the permit term, of permittee-owned properties that could be modified or retrofitted with BMPs to mitigate impervious areas and report on any properties that have been modified or retrofitted:

The City will begin work on retrofit properties inventory in FY2022, as outlined in the NOI. The City will identify a minimum of 5 permittee owned properties that could be modified with BMPs within 4 years of the permit effective date.

## **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:

When a sump is found to be more than 50% full WSD personnel will document the findings, investigate the contributing drainage area for sources of excessive sediment loading, and if possible, address the contributing sources. If no contributing sources are found, WSD will increase the inspection and cleaning frequencies of the sump when practicable.

### **Street Sweeping**

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

- ☒ Number of miles cleaned: 3,928
- ☐ 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: 4

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

Paint that was found to be stored in less than adequate containers is now in compliance.

**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:

In Permit year 3, Chelsea completed additional screening and sampling, which meet the requirements of the MS4 Permit, as a separate requirement from a Consent Decree with the EPA. That screening and sampling data is attached with this Year 3 Annual Report.

**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:

**COVID-19 Impacts**

*Optional:* If any of the above year 3 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:

Educational material was not submitted at the time of dog license renewal due to Covid precautions.

**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 4 requirements summarized below. (Note: impaired waters and TMDL requirements are not listed below)

Yes, I agree ☒

- Develop a report assessing current street design and parking lot guidelines and other local requirements within the municipality that affect the creation of impervious cover
- Develop a report assessing existing local regulations to determine the feasibility of making green infrastructure practices allowable when appropriate site conditions exist
- Identify a minimum of 5 permittee-owned properties that could potentially be modified or retrofitted with BMPs to reduce impervious areas

**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)

Provide any additional details on activities planned for permit year 4 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:

Thomas Amborosino

Title: City Manager

Signature:



Date: 09/27/21

*[Signatory may be a duly authorized representative]*