Stormwater Management Plan

City of Quincy

June 2019

Tighe&Bond

Engineers | Environmental Specialists

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Section 1
Introduction

Quincy is located in Norfolk County on the coast of Massachusetts, just south of Boston. It is abutted by the City of Boston to the north, the Town of Milton to the west, and the Towns of Randolph, Braintree, and Weymouth to the south. There are approximately 10.1 square miles of water within its 26.9 square mile footprint.

Figure 1-1 Location of Quincy, Massachusetts

According to the 2010 United States (U.S.) Census, Quincy is home to approximately 92,270 residents in more than 40,650 households.

Protecting the quality of Quincy's water resources, including streams, rivers, beaches, estuaries, and groundwater supplies, is a priority for the City of Quincy. Pollutants from stormwater runoff are a contributing factor to the impairment of Quincy's waterbodies, including low dissolved oxygen levels, high turbidity and total suspended solids, and bacterial contamination. The City has developed stormwater policy initiatives, provided education to its businesses and citizens, publicly discussed the issues related to stormwater runoff with the Stormwater Advisory Committee, and offered many opportunities for residents and businesses to pitch in with clean-up efforts, such as the annual Cleaner, Greener Quincy day and multiple beach clean-up events.

1.1 Purpose of this Plan

In an on-going effort to minimize stormwater impacts within Quincy, the City has developed this Stormwater Management Plan (SWMP). The SWMP is required by the U.S. Environmental Protection Agency's (EPA's) National Pollutant Discharge Elimination System (NPDES) General Permits for Stormwater Discharges from Small Municipal Separate Storm Sewer Systems (MS4s) in Massachusetts ("Small MS4 General Permit"). The SWMP describes and details the activities and measures that will be implemented by Quincy to meet the terms and conditions of the permit.

The SWMP will be updated during the permit term as the City's activities are modified, changed, or updated to meet permit conditions. Other requirements of the Small MS4 General Permit, such as a Notice of Intent (NOI), Authorization to Discharge letter, and documentation showing Endangered Species Act and Historic Properties eligibility criteria have been certified and are located in the Appendices of this Plan.

1.2 Regulatory Requirements

1.2.1 Overview of EPA's NPDES MS4 Program

Through the NPDES program, the EPA nationally regulates the discharge of stormwater runoff that is transported into waters of the U.S. EPA's MS4 stormwater program was enacted in two phases:

- Phase I, issued in 1990, requires *medium* and *large* cities or certain counties with populations of 100,000 or more to obtain NPDES permit coverage for their stormwater discharges.
- Phase II, issued in 1999, requires regulated *small* MS4s in urbanized areas, as well as small MS4s outside the urbanized areas that are designated by the permitting authority, to obtain NPDES permit coverage for their stormwater discharges.

A **municipal separate storm sewer system (MS4)** is a conveyance or system of conveyances that is:

- owned by a state, city, City, village, or other public entity that discharges to waters of the U.S.,
- designed or used to collect or convey stormwater (e.g., storm drains, pipes, ditches),
- not a combined sewer, and
- not part of a sewage treatment plant, or publicly owned treatment works (POTW).

In Massachusetts, the EPA Region 1 and the Massachusetts Department of Environmental Protection (MassDEP) jointly administer the municipal stormwater program. EPA and MassDEP originally authorized Quincy to discharge stormwater in 2003 under a *NPDES General Permit for Storm Water Discharges from Small Municipal Separate Storm Sewer Systems*, known as the "2003 General Permit." Under this permit, the City has developed and implemented a Stormwater Management Program to reduce the contamination of stormwater runoff.

The 2003 General Permit expired in May 2008 but remained in full force and effect until a replacement permit was issued on April 13, 2016. The reissued NPDES *General Permit for Stormwater Discharges from Small MS4 in Massachusetts* substantially increases stormwater management requirements and mandates specific timelines for compliance. On June 30, 2017, an EPA stay delayed the effective date of the General Permit until July 1, 2018. The MassDEP also adopted this delayed effective date.

This SWMP was developed to be consistent with the requirements of the 2016 Small MS4 General Permit for Massachusetts. Once implemented, the SWMP described herein will satisfy the requirements for compliance under the 2016 General Permit.

The reissued General Permit is intended to be more prescriptive than the 2003 General Permit, and to build upon the regulations already in place. The 2016 General Permit substantially increases stormwater management requirements and mandates specific timelines for compliance. A few of the major differences for each minimum control measure are summarized in the following points:

- **Public Education and Outreach**: More specific messages required and prescriptive deadlines compared to the 2003 General Permit.

- **Public Involvement and Participation**: No substantial change from the 2003 General Permit.
- **Illicit Discharge Detection and Elimination (IDDE) Program**: Complete drainage system mapping, building on outfall mapping developed under the 2003 General Permit. Add interconnections to the outfall inventory. Delineate catchment areas and prioritize catchment investigations. Perform dry weather screening and sampling of high priority and low priority MS4 interconnections and outfalls by the end of Year 3. Perform wet weather screening in the spring for the catchments that indicate the presence of one or more System Vulnerability Factors. Complete catchment investigations. For impaired waters without Total Maximum Daily Loads (TMDLs), implement a multi-step approach to address the discharges including BMPs, source identification, and an evaluation of retrofit feasibility.
- **Construction Site Stormwater Runoff Control**: If it does not already exist, add inspection and enforcement to the site plan review procedure.
- **Stormwater Management in New Development and Redevelopment**: For new development, retain the first 1 inch of runoff from all impervious surfaces on site, or provide pollutant removal with a BMP. For redevelopment, retain the first 0.80 inches of runoff from all impervious surfaces on site or provide pollutant removal with a BMP. Offsite mitigation may be used for redevelopment projects. Evaluate local code for consistency with smart growth principles and green infrastructure.
- **Good Housekeeping and Pollution Prevention**: Develop a program to repair and rehabilitate the MS4 infrastructure. Sweep/clean municipal streets once in the spring. Include all activities that occur at a municipal facility and potential pollutants associated with each activity in the stormwater pollution prevention plan (SWPPP) for the facility.

1.2.2 Quincy's Regulated Area

The City of Quincy meets EPA's regulatory threshold for Phase II of the MS4 program, and therefore is required to be covered under a NPDES permit for its stormwater discharges from the MS4 in its Urbanized Area. The City of Quincy is charged by the EPA with operating and maintaining its MS4 as well as taking steps to reduce pollution in stormwater runoff. Additional objectives of the program are to protect public health and safety, preserve environmental resources, and safeguard City character.

Urbanized Areas (also known as "regulated areas") are defined by the latest U.S. decennial census. An urbanized area encompasses a densely settled territory that consists of core census block groups or blocks that have a population of at least 1,000 people per square mile and surrounding census blocks that have an overall density of at least 500 people per square mile or are included to link outlying densely settled territory with a densely settled urban core.[1] According to EPA Region 1, the area covered by either the 2000 census or the 2010 census are regulated by EPA under the MS4 program. The 2000 census was used to determine that approximately 20 square miles (74%) of Quincy was urbanized

[1] U.S. EPA. *Fact Sheet: Draft General Permits for Stormwater Discharges from Small Municipal Separate Storm Sewer Systems in Massachusetts.* September 2014. For a complete definition of Urbanized Area see Federal Register, August 24, 2011. Vol. 76 No. 164 p. 53030. URL: http://www2.census.gov/geo/pdfs/reference/fedreg/fedregv76n164.pdf.

and therefore regulated under the 2003 General Permit. On March 26, 2012, the Census Bureau published the final listing of urbanized areas for the 2010 census, which increased Quincy's urbanized area by approximately 7 miles, or 26%. In total, 100% of the City of Quincy is considered an urbanized area, as illustrated by the hatching in Figure 1-2.[2] This Plan must be implemented throughout the entire City.

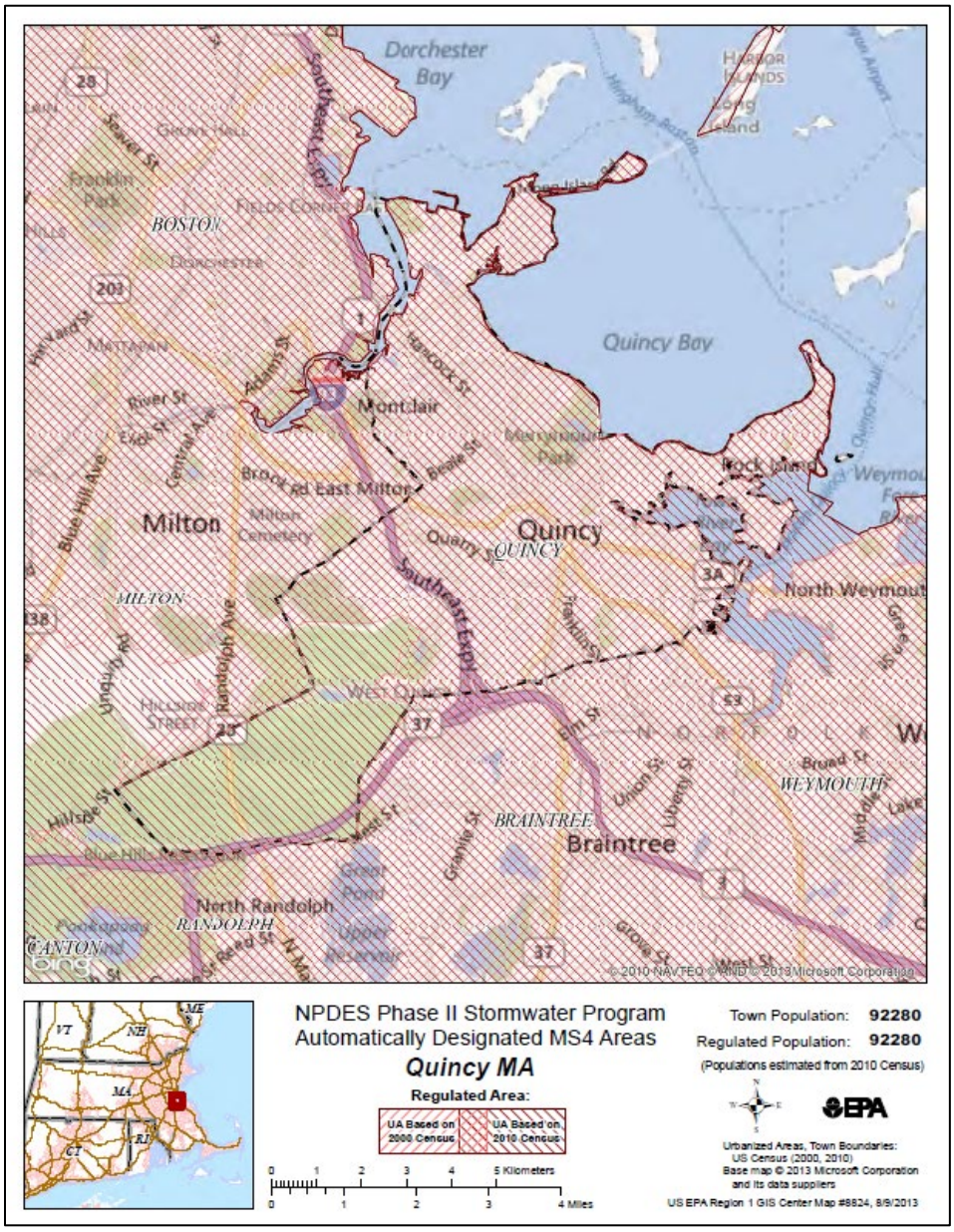


Figure 1-2 City of Quincy's Urbanized Area based on 2000 and 2010 census

[2] U.S. EPA, 2014.

1.3 Summary of Quincy's Stormwater Management Program under the 2003 Small MS4 General Permit

Quincy's stormwater management program is managed within the Department of Public Works (DPW). Currently, stormwater management tasks are carried out by various City departments and volunteer boards, including the Conservation Commission, the Planning Board and the Building Department.

The City of Quincy has achieved all of the measurable goals for the BMPs selected in the 2003 Notice of Intent and those added in subsequent years to reflect unplanned stormwater activities by the City. The following paragraphs include brief descriptions of current practices the City undertakes as part of its Stormwater Management Program.

1.3.1 MCM 1 - Public Education and Outreach

The City has been able to provide a robust multi-media public education program related to nonpoint source pollution and stormwater management targeted at multiple audiences. The City's stormwater education program, "Clean Water is Everyone's Business", received the STORMY award from the New England Stormwater Collaborative in 2016. The program includes distributing water conservation pamphlets and "Dwayne the Storm Drain" coloring books to local schools, direct mailings to residents focused on clean water efforts in the City and encouraging clean water practices, distributing inserts regarding pet waste with the mailing of dog license renewals, holding neighborhood forums on flooding, organizing the City's biannual Household Hazardous Waste Days and Public Service Announcements on local cable TV about the City's clean water efforts. In recent years, the City has utilized educational materials developed by the Neponset Stormwater Partnership.

1.3.2 MCM 2 – Public Involvement and Participation

Notice of public meetings complies with State and Local public meeting notice requirements and there are opportunities for residents of all ages to participate in Quincy's stormwater program and overall environmental stewardship. This includes the annual Cleaner, Greener Quincy Day, local beach clean-ups, and neighborhood forums on flooding. The City formed the Stormwater Advisory Committee (SWAC), which has held regular public meetings to discuss various stormwater program elements since 2017. The DPW holds monthly water-sewer-drain staff meetings to review and discuss stormwater management issues. The DPW also advertises the City's Ordinance by posting signage in parks and fields, encouraging residents to pick up their pet's waste. There are a number of volunteer organizations that contribute to the City's public participation program, such as the Friends of Wollaston Beach, who hold an Annual KidsFest and clean-up events.

1.3.3 MCM 3 – Illicit Discharge and Detection Elimination

Quincy has spent considerable effort on their IDDE Program. The City has satisfied the mapping requirements of the 2003 General Permit and is well on the way to meeting the requirements in the 2016 Small MS4 General Permit. Quincy has identified priority areas for additional work, developed procedures for locating illicit discharges. The City is working to complete mapping of its MS4 system and perform dry weather screening at all of their outfalls.

In 2015, Quincy adopted *Section 13.10 of the City Municipal Code*, which regulates illicit discharges and illegal connections to the MS4. The DPW serves as the enforcement agency.

Woodard & Curran developed the City's IDDE Plan in 2016 under the Draft 2016 General Permit. The IDDE plan is being updated to meet the requirements of the Final 2016 General Permit and reflect work completed since 2016.

City Staff have been trained, and are provided regular training opportunities, on illicit discharges and stormwater outfall investigations and sampling.

1.3.4 MCM 4 – Construction Site Stormwater Runoff Control and MCM 5 – Post-Construction Stormwater Management

Quincy has adopted a *Stormwater Management and Land Disturbance* Ordinance that requires all new development and redevelopment projects greater than one acre of land disturbance to obtain a stormwater permit. The Department of Public Works serves as the enforcement agency.

In addition, the City of Quincy requires construction sites to meet performance standards for erosion and sediment control. All projects subject to the Stormwater Management and Land Disturbance Ordinance are required to submit a Stormwater Management Plan, Erosion and Sediment Control Plan and Operations & Maintenance Plan as part of their permit application. Upon project completion, a final report, including as-built construction plans, are required to be sent to the Department of Public Works to ensure Stormwater Management BMPs have been constructed in accordance with City standards and meet design and performance criteria.

1.3.5 MCM 6 – Pollution Prevention and Good Housekeeping

The City implements Good Housekeeping Standard Operating Procedures and employee training for numerous actions to reduce pollutant runoff from municipal operations, including catch basin cleaning, street sweeping, staff training, and vehicle washing and maintenance. The City inspects catch basins, storm drains, outfalls, and tide gates, replacing any that need repair. A "salt-only" strategy has been implemented to eliminate sand from the roadways in the winter and the City has been following its Comprehensive Storm Drain/Catch Basin Cleaning and Evaluation Program. Additionally, the City has implemented stormwater retrofit projects to manage flooding and water quality, such as the Broad Meadow Marsh Restoration project and the Town Brook Realignment and Restoration project.

1.3.6 Additional Permit Requirements

Groundwater Recharge and Infiltration: Through implementation of the Stormwater Management and Land Disturbance Ordinance and Wetlands Protection Regulations, the City evaluates site conditions relative to stormwater infiltration.

Record Keeping: The City of Quincy maintains stormwater management program records that are organized by year and are stored in both paper and digital format.

Water Quality Impaired Waters and Total Maximum Daily Load (TMDL) Allocations: Quincy's stormwater program is addressing many of the current requirements for

discharges to impaired waterbodies. Through the implementation of its current stormwater program, the City is addressing the discharge of the pollutants of concern.

1.3.7 Building on 2003 BMPs

According to Section 1.10.b of the 2016 General Permit, Quincy must modify or update the BMPs being implemented under the 2003 General Permit to meet the terms and conditions of part 2.3 of the 2016 General Permit. Appendix C includes a list of BMPs completed under the 2003 Small MS4 General Permit and BMPs included in the Notice of Intent and SWMP which comply with the 2016 Small MS4 General Permit. This list identifies how the intent of each 2003 BMP is being met under the 2016 BMPs (further description of 2016 BMPs is included in Section 3 of this SWMP).

1.4 General Eligibility Determination

Section 1.2.1 of the Small MS4 General Permit authorizes the discharge of stormwater from small MS4s if the MS4 is determined to meet general eligibility criteria:

- *Small MS4 within the Commonwealth of Massachusetts*

  The City of Quincy is located within Norfolk County, Massachusetts.

- *Not a large or medium MS4 as defined in 40 CFR 122.26(b)(4) or (7)*

  The population of Quincy is approximately 92,270 according to the 2010 Census, the MS4 is not within a designated County, and the City has not been designated by the Director as part of a large or medium MS4.

- *Located either fully or partially within an urbanized area as determined by the 2010 Census or located in a geographic area designated by EPA as requiring a permit*

  Figure 1-2 shows the Regulated MS4 Areas for the City of Quincy, based on 2000 and 2010 census listings. Quincy is fully within an urbanized area.

1.5 Special Eligibility Determinations

1.5.1 Endangered Species

On behalf of the City of Quincy, Tighe & Bond completed the National Endangered Species Eligibility Determination screening process in accordance with Part 1.9.1 and Appendix C of the Small MS4 General Permit, and determined that the City of Quincy meets **Criterion C**, where it has been determined that the City's stormwater discharges and discharge related activities will have "no affect" on any federally threatened or endangered listed species or designated critical habitat under the jurisdiction of the US Fish and Wildlife Service. Refer to Appendix D of the SWMP for supporting information, including the US Fish and Wildlife Service IPaC Trust Resources Report for the project area and the Endangered Species Act Certification.

1.5.2 Historic Properties

On behalf of the City of Quincy, Tighe & Bond completed the National Historic Preservation Act Eligibility Determination screening process in accordance with Part 1.9.2 and Appendix D of the Small MS4 General Permit and determined that the City of Quincy meets **Criterion A**, as the discharges do not have the potential to cause effects on historic properties. Please refer to Appendix E of the SWMP for supporting information, including a list of the federal- and state-listed historic areas, buildings, burial grounds, objects, and

structures in the City of Quincy's regulated area downloaded from the Massachusetts Cultural Resource Information System (MACRIS).

1.6 Authorization for Quincy to Discharge Stormwater

As required by the General Permit, a NOI was submitted on September 28, 2018, which was within 90 days of the effective date of the permit. A copy of the NOI and the City of Quincy's April 5, 2019 Authorization to Discharge letter from EPA are included in Appendix A. This written SWMP must be finalized within one year of the effective date of the permit.

Section 2
Watershed Resources

2.1 Watershed Inventory

The City of Quincy, Massachusetts is located within the Boston Harbor Watershed and ultimately drains to Boston Harbor, as shown in Figure 2-1.

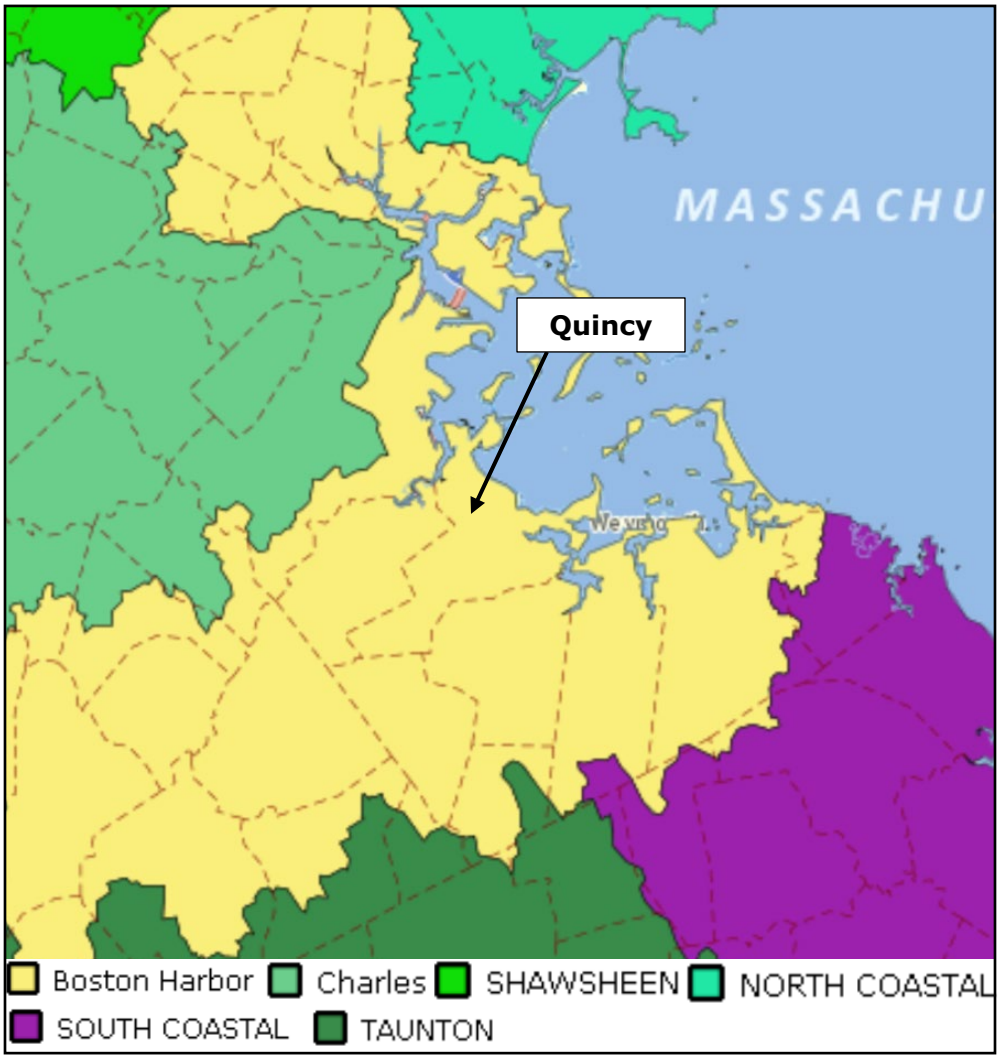


Figure 2-1 Major drainage areas in the City of Quincy[3]

Quincy is located entirely within the Boston Harbor Watershed, which extends to the Atlantic Ocean. Several watersheds make up the Boston Harbor sub-basin; the City of Quincy is located within the Neponset River and Fore River Watersheds.

[3] North Shore Coastal Watersheds 2002 Water Quality Assessment Report

Table 2-1 identifies the natural drainage basins within the City of Quincy for waterbodies that are included in the 2014 Integrated List of Waters (see discussion in Section 2.2 for additional information). Note that there are additional waterbodies within City that are not included in the Integrated List. The NOI includes a more comprehensive list of the waterbodies that receive stormwater discharges from the MS4 and excludes waters where stormwater does not directly discharge.

Table 2-1
Natural Drainage Basins within the City of Quincy, Massachusetts

Major Basin	Main Stem Basin
Boston Harbor Watershed	MA70-01 – Boston Harbor
	MA70-03 – Dorchester Bay
	MA70-06 – Hingham Bay
	MA70-05 – Quincy Bay
	MA70-04 – Quincy Bay
	MA73-04 – Neponset River
	MA74-10 – Furnace Brook
	MA74-09 – Town Brook
	MA74-15 – Town River Bay
	MA74-14 – Weymouth Fore River
	MA73004 – Blue Hills Reservoir

2.2 Water Quality

To meet the requirements of the Clean Water Act (CWA) Section 303(d), Massachusetts must assess and categorize surface waterbodies for attainment of designated uses (such as habitat for aquatic wildlife, aquatic wildlife consumption, and primary and secondary recreation), as well as identify any waterbodies that are not expected to meet surface water quality standards after implementation of controls. These sources are prioritized for establishing TMDLs for use in permit setting. Massachusetts meets the CWA reporting requirements through the development of an Integrated List of Waters, in which waters in the Commonwealth are categorized for attainment of designated uses. The Integrated List assigns each waterbody or waterway with one of five categories:

- **Category 1**: waters that are unimpaired and not threatened for all designated uses
- **Category 2**: waters that are unimpaired for some uses and not assessed for others
- **Category 3**: waters with insufficient information to make assessments for any uses
- **Category 4a**: waters with a completed TMDL
- **Category 4c**: waters that are impaired or threatened for one or more uses, but not by a pollutant and therefore not requiring the calculation of a TMDL
- **Category 5**: waters that are impaired or threatened for one or more uses and requiring a TMDL

Waterbodies classified as Category 4a (waterbodies with a TMDL) and Category 5 ("water quality limited" waterbodies) do not meet CWA designated uses, and stormwater

pollutants of concern will need to be addressed. The Small MS4 General Permit includes additional requirements for waterbodies not meeting water quality standards; these are summarized in **Section 4** of this Plan.

Water quality within the entire Boston Harbor Watershed and the Neponset River Watershed was assessed by the Massachusetts Department of Environmental Protection, Division of Watershed Management in 2008[4] and 2004[5], respectively. See the applicable MassDEP reports for further information.

2.2.1 2014 Integrated List of Waters

As of the date of this SWMP, Massachusetts waters categorized as impaired surface waters were identified in the Final Massachusetts Year 2014 Integrated List of Waters.[6] Waterbodies identified on Integrated List within Quincy are listed in Table 2-2.

[4] MassDEP, Division of Watershed Management, "Boston Harbor 2004-2008 Water Quality Assessment Report".
[5] MassDEP, Division of Watershed Management, "Neponset River Watershed 2004 Water Quality Assessment Report".
[6] MassDEP, Bureau of Water Resources "Final Massachusetts Year 2014 Integrated List of Waters". December 2015. Accessed online November 2016 at: http://www.mass.gov/eea/docs/dep/water/resources/07v5/14list2.pdf.

Table 2-2
Summary of 2014 Integrated List of Waters - Status of Quincy's Receiving Waters

Indicator contributing to impairment:	Boston Harbor MA70-01	Dorchester Bay MA70-03	Hingham Bay MA70-06	Quincy Bay MA70-04	Quincy Bay MA70-05	Neponset River MA73-04	Furnace Brook MA74-10	Town Brook MA74-09	Town River Bay MA74-15	Weymouth Fore River MA74-14
Category 5 Waters: waters requiring a TMDL										
Fecal Coliform	●	●	●	●	●	●		●	●	●
PCB in Fish Tissue	●	●	●	●	●	●			●	●
Enterococcus		●		●	●	●				
Total Suspended Solids		●								
Turbidity		●				●				
Dissolved Oxygen						●	●		●	
Debris/Floatables/ Trash*						●				
Other flow regime alterations*								●		
Physical substrate habitat alterations*								●		
Aquatic Macroinvertebrate Bioassessments								●		
Category 3 Waters: no uses assessed										
Blue Hills Reservoir MA73004										

*TMDL not required (Non-pollutant)

Note that a draft 2016 Integrated List of Waters is available from MassDEP but has not been finalized and therefore is not yet the official EPA 303(d) list. Compared to the 2014 Integrated List of Waters for impaired waters in Quincy, the 2016 Integrated List of Waters includes the following changes:

- Adds enterococcus as an impairment to Category 5 waters Town River Bay (MA74-15) and Weymouth Fore River (MA74-14).
- Adds E. coli as an impairment to Category 5 waters Furnace Brook (MA74-10) and Town Brook (MA74-09).
- Removes total suspended solids and turbidity impairments from Category 5 water Dorchester Bay (MA70-03).

2.2.2 Pollutants of Concern

Based on the 2014 Integrated List of Waters, the pollutants of concern for Quincy's impaired waters related to stormwater include bacteria, solids, and dissolved oxygen. More information about these pollutants and their potential sources are included in Appendix F.

2.2.3 Applicable TMDLs

Several waterbodies within the City of Quincy are identified as Category 5 waters (impaired and requiring a TMDL), as described in Section 2.2.1. Currently, only one TMDL is established and final for Quincy. The *Total Maximum Daily Loads of Bacteria for Neponset River Basin* includes the Neponset River Segment MA73-04 in Quincy.

Section 3
Best Management Practices (BMPs) to Address Minimum Control Measures (MCMs)

This section includes descriptions of each BMP included in Quincy's NOI, an implementation plan, guidelines and resources, and lists of important documentation to best address the MCMs in the General Permit.

3.1 MCM 1: Public Education and Outreach

Objective: *The permittee shall implement an education program that includes educational goals based on stormwater issues of significance within the MS4 area. The ultimate objective of a public education program is to increase knowledge and change behavior of the public so that pollutants in stormwater are reduced.*

This section of the SWMP describes how to comply with the Public Education and Outreach requirements in General Permit Section 2.3.2.

3.1.1 MCM 1 BMPs from NOI

BMP ID	BMP Media/ Category	BMP Description	Targeted Audience	Responsible Department/ Parties	Measurable Goal	Beginning Year of BMP Implementation
1A	Outreach Message	Mailing, website, event, school program, press coverage and/or other means	Residents	DPW working with Neponset Stormwater Partnership	Raise awareness and modify behaviors to reduce pollutant loading	FY22/PY4
1B	Outreach Message	Mailing, website, event, school program, press coverage and/or other means	Businesses, Institutions, and Commercial Facilities	DPW working with Neponset Stormwater Partnership	Raise awareness and modify behaviors to reduce pollutant loading	FY22/PY4
1C	Outreach Message	Mailing, website, event, school program, press coverage and/or other means	Developers (Construction)	DPW working with Neponset Stormwater Partnership	Raise awareness and modify behaviors to reduce pollutant loading	FY22/PY4
1D	Outreach Message	Mailing, website, event, school program, press coverage and/or other means	Industrial Facilities	DPW working with Neponset Stormwater Partnership	Raise awareness and modify behaviors to reduce pollutant loading	FY22/PY4
1E	Outreach Message	Mailing, website, event, school program, press coverage and/or other means	Residents	DPW working with Neponset Stormwater Partnership	Raise awareness and modify behaviors to reduce pollutant loading	FY23/PY5

BMP ID	BMP Media/ Category	BMP Description	Targeted Audience	Responsible Department/ Parties	Measurable Goal	Beginning Year of BMP Implementation
1F	Outreach Message	Mailing, website, event, school program, press coverage and/or other means	Businesses, Institutions, and Commercial Facilities	DPW working with Neponset Stormwater Partnership	Raise awareness and modify behaviors to reduce pollutant loading	FY23/PY5
1G	Outreach Message	Mailing, website, event, school program, press coverage and/or other means	Developers (Construction)	DPW working with Neponset Stormwater Partnership	Raise awareness and modify behaviors to reduce pollutant loading	FY23/PY5
1H	Outreach Message	Mailing, website, event, school program, press coverage and/or other means	Industrial Facilities	DPW working with Neponset Stormwater Partnership	Raise awareness and modify behaviors to reduce pollutant loading	FY23/PY5

3.1.2 MCM 1 Implementation Plan

The City will build upon the existing public education and outreach program to disseminate educational materials to residents via the internet, email, direct mailing, local cable channel, and/or public posting. School programs will be used for residential public education only (BMPs 1A and 1E). The City will coordinate public educational strategies with the SWAC and Neponset River Watershed Association and take advantage of existing materials wherever possible. Section 3.1.5 includes free resources the City can use to supplement the public education and outreach program.

BMPs 1A and 1E Outreach Message to Residents

Education and outreach goals for BMPs 1A and 1E include:

- Increasing awareness of the impact of human activities on stormwater runoff and water quality;
- Changing residential behavior over time; and
- Reaching broad audiences with information that appeals to a diverse public.

Quincy will provide educational materials and general outreach to residents for stormwater management topics relevant to the City. Topics may include:

- Information about Quincy's impaired waterbodies;
- Annual messages about grass clippings, fertilizer use, and leaf litter in the Neponset River Watershed, per Section 4.1.2;
- Effects of outdoor activities such as lawn care on water quality (use of pesticides, herbicides, and fertilizers);
- Benefits of appropriate on-site infiltration of stormwater;
- Effects of automotive work and car washing on water quality;
- Proper disposal of swimming pool water;

- Information about illicit discharges to the MS4; and
- Proper management of pet waste (annually for the Neponset River Watershed, per Section 4.1.2).

BMPs 1B and 1F Outreach Message to Businesses, Institutions, and Commercial Facilities

Education and outreach goals for BMPs 1B and 1F include:

- Increasing awareness of business practices that may contribute to stormwater pollution;
- Changing behavior over time; and
- Improving compliance with local code.

Quincy will provide educational materials and general outreach to businesses, institutions, and commercial facilities within City for stormwater management topics relevant to Quincy. Topics may include:

- Information about Quincy's impaired waterbodies;
- Annual messages about grass clippings, fertilizer use, and leaf litter in the Neponset River Watershed, per Section 4.1.2;
- Proper lawn maintenance (use of pesticides, herbicides and fertilizer);
- Benefits of appropriate on-site infiltration of stormwater;
- Building maintenance (use of detergents);
- Minimizing the use of salt or other de-icing and anti-icing materials;
- Proper storage of salt or other de-icing/anti-icing materials (cover/prevent runoff to storm system and contamination to groundwater);
- Proper storage of materials (emphasize pollution prevention);
- Proper management of waste materials and dumpsters (cover and pollution prevention);
- Proper management of parking lot surfaces (sweeping);
- Proper car care activities (washing of vehicles and maintenance); and
- Proper disposal of swimming pool water by entities such as motels, hotels, and health and country clubs (discharges must be dechlorinated and otherwise free from pollutants).

BMPs 1C and 1G Outreach Message to Developers

Education and outreach goals for BMPs 1C and 1G include:

- Increasing awareness of the impact of construction activities on stormwater runoff and water quality;
- Changing developer behavior over time; and
- Improving compliance with local code.

Quincy will provide educational materials and general outreach to developers for stormwater management topics relevant to Quincy. Topics may include:

- Information about Quincy's impaired waterbodies;
- Proper sediment and erosion control management practices per City Code;
- Information about City permit requests and stormwater design standards; and
- Information about EPA's construction general permit (CGP).

BMPs 1D and 1H Outreach Message to Industrial Facilities

Education and outreach goals for BMPs 1D and 1H include:

- Increasing awareness of industrial activities that may contribute to stormwater pollution;
- Changing behavior over time; and
- Improving compliance with local code.

Quincy will provide educational materials and general outreach to industrial facilities within City for stormwater management topics relevant to Quincy. Topics may include:

- Information about Quincy's impaired waterbodies;
- Equipment inspection and maintenance;
- Proper storage of industrial materials (emphasize pollution prevention);
- Proper management and disposal of wastes;
- Proper management of dumpsters;
- Minimization of use of salt or other de-icing/anti-icing materials;
- Proper storage of salt or other de-icing/anti-icing materials (cover/prevent runoff to storm system and groundwater contamination);
- Benefits of appropriate on-site infiltration of stormwater runoff from areas with low exposure to industrial materials such as roofs or employee parking;
- Proper maintenance of parking lot surfaces (sweeping); and
- Requirements for coverage under EPA's Multi-Sector General Permit (MSGP).

3.1.3 MCM 1 Implementation Schedule

Outreach Method	PY1	PY2	PY3	PY4	PY5
Social media	■	■	■	■	■
Signage and brochures	■	■	■	■	■
Targeted outreach				Residents	Residents
Targeted outreach				Businesses, Institutions, and Commercial Facilities	Businesses, Institutions, and Commercial Facilities
Targeted outreach				Developers	Developers
Targeted outreach				Industrial Facilities	Industrial Facilities

Residents
Businesses, Institutions, and Commercial Facilities
Developers
Industrial Facilities
All Audiences

3.1.4 Public Education and Outreach Goals and Progress

Per Section 2.3.2.e of the General Permit, the public education and outreach program shall provide focused messages for specific audiences and show evidence that progress toward the goals of the program have been achieved. The following methods will be used by the City to evaluate the effectiveness of the educational messages and overall education program:

- Track the number of messages delivered (pieces of material mailed, pieces of material handed out, press releases published and circulation, phone contacts where target is reached, etc.).
- Track the number of hits on the stormwater website over time and in the period following distribution of each message.
- Track number of "shares" or "likes" on social media such as Facebook or Twitter.

The above methods used to evaluate the effectiveness of the program, and any additional methods developed after the date of this SWMP, shall be tied to the defined goals of the program and the overall objective of **changes in behavior and knowledge**.

3.1.5 MCM 1 Guidelines and Resources

The following links include free or low-cost resources Quincy can use to supplement the Public Education program.

EPA Public Education
https://cfpub.epa.gov/npstbx/

EPA Stormwater Education Toolkit (SET)
http://www.stormwater.ucf.edu/toolkit/

EPA National Menu of BMPs for Stormwater
https://www.epa.gov/npdes/national-menu-best-management-practices-bmps-stormwater#edu

MassDEP Public Education
https://www.mass.gov/guides/stormwater-outreach-materials-to-help-Citys-comply-with-the-ms4-permit

Developing an Effective Stormwater Education and Outreach Program for Your Community
http://www.urbanwaterslearningnetwork.org/wp-content/uploads/2016/04/Manual-Stormwater-Education-and-Outreach_2014.pdf

Neponset River Watershed Association
https://www.neponset.org/

Neponset Stormwater Partnership
https://yourcleanwater.org/

Massachusetts Greenscapes
http://greenscapes.org/

3.1.6 MCM 1 Checklist of Key Documentation

Documentation of BMP progress should be kept in Appendix I. The following checklist includes the required documentation for MCM 1. See Section 5 of this Plan for additional record keeping information.

- ☐ All educational materials provided to target audiences
- ☐ Distribution lists for target audiences
- ☐ Dates of distribution of educational materials
- ☐ Note educational goals and opinion on effectiveness based on results tracked; modify education and outreach program if necessary

3.2 MCM 2: Public Involvement and Participation

Objective: *The permittee shall provide opportunities to engage the public to participate in the review and implementation of the SWMP.*

This section of the SWMP describes how to comply with the Public Involvement and Participation requirements in General Permit Section 2.3.3.

3.2.1 MCM 2 BMPs from NOI

BMP ID	BMP Category	BMP Description	Responsible Department/ Parties	Measurable Goal	Beginning Year of BMP Implementation
2A	Public Review	SWMP review (Plan and reports available on web and at public meetings)	DPW	Annually provide the public with an opportunity to participate in the review and implementation of the SWMP	FY19/PY1
2B	Public Participation	Annual event or activity such as hazardous waste day, water testing, catch basin stenciling or river cleanup	DPW working with Neponset Stormwater Partnership	Citizens will learn about and help implement MS4 program through a hands-on activity annually	FY19/PY1

3.2.2 MCM 2 Implementation Plan

BMP 2A Stormwater Management Plan Public Review

Quincy shall provide the public with an opportunity to review this Stormwater Management Plan prior to finalizing it, and with other opportunities to participate in the City's Stormwater Program on an annual basis.

While the Department of Public Works is the responsible party for this BMP, multiple City Departments can help aid in successful implementation, as public participation in stormwater management initiatives often crosses Departments.

The NOI and SWMP were presented at a public SWAC meeting on June 25, 2019 to solicit input from the general public. Additionally, the NOI and draft SWMP were posted online and made available to the public prior to the meeting. The City will post the final SWMP and NOI on the City's website for the duration of the permit term.

BMP 2B Public Participation in Stormwater Management Program

Public involvement and participation goals for BMP 2B include:

- Increasing public involvement in and knowledge of Quincy's stormwater program; and

- Improving water quality through local clean up and waste collection events, such as Cleaner, Greener Quincy Day, beach clean-up events and Household Hazardous Waste Collection Days.

Quincy shall continue to provide notice for public meetings per Massachusetts General Law requirements, including meetings pertaining to the Stormwater Management Program.

The City shall continue to provide annual opportunities for public participation in the Program. These opportunities may include, but are not limited to:

- Neighborhood Forums;
- Stormwater education at local schools;
- Household Hazardous waste days;
- Yard waste collection days; and
- Beach clean ups.

Some of these activities are organized by volunteer organizations, such as the Friends of Wollaston Beach, and the City will continue to provide support if requested and if resources are available.

Appendix F includes a document with helpful tips for organizing and conducting volunteer clean-up events that Quincy may reference. The City shall document all public participation activities in the Annual Reports, and documentation should seek to quantify results or impact to better evaluate the public involvement and participation program effectiveness.

3.2.3 MCM 2 Implementation Schedule

BMP	PY1	PY2	PY3	PY4	PY5
2A Stormwater Management Plan Public Review	●	●	●	●	●
2B Public Participation in Stormwater Management Program	⟷	⟷	⟷	⟷	⟷

● = annual requirement

⟷ = ongoing requirement

3.2.4 MCM 2 Guidelines and Resources

The following links include free or low-cost resources Quincy can use to supplement the Public Involvement program.

EPA National Menu of BMPs for Stormwater
https://www.epa.gov/npdes/national-menu-best-management-practices-bmps-stormwater#inv

EPA Evaluation of the Role of Public Outreach and Stakeholder Engagement in Stormwater Funding Decisions in New England: Lessons from Communities
https://www.epa.gov/sites/production/files/2015-09/documents/eval-sw-funding-new-england.pdf

Manchester Urban Ponds Restoration Program: Tips for Organizing and Conducting Volunteer Clean-up Events
Available in Appendix F of this SWMP

Neponset River Watershed Association Volunteer Webpage
https://www.neponset.org/do-your-part/volunteer-opportunities/

Massachusetts Open Meeting Law Guide
http://www.mass.gov/ago/docs/government/oml/oml-guide.pdf

Friends of Wollaston Beach
http://wollastonbeach.org/

COASTSWEEP (The statewide beach cleanup organized each fall by the MA Office of Coastal Zone Management)
https://www.mass.gov/coastsweep

3.2.5 MCM 2 Checklist of Key Documentation

Documentation of BMP progress should be kept in Appendix I. The following checklist includes the required documentation for MCM 2. See Section 5 of this Plan for additional record keeping information.

- ☐ Meeting dates, agendas, attendees, and meeting notes for Stormwater Advisory Committee meetings
- ☐ Other public meeting dates and topics when stormwater management-related topic is discussed
- ☐ Dates of public participation activities and quantification of participation (such as number of volunteers/participants, number of bags collected, etc.)

3.3 MCM 3: Illicit Discharge Detection and Elimination Program

Objective: *The permittee shall implement an IDDE program to systematically find and eliminate sources of non-stormwater discharges to its municipal separate storm sewer system and implement procedures to prevent such discharges.*

This section of the SWMP describes how to comply with the Illicit Discharge Detection and Elimination Program requirements in General Permit Section 2.3.4.

3.3.1 MCM 3 BMPs from NOI

BMP ID	BMP Category	BMP Description	Responsible Department/ Parties	Measurable Goal	Beginning Year of BMP Implementation
3A	IDDE Ordinance	Complete. Continue to enforce and update if necessary.	DPW	Track illicit discharges identified and removed.	FY19/PY1
3B	SSO Inventory	Continue to update SSO inventory in accordance with permit conditions.	DPW	Complete within one (1) year of effective date of permit. Track # of SSOs identified and removed annually	FY19/PY1
3C	Storm sewer system map	Update map during IDDE Program implementation	DPW	Update map within two (2) years of effective date of permit and complete full system map 10 years after effective date of permit	FY19/PY1
3D	Written IDDE program	Update written IDDE Plan	DPW	Complete within one (1) year of the effective date of permit and update as required	FY19/PY1
3E-1	Assessment and Priority Ranking of Outfalls & Interconnections	Update Outfall/ Interconnection Inventory and Initial Ranking as part of BMP 3D	DPW	Complete within one (1) year of the effective date of permit and update as necessary	FY19/PY1
3E-2	Assessment and Priority Ranking of Outfalls & Interconnections	Dry Weather Outfall Screening & Sampling in accordance with IDDE Plan and permit conditions	DPW	Complete three (3) years after effective date of permit. Track # of illicit discharges identified & volume removed. Summarize screening/ sampling results.	FY19/PY1

BMP ID	BMP Category	BMP Description	Responsible Department/ Parties	Measurable Goal	Beginning Year of BMP Implementation
3E-3	Assessment and Priority Ranking of Outfalls & Interconnections	Catchment Investigations according to program and permit conditions	DPW	Complete 10 years after effective date of permit. Track # and percentage of MS4 catchments evaluated. Track # of illicit discharges identified & volume removed. Summarize screening/sampling results.	FY20/PY2
3F	Employee Training	Train employees on IDDE implementation	DPW	Train annually. Track employees trained, training topic, date/time, and materials presented.	FY19/PY1

3.3.2 MCM 3 Implementation Plan

A written Illicit Discharge Detection and Elimination Plan was developed for the City of Quincy and updated in 2019. Refer to this Plan for the complete IDDE program and requirements of MCM 3. This SWMP section presents a brief summary of the information presented in the IDDE Plan, and the information and guidance provided in the IDDE Plan supersedes.

BMP 3A IDDE Ordinance

The IDDE program shall include adequate legal authority to prohibit, investigate, and eliminate illicit discharges and implement enforcement procedures and actions. Quincy has met this requirement by adopting an ordinance entitled *Illicit Discharge and Connection Ordinance,* Section 13.10 of the Quincy's Municipal Code (QMC) on June 1, 2015. This ordinance prohibits illicit discharges to the City's drainage system and includes a permitting process for new or altered connections to the MS4. The Department of Public Works serves as the enforcement agency for the ordinance.

BMP 3A is complete. See Appendix B of the IDDE Plan for additional information.

BMP 3B SSO Inventory

The City must identify all known locations where sanitary sewer overflows (SSOs) have discharged to the municipal drainage system within the past five (5) years and create an inventory that includes the following information:

- Location, date, time, and volume of each occurrence;
- Whether the discharge entered surface water or the MS4;
- Description, indicating known or suspected cause(s); and
- Mitigation and corrective measures planned and completed.

The inventory will be included in Appendix G and must be kept up to date. Each municipal Department can aid in the development and maintenance of the inventory by reporting instances of SSOs found during field work to the DPW.

BMP 3C Storm Sewer System Map

A comprehensive map of Quincy's drainage system has been developed, and the City has met a large portion of the requirements of this BMP. City staff should continue to update the map as necessary to reflect newly discovered information, corrections or modifications, improved connectivity, and progress made.

BMP 3C is ongoing. See Section 2 of the IDDE Plan for additional information.

BMP 3D Written IDDE Program

Quincy has developed a City-wide IDDE Plan, updated in 2019, which includes procedures and timelines developed in accordance with the final General Permit. The City will implement the Plan and continue to update and modify it on an as-needed basis.

BMP 3E-1 Outfall/Interconnection Inventory and Initial Ranking

The City has assessed and priority ranked each outfall within the MS4 in terms of their potential to have illicit discharges and SSOs, and the related public health significance.

BMP 3E-1 is complete. See the 2019 Addendum to the IDDE Plan for additional information.

BMP 3E-2 Dry Weather Outfall/Interconnection Screening and Sampling

Field investigations must be completed during dry weather conditions to confirm whether any Low or High Priority outfalls have dry weather flow, which may be indicative of illicit connections/discharges. The initial catchment delineation and priority ranking must be updated by the end of Permit Year 3 based on the data gathered in the field. All data gathered during implementation of this BMP must be reported annually.

BMP 3E-2 is ongoing. See the 2019 Addendum to the IDDE Plan for additional information.

BMP 3E-3 Outfall/Interconnection Catchment Investigations

Each catchment associated with an outfall or interconnection within the MS4 must be investigated based on identified System Vulnerability Factors (SVF, i.e., the likelihood that illicit discharges/connections exist) in that particular area. For all catchments, key junction manholes shall be opened and inspected for evidence of illicit connections during dry weather conditions. For catchments with one or more SVF, wet weather monitoring must be completed. The City will identify the number of outfall catchments in the MS4 that have been evaluated using the catchment investigation procedure developed under BMP 3D. All data gathered during implementation of this BMP must be reported annually.

At the conclusion of field work for this BMP, the outfall/interconnection inventory should be updated and reprioritized for ongoing screening once every five years. See Section 4 of the IDDE Plan for additional information.

BMP 3F Employee Training

Employees involved in the IDDE Program must be trained annually on the Program, including how to recognize illicit discharges and SSOs in accordance with the IDDE Plan.

See Section 7 of the IDDE Plan for additional information.

3.3.3 MCM 3 Implementation Schedule

EPA's implementation timeline for the IDDE Program is available in Appendix F.

BMP	PY1	PY2	PY3	PY4	PY5
3A IDDE Ordinance	✓				
3B SSO Inventory	●	●	●	●	●
3C Storm Sewer System Map	←●	———	———	———	——→
3D Written IDDE Program	✓				
3E-1 Outfall/Interconnection Inventory and Initial Ranking	✓				
3E-2 Dry Weather Screening and Sampling	←———	———	———→		
3E-3 Catchment Investigations		←———	———	———	——→
3F Employee Training	●	●	●	●	●

✓ = BMP complete
● = annual requirement or year due
←→ = ongoing requirement

3.3.4 MCM 3 Guidelines and Resources

The following links include resources Quincy can use to supplement the IDDE program. The City-specific procedures in the IDDE Plan were developed using the IDDE Guidance Manual and New England Source Tracking Protocol linked below.

Center for Watershed Protection Illicit Discharge Detection and Elimination: A Guidance Manual for Program Development and Technical Assessments
https://www3.epa.gov/npdes/pubs/idde_manualwithappendices.pdf

EPA New England Bacterial Source Tracking Protocol
https://www3.epa.gov/region1/npdes/stormwater/ma/2014AppendixI.pdf

EPA National Menu of BMPs for Stormwater
https://www.epa.gov/npdes/national-menu-best-management-practices-bmps-stormwater#ill

Quincy *Illicit Discharge and Connection Ordinance*
City of Quincy Municipal Code, Section 13.10

3.3.5 MCM 3 Checklist of Key Documentation

Documentation of BMP progress should be kept in Appendix I. The following checklist includes the required documentation for MCM 3. More information about IDDE reporting is located in Sections 4.4, 5.5 6.6 and 7.3 of the IDDE Plan. See Section 5 of this Plan for additional record keeping information.

- ☐ Log of phone calls and complaints received regarding suspected illicit connections and other storm drain issues, including dates and actions taken;
- ☐ SSO inventory (updated annually), including the number of illicit discharges/ connections identified and/or removed and the volume of sewage removed;
- ☐ Drainage system map;
- ☐ Data collected during dry and wet weather outfall/interconnection investigations, including the date, outfall/interconnection identifier, location, weather conditions at time of sampling, precipitation in previous 48 hours, field screening results, and results of all analyses (summarize on an annual basis and for the entire permit term);
- ☐ Number and percent of total outfall catchments served by the MS4 evaluated using the catchment investigation procedure;
- ☐ Presence or absence of System Vulnerability Factors for each catchment;
- ☐ Data collected during key junction manhole investigations;
- ☐ Inspection and maintenance records; and
- ☐ Frequency and type of employee training, including employees trained, training topic, date/time, and materials presented.

3.4 MCM 4: Construction Site Stormwater Runoff Control

Objective: *To minimize or eliminate erosion and maintain sediment on site so that it is not transported in stormwater and allowed to discharge to a water of the U.S. through the permittee's MS4.*

This section of the SWMP describes how to comply with the Construction Site Stormwater Runoff Control requirements in General Permit Section 2.3.5.

3.4.1 MCM 4 BMPs from NOI

BMP ID	BMP Category	BMP Description	Responsible Department/ Parties	Measurable Goal	Beginning Year of BMP Implementation
4A	Construction Ordinance and Regulations	Modify local ordinance and regulations, if necessary, to require construction operators to implement a sediment and erosion control program and control waste, including but not limited to, discarded building materials, concrete truck wash out, chemicals, litter, and sanitary wastes.	DPW/Conservation Commission/ Planning/Building Department	Review current procedures and modify if necessary within one (1) year of permit effective date	FY19/PY1
4B	Construction Policy and Procedures	Develop and implement written procedures for site inspections and enforcement procedures per section 2.3.5 and begin implementation.	DPW/Conservation Commission/ Planning/Building Department	Review current procedures and modify if necessary within one (1) year of permit effective date	FY19/PY1

3.4.2 MCM 4 Implementation Plan

Per the General Permit, Quincy must develop and implement the following items, which will be adopted as either ordinance and regulation modifications or a formalized policy or procedure. Note that while Quincy can choose to implement these items City-wide, they are only required for disturbances that are greater than or equal to one (1) acre or less than one (1) acre if that disturbance is part of a larger common plan of development or sale that would disturb one (1) or more acres.

- A regulatory mechanism that requires the use of sediment and erosion control practices at construction sites, as well as controls for other wastes on construction sites such as demolition debris, litter, and sanitary wastes;

- Written procedures for site inspections and enforcement of sediment and erosion control measures, including the responsible party for site inspections and enforcement authority, due within one (1) year of the effective date of the permit;
- Requirements for construction site operators performing land disturbance activities within the MS4 jurisdiction that result in stormwater discharges to the MS4 to implement a sediment and erosion control program that includes BMPs appropriate for the conditions at the construction site;
- Requirements for construction site operators within the MS4 jurisdiction to control wastes, including but not limited to, discarded building materials, concrete truck wash out, chemicals, litter, and sanitary wastes; and
- Written procedures for site plan review and inspection and enforcement, due within one (1) year of the effective date of the permit.

BMP 4A Construction Ordinance and Regulations

The City shall implement and enforce a program to reduce pollutants in stormwater runoff discharged to the municipal drainage system from construction activities, including use of sediment and erosion control practices, at sites greater than one acre. Quincy met this requirement in 2015 by adopting ordinance QMC Section 13.14 entitled *Stormwater Management and Land Disturbance Ordinance*. This ordinance provides guidance for stormwater runoff control during construction and post-construction to protect local water resources from discharges. The ordinance requires an Erosion Control and Sediment Control Plan, which is equivalent to a Stormwater Pollution Prevention Plan (SWPPP) under the Construction General Permit, a number of control measures, Construction Site Inspections (by owner and/or the City), and reporting. The Department of Public Works serves as the enforcement agency for the ordinance.

The City will review the existing ordinance and regulations with respect to the 2016 General Permit and modify it if needed.

BMP 4B Construction Policy and Procedures

Quincy has developed procedures for site inspections and enforcement of sediment and erosion control measures in the Stormwater Management Regulations under QMC Section 13.14, including procedures for tracking the number of site reviews, inspections, and enforcement actions. The City will review written procedures and forms and determine if improvements are necessary.

3.4.3 MCM 4 Implementation Schedule

BMP	PY1	PY2	PY3	PY4	PY5
4A Construction Ordinance and Regulations	●				
4B Construction Policy and Procedures	●				

● = year due

3.4.4 MCM 4 Guidelines and Resources

The following links include free or low-cost resources Quincy can use to supplement the Construction program.

EPA Construction General Permit SWPPP template, including inspection forms
https://www.epa.gov/npdes/epas-2017-construction-general-permit-cgp-and-related-documents

Massachusetts Stormwater Handbook
https://www.mass.gov/guides/massachusetts-stormwater-handbook-and-stormwater-standards

EPA National Menu of BMPs for Stormwater
https://www.epa.gov/npdes/national-menu-best-management-practices-bmps-stormwater#constr

Quincy *Stormwater Management and Land Disturbance* Ordinance
Quincy Stormwater Management Regulations, July 1, 2015, City of Quincy Municipal Code, Section 13.14

Central Massachusetts Regional Stormwater Coalition SOP 5: Construction Site Inspection
http://www.centralmastormwater.org/Pages/crsc_toolbox/Construction%20Inspection%20SOP_FINAL.pdf

Central Massachusetts Regional Stormwater Coalition SOP 6: Erosion and Sedimentation Control
http://www.centralmastormwater.org/Pages/crsc_toolbox/Erosion%20and%20Sedimentation%20Control%20SOP_FINAL.pdf

3.4.5 MCM 4 Checklist of Key Documentation

Documentation of BMP progress should be kept in Appendix I. The following checklist includes the required documentation for MCM 4. See Section 5 of this Plan for additional record keeping information.

- ☐ Number of site reviews, inspections, and enforcement actions; and
- ☐ Modifications to Quincy's ordinances, regulations, policies, and/or procedures as necessary.

3.5 MCM 5: Post-Construction Stormwater Management

Objective: *Reduce the discharge of pollutants found in stormwater through the retention or treatment of stormwater after construction on new or redeveloped sites.*

This section of the SWMP describes how to comply with the Stormwater Management in New Development and Redevelopment requirements in General Permit Section 2.3.6.

3.5.1 MCM 5 BMPs from NOI

BMP ID	BMP Category	BMP Description	Responsible Department/ Parties	Measurable Goal	Beginning Year of BMP Implementation
5A	Post-Construction Ordinance and Regulations	Modify local ordinances and develop regulations to require submissions of as-built drawings and ensure long term operation and maintenance will be a part of the SWMP and ensure stormwater controls or management practices for new development and redevelopment meet the requirements of the permit.	DPW/Conservation Commission/ Planning/Building Department	Modify existing ordinance and/or regulations if necessary within two (2) years of permit effective date	FY20/PY2
5B	Target properties to retrofit/reduce impervious areas	Identify at least 5 permittee-owned properties that could be modified or retrofitted with BMPs to reduce impervious areas and update annually	DPW working with Neponset Stormwater Partnership	Complete 4 years after effective data of permit and report annually on retrofitted properties	FY21/PY3
5C	Allow green infrastructure	Develop a report assessing existing local regulations to determine the feasibility of making green infrastructure practices allowable when appropriate site conditions exist	DPW working with Neponset Stormwater Partnership	Complete 4 years after effective data of permit and implement recommendations of report	FY22/PY4

BMP ID	BMP Category	BMP Description	Responsible Department/ Parties	Measurable Goal	Beginning Year of BMP Implementation
5D	Street design and parking lot guidelines	Develop a report assessing requirements that affect the creation of impervious cover. The assessment will help determine if change to design standards for streets and parking lots can be modified to support low impact design options	DPW working with Neponset Stormwater Partnership	Complete 4 years after effective data of permit and implement recommendations of report	FY22/PY4

3.5.2 MCM 5 Implementation Plan

BMP 5A Post-Construction Ordinance and Regulations

The City shall implement and enforce a program to reduce pollutants in stormwater runoff discharged to the municipal drainage system from post-construction activities for all new development and redevelopment sites greater than one acre. Quincy met this requirement in 2015 by adopting the ordinance QMC section 13.14 entitled *Stormwater Management and Land Disturbance*. This ordinance provides guidance for stormwater runoff control during construction and post-construction to protect local water resources from discharges. The Department of Public Works serves as the enforcement agency for the ordinance.

The City will need to review the existing ordinance and regulations with respect to the 2016 General Permit, specifically Section 2.3.6.a.2, and modify it if needed.

Additionally, the City must have procedures in place to require the submission of as-built plans after the completion of construction projects and ensure long-term operation and maintenance of stormwater management practices in place at construction sites. The City has already met these requirements through the *Stormwater Management and Land Disturbance* Ordinance and Stormwater Management Regulations. Additionally, QMC Section 13.10.100 requires an annual inspection report and certification of maintenance for all private BMPs.

BMP 5B Target properties to retrofit/reduce impervious areas

The City must identify at least five City-owned properties that could potentially be modified or retrofitted with BMPs designed to reduce the frequency, volume, and pollutant loads of stormwater discharges through a reduction of impervious area. General Permit Section 2.3.6.d describes factors and considerations for selecting potential sites with the goal of reducing impervious area and improving water quality. The inventory must be updated annually starting in Permit Year 5. It is anticipated that the Neponset Stormwater Partnership will assist with this effort.

BMP 5C Allow Green Infrastructure

As detailed in General Permit Section 2.3.6.c, Quincy shall develop a report assessing existing local regulations to determine the feasibility of making green roofs, infiltration

practices, and water harvesting devices allowable when appropriate site conditions exist. The City shall implement all recommendations in accordance with the schedules contained in the assessment.

BMP 5B Assess Street Design and Parking Lot Guidelines

In accordance with General Permit Section 2.3.6.b, Quincy shall develop a report assessing current street design and parking lot guidelines and other local requirements that affect the creation of impervious cover. This assessment shall be used to provide information to allow the City to determine if changes to design standards for streets and parking lots can be made to support low impact design (LID) options. Input will be gathered from multiple City departments. The final report will be appended to this SWMP once completed.

3.5.3 MCM 5 Implementation Schedule

BMP	PY1	PY2	PY3	PY4	PY5
5A Post-Construction Ordinance and Regulations		●			
5B Target properties to retrofit/reduce impervious areas				●	
5C Allow Green Infrastructure				●	
5D Assess Street Design and Parking Lot Guidelines				●→	

● = year due

3.5.4 MCM 5 Guidelines and Resources

The following links include free or low-cost resources Quincy can use to supplement the Post-Construction program.

Massachusetts Stormwater Handbook
https://www.mass.gov/guides/massachusetts-stormwater-handbook-and-stormwater-standards

EPA National Menu of BMPs for Stormwater
https://www.epa.gov/npdes/national-menu-best-management-practices-bmps-stormwater#post

Quincy *Stormwater Management and Land Disturbance* Ordinance
Quincy Stormwater Management Regulations July 1, 2015, City of Quincy Municipal Code, Section 13.14

Managing Stormwater in Your Community: A Guide for Building an Effective Post-Construction Program
https://www3.epa.gov/npdes/pubs/stormwaterinthecommunity.pdf

EPA Managing Stormwater with LID Practices: Addressing Barriers to LID
https://www3.epa.gov/region1/npdes/stormwater/assets/pdfs/AddressingBarrier2LID.pdf

Metropolitan Area Planning Council LID Toolkit
https://www.mapc.org/resource-library/low-impact-development-toolkit/

Central Massachusetts Regional Stormwater Coalition SOP 5: Construction Site Inspection
http://www.centralmastormwater.org/Pages/crsc_toolbox/Construction%20Inspection%20SOP_FINAL.pdf

Central Massachusetts Regional Stormwater Coalition SOP 6: Erosion and Sedimentation Control
http://www.centralmastormwater.org/Pages/crsc_toolbox/Erosion%20and%20Sedimentation%20Control%20SOP_FINAL.pdf

3.5.5 MCM 5 Checklist of Key Documentation

Documentation of BMP progress should be kept in Appendix I. The following checklist includes the required documentation for MCM 5. See Section 5 of this Plan for additional record keeping information.

- ☐ Measures the City has taken to ensure adequate long-term operation and maintenance of stormwater BMPs and to require submission of as-built plans;
- ☐ Modifications to Quincy's ordinances, regulations, policies, and/or procedures as necessary;
- ☐ Status of BMP 5C and 5D assessments, including any planned or completed changes to local regulations and guidelines (BMP 5D) and findings and progress towards making the practices allowable (BMP 5C); and
- ☐ Retrofit inventory, including all sites that have been modified or retrofitted. Sites should include City-owned sites identified in the inventory as well as non-municipal property modified or retrofitted to mitigate impervious area.

3.6 MCM 6: Good Housekeeping and Pollution Prevention

Objective: *The permittee shall implement an operations and maintenance program for permittee-owned operations that has a goal of preventing or reducing pollutant runoff and protecting water quality from all permittee-owned operations.*

This section of the SWMP describes how to comply with the Good Housekeeping and Pollution Prevention requirements in General Permit Section 2.3.7.

3.6.1 MCM 6 BMPs from NOI

BMP ID	BMP Category	BMP Description	Responsible Department/ Parties	Measurable Goal	Beginning Year of BMP Implementation
6A	Operation & Maintenance Program	Inventory and create O&M procedures for all permittee-owned **parks and open spaces**, **buildings and facilities** (including their storm drains), and **vehicles and equipment**	DPW	Complete two (2) years after permit effective date, implement in following years	FY20/PY2
6B	Operation & Maintenance Program	Establish and implement program for repair and rehabilitation of **MS4 infrastructure**	DPW	Complete two (2) years after permit effective date, implement in following years	FY20/PY2
6C	Stormwater Pollution Prevention Plans (SWPPP)	Update SWPPP for DPW Facility	DPW	Complete SWPPPs within two (2) years of permit effective date, implement in following years	FY20/PY2
6D-1	Operation & Maintenance Program	Implement procedures to optimize catch basin cleaning developed under BMP 6B	DPW	Track frequency and material quantity of catch basin cleaning in City. In first Annual Report and in SWMP, document plan for optimizing catch basin cleaning.	FY19/PY1
6D-2	Operation & Maintenance Program	Implement procedures for street and parking lot sweeping developed under BMP 6B	DPW	Annually track number of miles cleaned or the volume or mass of material removed.	FY19/PY1
6D-3	Operation & Maintenance Program	Implement procedures for use and storage of deicing materials developed under BMP 6B	DPW	Implement program for winter road maintenance throughout permit term.	FY19/PY1

BMP ID	BMP Category	BMP Description	Responsible Department/ Parties	Measurable Goal	Beginning Year of BMP Implementation
6D-4	Operation & Maintenance Program	Implement procedures to inspect and maintain City-owned structural stormwater BMPs	DPW	Develop an inventory of City-owned BMPs within two (2) years of permit effective date. Report on inspection and maintenance conducted annually.	FY19/PY1

3.6.2 MCM 6 Implementation Plan

BMP 6A Operation and Maintenance Program for Municipal Facilities and Equipment

Quincy must develop a written City-Wide Operation and Maintenance Program for municipal facilities and equipment, including:

- Parks and open space;
- Buildings and facilities, including schools, where pollutants are exposed to stormwater runoff; and
- Vehicles and equipment.

This plan will include an inventory of the municipally-owned facilities and equipment. The inventory and written program will be appended to this SWMP.

BMP 6B Operation and Maintenance Program for MS4 Infrastructure

The City shall include a written program describing Operation and Maintenance for MS4 in the plan described in BMP 6A. This section of the plan describes the activities and procedures used to maintain MS4 infrastructure in a timely manner to reduce the discharge of pollutants from the MS4. The City has developed procedures for maintenance and repair of MS4 infrastructure, included in Appendix H of this SWMP. These procedures will be updated when the City finalizes its City-wide Operation and Maintenance Plan in Permit Year 2.

BMP 6C Stormwater Pollution Prevention Plans

The City shall update the SWPPP for the City's DPW facility. In accordance with General Permit Section 2.3.7.b, Quincy must also develop and implement a SWPPP for other City-owned or operated waste handling facilities where pollutants are exposed to stormwater. SWPPP requirements include "regular" employee training for all members of the Pollution Prevention Team (annual training is recommended as a minimum). Additionally, quarterly site inspections are required at these sites according to General Permit Section 2.3.7.b.iii.

BMP 6D-1 Catch Basin Cleaning

The City must clean and inspect catch basins to make sure that catch basins are no more than 50% full and develop and implement a program to optimize routine inspections, cleaning, and maintenance of catch basins. The City already tracks catch basin cleaning in GIS with mobile data collection. If a catch basin is consistently less than 50% full, the City can reduce the frequency of cleanings. If a catch basin is more than 50% full during two consecutive cleanings/inspections, the City must investigate the contributing drainage

area for sources of excessive sediment loading and abate contributing sources when possible.

In accordance with General Permit Section 2.3.7.a.iii.2, the City has taken steps toward optimizing catch basin cleaning operations in Permit Year 1. The City's Engineering Department has developed a mobile data collection application for contractors and City staff to document catch basin cleaning and inspections, including percent full at the time of cleaning. The City follows the MassDEP policies for the management of catch basin cleanings, included in Appendix H of this SWMP. The City will evaluate cleaning SOPs, the data collection process, and the data collected to make recommendations for improvements in the City-wide Operation and Maintenance Plan.

BMP 6D-2 Street Sweeping

Establish and implement procedures for sweeping and/or cleaning streets and City-owned parking lots. All streets must be swept and/or cleaned at least once per year in the spring (excluding rural streets with no curbs or catch basins). More frequent sweeping shall occur in targeted areas on the basis of pollutant load reduction potential, discussed further in Section 4 for watersheds impacted. The City follows the MassDEP policies for reuse and disposal of street sweepings, included in Appendix H of this SWMP. The City's procedures for street sweeping will be finalized in the City-wide Operation and Maintenance Plan during Permit Year 2.

BMP 6D-3 Deicing Materials

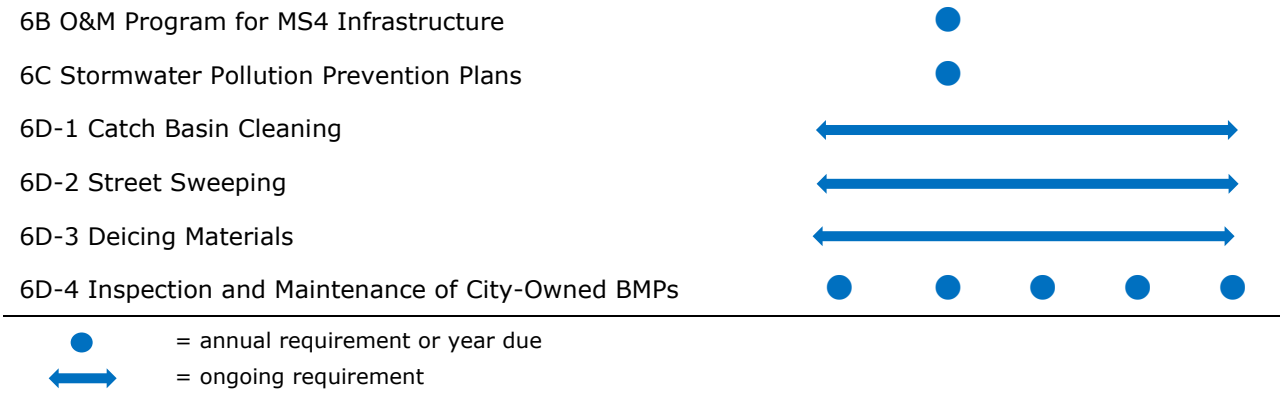
Update and implement procedures for winter road maintenance, including the use and storage of salt and sand. The City has established procedures for winter road maintenance, which will be updated when the City finalizes its City-wide Operation and Maintenance Plan in Permit Year 2.

BMP 6D-4 Inspection and Maintenance of City-Owned BMPs

The City shall develop inspection and maintenance procedures and frequencies for all stormwater treatment structures. An important first step will be to improve the inventory, mapping, and record keeping procedures for City-owned or operated stormwater BMPs, such as detention ponds and swales. The inventory should be developed within two (2) years of the permit effective date, per Section 2.3.4.5.a of the General Permit. All City-owned water quality BMPs must be inspected annually at a minimum. Note that drainage manholes and catch basins are not considered stormwater treatment structures for this BMP (structure maintenance procedures will be developed and implemented under BMPs 6B and 6D-1). The City has developed procedures for inspection and maintenance of City-owned structural BMPs, included in Appendix H of this SWMP. These procedures will be updated when the City finalizes its city-wide Operation and Maintenance Plan in Permit Year 2.

3.6.3 MCM 6 Implementation Schedule

BMP	PY1	PY2	PY3	PY4	PY5
6A O&M Program for Municipal Facilities and Equipment		●			



3.6.4 MCM 6 Guidelines and Resources

The following links include free or low-cost resources Quincy can use to supplement the Good Housekeeping and Pollution Prevention program.

EPA National Menu of BMPs for Stormwater
https://www.epa.gov/npdes/national-menu-best-management-practices-bmps-stormwater#poll

Center for Watershed Protection Municipal Pollution Prevention/Good Housekeeping Practices
http://cdrpc.org/wp-content/uploads/2015/05/CWP_Municipal_Pollution_Prevention.pdf

MassDEP Management of Catch Basin Cleanings
https://www.mass.gov/files/documents/2018/03/09/catch-basins.pdf

MassDEP Reuse & Disposal of Street Sweepings
https://www.mass.gov/files/documents/2018/05/14/street-sweepings.pdf

MassDEP Snow Disposal Guidance
https://www.mass.gov/guides/snow-disposal-guidance

Central Massachusetts Regional Stormwater Coalition SOP: Inspecting Constructed BMPs
http://centralmastormwater.org/Pages/crsc_toolbox/Constructed%20BMP%20Inspection%20SOP_FINAL.pdf

3.6.5 MCM 6 Checklist of Key Documentation

Documentation of BMP progress should be kept in Appendix I. The following checklist includes the required documentation for MCM 6. See Section 5 of this Plan for additional record keeping information.

- ☐ Inventory of municipal facilities and equipment;

- ☐ Plan for optimizing catch basin cleaning and metrics about the number of catch basins, quantity cleaned and inspected, and total volume of material removed from all catch basins;
- ☐ Miles of streets cleaned and the volume of material removed; and
- ☐ All records associated with SWPPP quarterly site inspections, maintenance activities, and training.

Section 4
BMPs to Address Specific Waterbody Requirements

4.1 Impaired Waterbodies

As described in Section 2 of the SWMP, several surface waterbodies within Quincy were identified in the 2014 Integrated List of Waters as Category 5 waters needing a TMDL. Although Furnace Brook, Neponset River and Town River Bay are impaired for dissolved oxygen, no additional BMPs are required for these waterbodies. The 2016 General Permit does not require BMPs or outreach to be completed for dissolved oxygen impairments beyond the outfall/interconnection monitoring described in the IDDE Plan.

Boston Harbor, Dorchester Bay, Hingham Bay, Quincy Bay (MA70-04 and MA70-05), Neponset River, Town River Bay and Weymouth Fore River are also impaired for PCB in Fish Tissue, however, no additional BMPs or outreach are required for this legacy pollutant. Nor are any additional BMPs or outreach required for the Neponset River's impairment for debris, floatables and trash, and Town Brook's impairments for flow regime alterations, physical substrate habitat alterations, and aquatic macroinvertebrate bioassessments.

While the Neponset River Segment MA73-04 is not impaired for nitrogen, low dissolved oxygen and high turbidity in the Neponset River Watershed have been linked by EPA to excessive nutrients in discharges. The Neponset River Segment MA73-04 is part of the Neponset River Estuary, and therefore, nitrogen is considered the limiting nutrient. Per Appendix H of the General Permit, the City must comply with the additional requirements listed in Section 4.1.2 below to address nitrogen in their stormwater discharges.

Boston Harbor, Dorchester Bay, Hingham Bay, Quincy Bay (MA70-04 and MA70-05), Neponset River, Town Brook, Town River Bay and Weymouth Fore River are impaired for Fecal Coliform. Additionally, Dorchester Bay, Quincy Bay (MA70-04 and MA70-05) and Neponset River are impaired for Enterococcus. Per Appendix H of the General Permit, the City must comply with the additional requirements listed in Section 4.1.1 below to address bacteria in their stormwater discharges.

Lastly, Dorchester Bay and Neponset River are also impaired for solids and/or turbidity. Appendix H of the General Permit, the City must comply with the additional requirements listed in Section 4.1.3 below to address solids in their stormwater discharges.

4.1.1 Enhanced BMPs for Bacteria or Pathogens (City-wide: multiple waterbodies)

General Permit Part 2.3.2: Public Education and Outreach

Quincy shall supplement the residential public education program with an annual message about the proper management of pet waste, including noting Chapter 6.04 of the City's Code of Ordinances where appropriate, and disseminating educational materials to dog owners at the time of issuance or renewal of a dog license. Education materials shall describe the detrimental impacts of improper management of pet waste, requirements for waste collection and disposal, and penalties for non-compliance.

The City shall also provide information to owners of septic systems about proper maintenance in any catchment that discharges to a waterbody impaired for bacteria or pathogens (i.e. Boston Harbor, Dorchester Bay, Hingham Bay, Quincy Bay, Neponset River, Town Brook, Town River Bay and Weymouth Fore River).

General Permit Part 2.3.4: Illicit Discharge

Quincy shall implement the IDDE program required by the General Permit and described in Section 3.3 of this SWMP. Additionally, catchments draining to any waterbody impaired for bacteria or pathogens shall be designated either Problem Catchments or High Priority in implementation of the IDDE program.

4.1.2 Enhanced BMPs for Total Nitrogen (Neponset River Estuary)

General Permit Part 2.3.2: Public Education and Outreach

Quincy shall supplement the residential and business/commercial/institution public education program with an annual message about various topics, including:

- Spring – the proper use and disposal of grass clippings and encouraging the proper use of slow-release fertilizers;
- Summer – the proper management of pet waste, including noting any existing ordinances where appropriate; and
- Fall – the proper disposal of leaf litter.

General Permit Part 2.3.6: Stormwater Management in New Development and Redevelopment

Quincy's Stormwater Management and Erosion Control Ordinance or regulations shall include requirements that new development and redevelopment stormwater management BMPs be optimized for nitrogen removal, at a minimum in the Neponset River Watershed. Additionally, the City's retrofit inventory developed under BMP 5D shall consider BMPs to reduce nitrogen discharges.

General Permit Part 2.3.7: Good House Keeping and Pollution Prevention for Permittee Owned Operations

The City shall establish requirements for use of slow release fertilizer and proper management of grass cuttings and leaf litter on City-owned properties, including prohibiting blowing organic waste onto impervious surfaces. Quincy shall also increase street sweeping to a minimum of two occurrences per year, once in the spring and at least once in the fall.

Nitrogen Source Identification Report

Within four years of the permit effective date, the City must complete a Nitrogen Source Identification Report that includes the following components:

- Calculation of total MS4 area draining to the water quality limited receiving water segments or their tributaries, including updated mapping and catchment delineations completed under the IDDE Program;
- All screening and monitoring results targeting the receiving water segment(s);
- Impervious area and directly connected impervious area for the target catchment;

- Identification, delineation and prioritization of potential catchments with high nitrogen loading; and
- Identification of potential retrofit opportunities or opportunities for the installation of structural BMPs during redevelopment, including the removal of impervious area.

Potential Structural BMPs

Within five years of the permit effective date, the City must evaluate all City-owned properties identified as presenting retrofit opportunities or areas for structural BMP installation under the Good Housekeeping Program or in the Nitrogen Source Identification Report that are within the drainage area of the water quality limited water or its tributaries. The evaluation shall include:

- The next planned infrastructure, resurfacing, or redevelopment activity planned for the property (if applicable) OR planned retrofit date;
- The estimated cost of redevelopment or retrofit BMPs; and
- The engineering and regulatory feasibility of redevelopment or retrofit BMPs.

The City must also provide a list of planned structural BMPs and a plan and schedule for implementation. At least one structural BMP must be installed as a "demonstration project" within a catchment with high nitrogen load potential within six years of the permit effective date.

The estimated nitrogen removal by structural BMPs installed in Quincy's regulated area must be tracked.

4.1.3 Enhanced BMPs for Solids (Dorchester Bay, Neponset River)

General Permit Part 2.3.6: Stormwater Management in New Development and Redevelopment

Stormwater management systems designed on commercial and industrial land that drains to the water quality limited waterbody shall incorporate designs that allow for shutdown and containment where appropriate to isolate the system in the event of an emergency spill or other unexpected event. EPA also encourages the City to require any stormwater management system designed to infiltrate stormwater on commercial or industrial sites to provide the level of pollutant removal equal to or greater than the level of pollutant removal provided through the use of biofiltration of the same volume of runoff to be infiltrated, prior to infiltration.

General Permit Part 2.3.7: Good House Keeping and Pollution Prevention for Permittee Owned Operations

The City shall:

- Increase street sweeping frequency of all municipally-owned streets and parking lots to target areas with potential for high pollutant loads. This may include, but is not limited to, increased street sweeping frequency in commercial areas and high-density residential areas, or drainage areas with a large amount of impervious area.

- Prioritize inspection and maintenance for catch basins to ensure that no sump is more than 50 percent full. Clean catch basins more frequently if inspection and maintenance activities indicate excessive sediment or debris loadings.
- Annually report on the street sweeping schedule to target high pollutant loads.

4.2 Neponset River Bacteria TMDL

As described in Section 2.2.3 of the SWMP, a final TMDL for bacteria has been developed for the Neponset River Watershed. This TMDL requires that Cities discharging to the Neponset River comply with requirements in Appendix F of the General Permit. These requirements are summarized below as they apply to Quincy's program.

4.2.1 Enhanced BMPs

General Permit Part 2.3.3: Public Education and Outreach

Quincy shall supplement the residential public education program with an annual message about the proper management of pet waste. Educational materials should also be provided to dog owners during issuance or renewal of dog licenses. All pet waste management educational materials should:

- Reference the Chapter 6.04 of the City's Code of Ordinances, which requires removal of any pet waste from public and private property;
- Describe the detrimental impacts of improper management of pet waste;
- Include requirements for waste collection and disposal; and
- List the penalties for non-compliance.

The City shall also provide information to owners of septic systems about proper maintenance within the Neponset River catchment area.

General Permit Part 2.3.4: Illicit Discharge Detection and Elimination Program

Catchments that drain to waterbodies impaired for bacteria or pathogens must be designated as "Problem" or "High Priority" catchments during implementation of the IDDE Program. This includes all outfalls discharging to the Neponset River in Quincy.

Section 5
Program Evaluation, Record Keeping, and Reporting

5.1 Program Evaluation

The City will annually self-evaluate its compliance with the terms and conditions of the 2016 General Permit, including the appropriateness of selected BMPs and progress toward defined measurable goals. The self-evaluation will be submitted as part of the Annual Report and maintained as part of the SWMP.

5.2 Record Keeping

The City will keep all records required by the 2016 General Permit for **at least five years**, including, but not limited to the following key information:

- Monitoring results;
- Copies of reports;
- Records of outfall/interconnection screening;
- Follow-up and elimination of illicit discharges;
- Maintenance records; and
- Inspection records.

Checklists of record keeping items Quincy should maintain are also included under each BMP in Section 3 of the SWMP. Records relating to the 2016 General Permit, including the SWMP, will be made available to the public, as required by Section 4.2.c of the Permit.

5.3 Annual Reports

The City will submit annual reports each year of the Small MS4 permit term, 90 days from the close of the reporting period (i.e., September 28). The reporting period will be a one-year period commencing on the permit effective date, and subsequent anniversaries thereof, except that the first annual report under the 2016 General Permit shall also cover the period from May 1, 2018 to the permit effective date, July 1, 2018. Under the 2016 General Permit, annual reports will consist of a simple update provided to EPA and more robust documentation included in Appendix I of this SWMP.

Per Section 4.4.b of the 2016 General Permit, the annual reports shall contain the following information:

i. A self-assessment review of compliance with the permit terms and conditions.

ii. An assessment of the appropriateness of the selected BMPs.

iii. The status of any plans or activities required by part 2.1 and/ or part 2.2, including:

- *Identification of all discharges determined to be causing or contributing to an exceedance of water quality standards and description of response including all items required by part 2.1.1;*
- *For discharges subject to TMDL related requirements, identification of specific BMPs used to address the pollutant identified as the cause of impairment and assessment of the BMPs effectiveness at controlling the pollutant (part 2.2.1. and Appendix F) and any deliverables required by Appendix F;*
- *For discharges to water quality limited waters a description of each BMP required by Appendix H and any deliverables required by Appendix H.*

iv. An assessment of the progress towards achieving the measurable goals and objectives of each control measure in part 2.3 including:

- *Evaluation of the public education program including a description of the targeted messages for each audience; method of distribution and dates of distribution; methods used to evaluate the program; and any changes to the program.*
- *Description of the activities used to promote public participation including documentation of compliance with state public notice regulations.*
- *Description of the activities related to implementation of the IDDE program including: status of the map; status and results of the illicit discharge potential ranking and assessment; identification of problem catchments; status of all protocols described in part 2.3.4.(program responsibilities and systematic procedure); number and identifier of catchments evaluated; number and identifier of outfalls screened; number of illicit discharges located; number of illicit discharges removed; gallons of flow removed; identification of tracking indicators and measures of progress based on those indicators; and employee training.*
- *Evaluation of the construction runoff management including number of project plans reviewed; number of inspections; and number of enforcement actions.*
- *Evaluation of stormwater management for new development and redevelopment including status of ordinance development (2.3.6.a.ii.), review and status of the street design assessment (2.3.6.b.), assessments to barriers to green infrastructure (2.3.6.c), and retrofit inventory status (2.3.6.d.)*
- *Status of the O&M Programs required by part 2.3.7.a.*
- *Status of SWPPP required by part 2.3.7.b. including inspection results.*
- *Any additional reporting requirements in part 3.0.*

v. All outfall screening and monitoring data collected by or on behalf of the permittee during the reporting period and cumulative for the permit term, including but not limited to all data collected pursuant to part 2.3.4. The permittee shall also provide a description of any additional monitoring data received by the permittee during the reporting period.

vi. Description of activities for the next reporting cycle.

vii. Description of any changes in identified BMPs or measurable goals.

viii. Description of activities undertaken by any entity contracted for achieving any measurable goal or implementing any control measure.

5.4 SWMP Modifications

Per Section 4.1 of the 2016 General Permit, the City shall complete the following tasks:

a. *The permittee shall annually self-evaluate its compliance with the terms and conditions of this permit and submit each self-evaluation in the Annual Report. The permittee shall also maintain the annual evaluation documentation as part of the SWMP.*

b. *The permittee shall evaluate the appropriateness of the selected BMPs in achieving the objectives of each control measure and the defined measurable goals. Where a BMP is found to be ineffective the permittee shall change BMPs in accordance with the provisions below. In addition, permittees may augment or change BMPs at any time following the provisions below:*

    - *Changes adding (but not subtracting or replacing) components or controls may be made at any time.*
    - *Changes replacing an ineffective or infeasible BMP specifically identified in the SWMP with an alternative BMP may be made as long as the basis for the changes is documented in the SWMP by, at a minimum:*
        - *An analysis of why the BMP is ineffective or infeasible;*
        - *Expectations on the effectiveness of the replacement BMP; and*
        - *An analysis of why the replacement BMP is expected to achieve the defined goals of the BMP to be replaced.*

    The permittee shall indicate BMP modifications along with a brief explanation of the modification in each Annual Report.

c. *EPA or MassDEP may require the permittee to add, modify, repair, replace or change BMPs or other measures described in the annual reports as needed:*
    - *To address impacts to receiving water quality caused or contributed to by discharges from the MS4; or*
    - *To satisfy conditions of this permit*

    Any changes requested by EPA or MassDEP will be in writing and will set forth the schedule for the permittee to develop the changes and will offer the permittee the opportunity to propose alternative program changes to meet the objective of the requested modification.

The City may update or revise the SWMP as needed as the City's activities are modified, changed, or updated to meet permit conditions during the permit term. If it is necessary to modify or update the SWMP, the City should follow this procedure to formalize the changes:

- Keep a log with a description of the modification, the date, and the name and signature of the person making it; and
- Re-sign and date the certification statement in Section 6 of this SWMP.

A SWMP amendment log and additional certification statements are located in Appendix J.

Section 6
SWMP 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 gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Name: Thomas P. Koch Title: Mayor

Signature:  Date: 6/25/19

The Mayor of Quincy may decide to delegate authority to sign and certify certain documents prepared under the Small MS4 General Permit. If so, a letter of authorization will be included in Appendix J.

Appendix A

Notice of Intent, System Map and
Authorization to Discharge Letter from EPA

Notice of Intent (NOI) for coverage under Small MS4 General Permit

Part I: General Conditions

General Information

Name of Municipality or Organization: City of Quincy

State: MA

EPA NPDES Permit Number (if applicable): MAR041081

Primary MS4 Program Manager Contact Information

Name: Paul Costello, P.E .

Title: City Engineer

Street Address Line 1: 55 Sea Street

Street Address Line 2:

City: Quincy

State: MA

Zip Code: 02169

Email: pcostello@quincyma.gov

Phone Number: (617) 367-1937

Fax Number: (617) 376-1946

Other Information

Stormwater Management Program (SWMP) Location (web address or physical location, if already completed): Final SWMP will be available at the Engineering Dept., Public Works Building, 55 Sea Street, Quincy, MA 02169

Eligibility Determination

Endangered Species Act (ESA) Determination Complete? Yes

Eligibility Criteria (check all that apply): ☐ A ☐ B ☒ C

National Historic Preservation Act (NHPA) Determination Complete? Yes

Eligibility Criteria (check all that apply): ☒ A ☐ B ☐ C

☑ Check the box if your municipality or organization was covered under the 2003 MS4 General Permit

MS4 Infrastructure (if covered under the 2003 permit)

Estimated Percent of Outfall Map Complete? *(Part II, III, IV or V, Subpart B.3.(a.) of 2003 permit)*: 100%

If 100% of 2003 requirements not met, enter an estimated date of completion (MM/DD/YY):

Web address where MS4 map is published:

If outfall map is unavailable on the internet an electronic or paper copy of the outfall map must be included with NOI submission (see section V for submission options)

See attached map

Regulatory Authorities (if covered under the 2003 permit)

Illicit Discharge Detection and Elimination (IDDE) Authority Adopted? *(Part II, III, IV or V, Subpart B.3.(b.) of 2003 permit)*: Yes

Effective Date or Estimated Date of Adoption (MM/DD/YY): 2005

Construction/Erosion and Sediment Control (ESC) Authority Adopted? *(Part II,III,IV or V, Subpart B.4.(a.) of 2003 permit)*: Yes

Effective Date or Estimated Date of Adoption (MM/DD/YY): Updated 2015

Post- Construction Stormwater Management Adopted? *(Part II, III, IV or V, Subpart B.5.(a.) of 2003 permit)*: Yes

Effective Date or Estimated Date of Adoption (MM/DD/YY): Updated 2015

Notice of Intent (NOI) for coverage under Small MS4 General Permit

Part II: Summary of Receiving Waters

Please list the waterbody segments to which your MS4 discharges. For each waterbody segment, please report the number of outfalls discharging into it and, if applicable, any impairments.

Massachusetts list of impaired waters: *Massachusetts 2014 List of Impaired Waters-* http://www.mass.gov/eea/docs/dep/water/resources/07v5/14list2.pdf

Check off relevant pollutants for discharges to impaired waterbodies (see above 303(d) lists) without an approved TMDL in accordance with part 2.2.2.a of the permit. List any other pollutants in the last column, if applicable.

Waterbody segment that receives flow from the MS4	Number of outfalls into receiving water segment	Chloride	Chlorophyll-a	Dissolved Oxygen/ DO Saturation	Nitrogen	Oil & Grease/ PAH	Phosphorus	Solids/ TSS/ Turbidity	E. coli	Enterococcus	Other pollutant(s) causing impairments
Blacks Creek	22	☐	☐	☐	☐	☐	☐	☐	☐	☐	
Wetland/Tributary to Blacks Creek	28	☐	☐	☐	☐	☐	☐	☐	☐	☐	
Broad Meadow Marsh	1	☐	☐	☐	☐	☐	☐	☐	☐	☐	
Dorchester Bay MA70-03	10	☐	☐	☐	☐	☐	☐	☒	☐	☒	Fecal Coliform, PCB in Fish Tissue, Other
Furnace Brook MA74-10	60	☐	☐	☒	☐	☐	☐	☐	☐	☐	
Wetland/Tributary to Furnace Brook MA74-10	1	☐	☐	☒	☐	☐	☐	☐	☐	☐	
Hingham Bay MA70-06	7	☐	☐	☐	☐	☐	☐	☐	☐	☐	Fecal Coliform, PCB in Fish Tissue, Other
Interconnection with Braintree	2	☐	☐	☐	☐	☐	☐	☐	☐	☐	
Isolated Wetland off of Curtis Street	1	☐	☐	☐	☐	☐	☐	☐	☐	☐	
Isolated Wetland off of Hobart Street	5	☐	☐	☐	☐	☐	☐	☐	☐	☐	
Neponset River MA73-04*	6	☐	☐	☒	☐	☐	☐	☒	☐	☒	Debris/Floatables/Trash, Fecal Coliform, PCB in Fish Tissue, Other
Wetland/Tributary to Neponset River MA73-04	11	☐	☐	☒	☐	☐	☐	☒	☐	☒	Debris/Floatables/Trash, Fecal Coliform, PCB in Fish Tissue, Other
Quincy Bay MA70-04	20	☐	☐	☐	☐	☐	☐	☐	☐	☒	Fecal Coliform, PCB in Fish Tissue, Other
Wetland/Tributary to Quincy Bay MA70-04	2	☐	☐	☐	☐	☐	☐	☐	☐	☒	Fecal Coliform, PCB in Fish Tissue, Other
Quincy Bay MA70-05	28	☐	☐	☐	☐	☐	☐	☐	☐	☒	Fecal Coliform, PCB in Fish Tissue, Other
Wetland/Tributary to Quincy Bay MA70-05	9	☐	☐	☐	☐	☐	☐	☐	☐	☒	Fecal Coliform, PCB in Fish Tissue, Other
Town Brook MA74-09	25	☐	☐	☐	☐	☐	☐	☐	☐	☐	Fecal Coliform, Aquatic Macroinvertebrate Bioassessments, Physical Substrate habitat alterations, Other flow regime alterations
Wetland/Tributary to Town Brook MA74-09	2	☐	☐	☐	☐	☐	☐	☐	☐	☐	Fecal Coliform, Aquatic Macroinvertebrate Bioassessments, Physical Substrate habitat alterations, Other flow regime alterations

Town River Bay MA74-15	21	☐	☐	☒	☐	☐	☐	☐	☐	☐	Fecal Coliform, PCB in Fish Tissue, Other
Unnamed Pond off of Marginal Road	3	☐	☐	☐	☐	☐	☐	☐	☐	☐	
Weymouth Fore River MA74-14	19	☐	☐	☐	☐	☐	☐	☐	☐	☐	Fecal Coliform, PCB in Fish Tissue, Other
Wetland/Tributary to Weymouth Fore River MA74-14	25	☐	☐	☐	☐	☐	☐	☐	☐	☐	Fecal Coliform, PCB in Fish Tissue, Other
Outside Receiving	36	☐	☐	☐	☐	☐	☐	☐	☐	☐	
Total Number of Outfalls	344	☐	☐	☐	☐	☐	☐	☐	☐	☐	
		☐	☐	☐	☐	☐	☐	☐	☐	☐	
		☐	☐	☐	☐	☐	☐	☐	☐	☐	
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Click to lengthen table

*Neponset River MA73-04 includes two outfalls that discharge to Sagamore Creek (which is not listed seperately in the 2014 303(d) list).

Part III: Stormwater Management Program Summary

Identify the Best Management Practices (BMPs) that will be employed to address each of the six Minimum Control Measures (MCMs). For municipalities/organizations whose MS4 discharges into a receiving water with an approved Total Maximum Daily Load (TMDL) and applicable waste load allocation (WLA), identify any additional BMPs employed to specifically support the achievement of the WLA in the TMDL section at the end of Part III.

For each MCM, list each existing or proposed BMP by category and provide a brief description, responsible parties/departments, measurable goals and the year the BMP will be employed (public education and outreach BMPs also require a target audience).

MCM 1: Public Education and Outreach

BMP ID	BMP Media/Category	BMP Description	Targeted Audience	Responsible Department/ Parties	Measurable Goal	Beginning Year of BMP Implementation
1A	Outreach Message	Mailing, website, event, school program, press coverage and/or other means	Residents	DPW working with Neponset Stormwater Partnership	Raise awareness and modify behaviors to reduce pollutant loading	FY22/PY4
1B	Outreach Message	Mailing, website, event, school program, press coverage and/or other means	Businesses, Institutions, and Commercial Facilities	DPW working with Neponset Stormwater Partnership	Raise awareness and modify behaviors to reduce pollutant loading	FY22/PY4
1C	Outreach Message	Mailing, website, event, school program, press coverage and/or other means	Developers (Construction)	DPW working with Neponset Stormwater Partnership	Raise awareness and modify behaviors to reduce pollutant loading	FY22/PY4
1D	Outreach Message	Mailing, website, event, school program, press coverage and/or other means	Industrial Facilities	DPW working with Neponset Stormwater Partnership	Raise awareness and modify behaviors to reduce pollutant loading	FY22/PY4
1E	Outreach Message	Mailing, website, event, school program, press coverage and/or other means	Residents	DPW working with Neponset Stormwater Partnership	Raise awareness and modify behaviors to reduce pollutant loading	FY23/PY5

BMP ID	BMP Media/Category	BMP Description	Targeted Audience	Responsible Department/ Parties	Measurable Goal	Beginning Year of BMP Implementation
1F	Outreach Message	Mailing, website, event, school program, press coverage and/or other means	Businesses, Institutions, and Commercial Facilities	DPW working with Neponset Stormwater Partnership	Raise awareness and modify behaviors to reduce pollutant loading	FY23/PY5
1G	Outreach Message	Mailing, website, event, school program, press coverage and/or other means	Developers (Construction)	DPW working with Neponset Stormwater Partnership	Raise awareness and modify behaviors to reduce pollutant loading	FY23/PY5
1H	Outreach Message	Mailing, website, event, school program, press coverage and/or other means	Industrial Facilities	DPW working with Neponset Stormwater Partnership	Raise awareness and modify behaviors to reduce pollutant loading	FY23/PY5

Part III: Stormwater Management Program Summary

MCM 2: Public Involvement and Participation

BMP ID	BMP Category	BMP Description	Responsible Department/ Parties	Measurable Goal	Beginning Year of BMP Implementation
2A	Public Review	SWMP Review (Plan and reports available on web and discussed at public meetings)	DPW	Annually provide the public with an opportunity to participate in the review and implementation of the SWMP	FY19/PY1
2B	Public Participation	Annual event or activity such as hazardous waste day, water testing, catch basin stenciling or river cleanup	DPW working with Neponset Stormwater Partnership	Citizens will learn about and help implement MS4 program through a hands on activity annually	FY19/PY1

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Part III: Stormwater Management Program Summary

MCM 3: Illicit Discharge Detection and Elimination (IDDE)

BMP ID	BMP Category	BMP Description	Responsible Department/ Parties	Measurable Goal	Beginning Year of BMP Implementation
3A	IDDE Ordinance	Complete. Continue to enforce and update if necessary	DPW	Track illicit discharges identified and removed	FY19/PY1
3B	SSO Inventory	Continue to update SSO inventory in accordance with permit conditions	DPW	Complete within 1 year of effective date of permit. Track number of SSOs identified and removed annually	FY19/PY1
3C	Storm sewer system map	Update map during IDDE program implementation	DPW	Update map within 2 years of effective date of permit and complete full system map 10 years after effective date of permit	FY19/PY1
3D	Written IDDE program	Update written IDDE plan	DPW	Complete within 1 year of the effective date of permit and update as required	FY19/PY1
3E-1	Assessment and Priority Ranking of Outfalls & Interconnections	Update Outfall/Interconnection Inventory and Initial Ranking as part of BMP 3D	DPW	Complete within 1 year of the effective date of permit and update as necessary	FY19/PY1
3E-2	Assessment and Priority Ranking of Outfalls & Interconnections	Dry Weather Outfall Screening & Sampling in accordance with IDDE Plan and permit conditions	DPW	Complete 3 years after effective date of permit. Track number of illicit discharges identified & volume removed. Summarize screening/sampling results	FY19/PY1
3E-3	Assessment and Priority Ranking of Outfalls & Interconnections	Continue Catchment Investigations according to program and permit conditions	DPW	Complete 10 years after effective date of permit. Track number and percentage of MS4 catchments evaluated. Track number of illicit discharges identified & volume removed. Summarize screening/sampling results	FY20/PY2

BMP ID	BMP Category	BMP Description	Responsible Department/ Parties	Measurable Goal	Beginning Year of BMP Implementation
3F	Employee Training	Train employees on IDDE implementation	DPW	Train annually. Track employees trained, training topic, date/time and materials presented	FY19/PY1

Part III: Stormwater Management Program Summary

MCM 4: Construction Site Stormwater Runoff Control

BMP ID	BMP Category	BMP Description	Responsible Department/ Parties	Measurable Goal	Beginning Year of BMP Implementation
4A	Construction Ordinance and Regulations	Modify local ordinance and regulations, if necessary, to require construction operators to implement a sediment and erosion control program and control waste, including but not limited to, discarded building materials, concrete truck wash out, chemicals, litter, and sanitary wastes.	DPW/ Conservation Commission/ Planning/ Building Department	Review current procedures and modify if necessary within 1 year of permit effective date	FY19/PY1
4B	Construction Policy and Procedures	Develop and implement written procedures for site inspections and enforcement procedures per Part 2.3.5. and begin implementation.	DPW/ Conservation Commission/ Planning/ Building Department	Review current procedures and modify if necessary within 1 year of permit effective date	FY19/PY1

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Part III: Stormwater Management Program Summary

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

BMP ID	BMP Category	BMP Description	Responsible Department/ Parties	Measurable Goal	Beginning Year of BMP Implementation
5A	Post-Construction Ordinance and Regulations	Modify local ordinances and develop regulations to require submissions of as-built drawings and ensure long term operation and maintenance will be a part of the SWMP and ensure stormwater controls or management practices for new development and redevelopment meet the requirements of the permit.	DPW/ Conservation Commission/ Planning/ Building Department	Modify existing ordinances and/or develop regulations within 2 years of permit effective date	FY20/PY2
5B	Target properties to retrofit /reduce impervious areas	Identify at least 5 permittee-owned properties that could be modified or retrofitted with BMPs to reduce impervious areas and update annually	DPW working with Neponset Stormwater Partnership	Complete 4 years after effective date of permit and report annually on retrofitted properties	FY21/PY3
5C	Allow green infrastructure	Develop a report assessing existing local regulations to determine the feasibility of making green infrastructure practices allowable when appropriate site conditions exist	DPW working with Neponset Stormwater Partnership	Complete 4 years after effective date of permit and implement recommendations of report	FY22/PY4
5D	Street design and parking lot guidelines	Develop a report assessing requirements that affect the creation of impervious cover. The assessment will help determine if changes to design standards for streets and parking lots can be modified to support low impact design options.	DPW working with Neponset Stormwater Partnership	Complete 4 years after effective date of permit and implement recommendations of report	FY22/PY4

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Part III: Stormwater Management Program Summary

MCM 6: Municipal Good Housekeeping and Pollution Prevention

BMP ID	BMP Category	BMP Description	Responsible Department / Parties	Additional Description/Measurable Goal	Beginning Year of BMP Implementation
6A	Operation & Maintenance Program	Inventory and create O&M procedures for all permittee-owned parks and open spaces, buildings and facilities (including their storm drains), and vehicles and equipment	DPW	Complete 2 years after permit effective date, implement in following years	FY20/PY2
6B	Operation & Maintenance Program	Establish and implement program for repair and rehabilitation of MS4 infrastructure	DPW	Complete 2 years after permit effective date, implement in following years	FY20/PY2
6C	Stormwater Pollution Prevention Plans (SWPPP)	Update SWPPP for DPW facility	DPW	Complete SWPPPs within 2 year of permit effective date, implement in following years	FY20/PY2
6D-1	Operation & Maintenance Program	Implement procedures to optimize catch basin cleaning developed under BMP 6B	DPW	Track frequency and material quantity of catch basin cleaning in the city. In first Annual Report and in SWMP, document plan for optimizing catch basin cleaning	FY19/PY1
6D-2	Operation & Maintenance Program	Implement procedures for street and parking lot sweeping developed under BMP 6B	DPW	Annually track number of miles cleaned or the volume or mass of material removed	FY19/PY1
6D-3	Operation & Maintenance Program	Implement procedures for use and storage of deicing materials developed under BMP 6B	DPW	Implement program for winter road maintenance throughout permit term	FY19/PY1
6D-4	Operation & Maintenance Program	Implement procedures to inspect and maintain City-owned structural stormwater BMPs	DPW	Develop an inventory of City-owned BMPs within 2 years of permit effective date. Report on inspection and maintenance conducted annually.	FY19/PY1

Notice of Intent (NOI) for coverage under Small MS4 General Permit

Part III: Stormwater Management Program Summary (continued)

Actions for Meeting Total Maximum Daily Load (TMDL) Requirements

Use the drop-down menus to select the applicable TMDL, action description to meet the TMDL requirements, and the responsible department/parties. If no options are applicable, or more than one, **enter your own text to override drop-down menus.**

Applicable TMDL	**Action Description**	**Responsible Department/Parties** (enter your own text to override the drop down menu)
Total Maximum Daily Loads of Bacteria for Neponset River Basin	Adhere to the requirements of Part A.III of Appendix F	DPW

Notice of Intent (NOI) for coverage under Small MS4 General Permit

Part III: Stormwater Management Program Summary (continued)

Actions for Meeting Requirements Related to Water Quality Limited Waters

Use the drop-down menus to select the pollutant causing the water quality limitation and enter the waterbody ID(s) experiencing excursions above water quality standards for that pollutant. Choose the action description from the dropdown menu and indicate the responsible party. If no options are applicable, or more than one, **enter your own text to override drop-down menus.**

Pollutant	Waterbody ID(s)	Action Description	Responsible Department/Parties (enter your own text to override the drop down menu)
Total Suspended Solids	MA70-03 (Dorchester Bay)	Adhere to requirements of part V of Appendix H	DPW
Fecal Coliform	MA70-03 (Dorchester Bay)	Adhere to requirements of part III of Appendix H	DPW
Fecal Coliform	MA70-06 (Hingham Bay)	Adhere to requirements of part III of Appendix H	DPW
Fecal Coliform	MA73-04 (Neponset River)	Adhere to requirements of part III of Appendix H	DPW
Turbidity	MA73-04 (Neponset River)	Adhere to requirements of part V of Appendix H	DPW
Fecal Coliform	MA70-04 (Quincy Bay)	Adhere to requirements of part III of Appendix H	DPW
Fecal Coliform	MA70-05 (Quincy Bay)	Adhere to requirements of part III of Appendix H	DPW
Fecal Coliform	MA74-09 (Town Brook)	Adhere to requirements of part III of Appendix H	DPW
Fecal Coliform	MA74-15 (Town River Bay)	Adhere to requirements of part III of Appendix H	DPW
Fecal Coliform	MA74-14 (Weymouth Fore River)	Adhere to requirements of part III of Appendix H	DPW

Part IV: Notes and additional information

Use the space below to indicate the part(s) of 2.2.1and 2.2.2 that you have identified as not applicable to your MS4 because you do not discharge to the impaired water body or a tributary to an impaired water body due to nitrogen or phosphorus. Provide all supporting documentation below or attach additional documents if necessary. Also, provide any additional information about your MS4 program below.

1) Where a "beginning year" is requested, we have listed the applicable fiscal year. Fiscal years run from July 1 to June 30 and correspond to permit years (i.e., permit year 1 is FY'19)

2) BMPs identified in the 2003 General Permit NOI have been modified or replaced over the permit term due to staff changes and Stormwater Program modifications. The intent of the 2003 BMPs are being met under the proposed 2016 General Permit BMPs included in the Stormwater Management Plan. The Plan will describe how the BMPs under the 2003 permit fit into the new program, particularly where BMPs and/or measurable goals that are outdated or no longer appropriate have been replaced or updated.

3) The National Endangered Species Eligibility Determination screening process has been completed and the City of Quincy meets Criterion C. The City's stormwater discharges and discharge related activities will have no affect on listed species or critical habitat. The City will consult with U.S. Fish and Wildlife as needed during the permit term.

4) The National Historic Preservation Act Eligibility Determination screening process has been completed and the City of Quincy meets Criterion A. The City's stormwater discharges do not have the potential to cause effects on historic properties. The City will consult with the State Historic Preservation Officer as needed during the permit term.

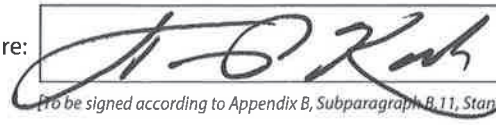
5) The outfalls and associated receiving waters in Part II are based on mapping as of September 2018 and are subject to change during implementation of the Stormwater Management Program as newly constructed outfalls are added to the map and inventory; locations are adjusted, or outfalls are removed if they are determined to be non-municipally owned/operated or reclassified as a BMP inlet, culvert or other structure, Changes to the outfall inventory and mapping will be formalized in Annual Reports to EPA.

6) The City of Quincy is listed in the General Permit as a municipality where MS4s discharge to waterbodies, or their tributaries, that are impaired due to phosphorus. No waterbodies or tributaries impaired due to phosphorus which receive MS4 discharges from the City of Quincy have been identified.

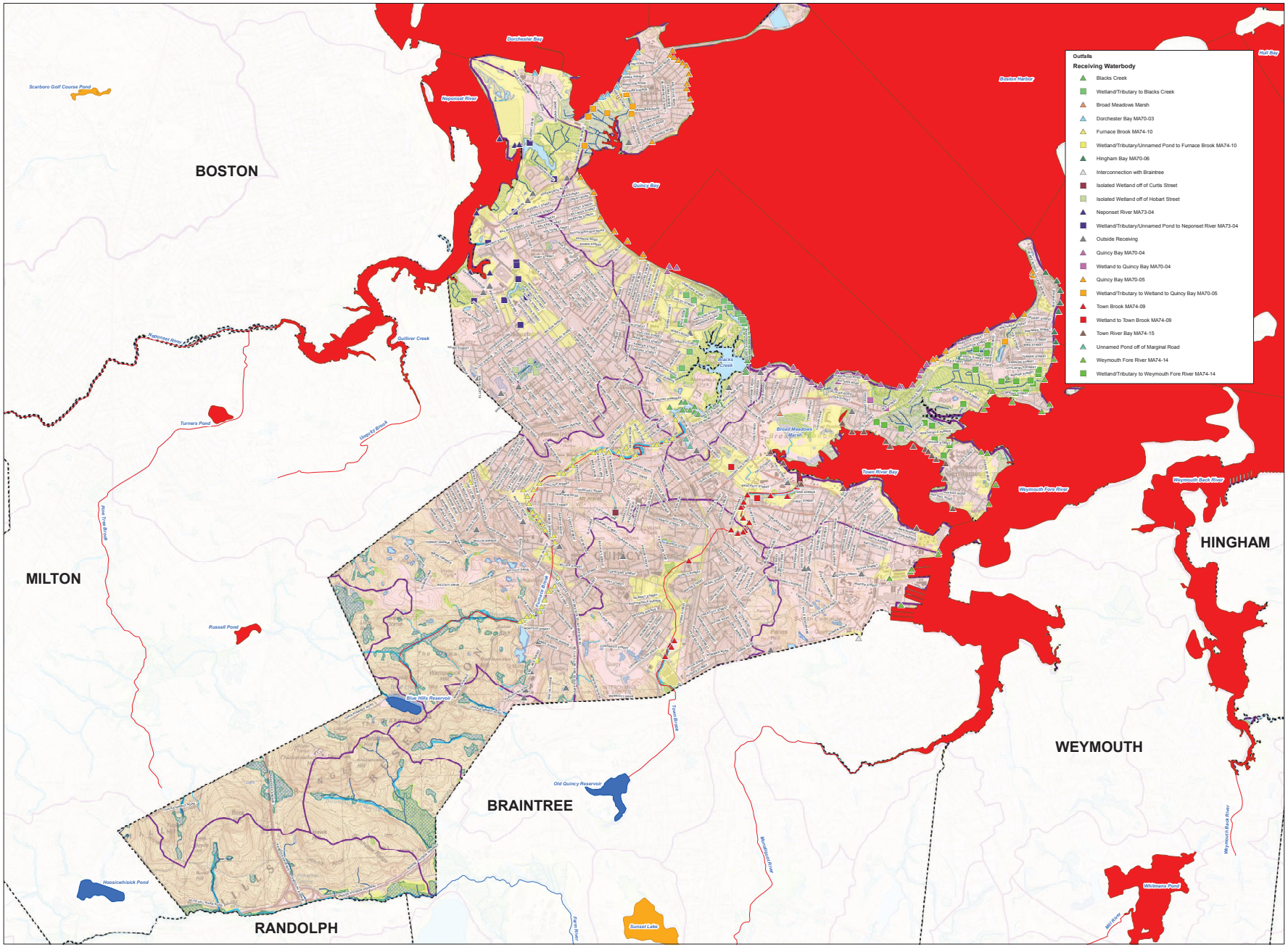
Detailed explanations of the above notes will be included in the City's Stormwater Management Plan.

Part V: 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 P. Koch	Title:	Mayor
Signature:	 *[To be signed according to Appendix B, Subparagraph B.11, Standard Conditions]*	Date:	Sept. 25, 2018

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



Outfalls and Receiving Waterbodies

LEGEND

- Major Drainage Basin
- Subbasin
- Urban Area 2000
- Urban Area 2010 Census

MassDEP Waterbodies

- Public Surface Water Supply (PSWS)
- Water Bodies
- MassDEP Inland Wetlands
- MassDEP Coastal Wetlands
- Stream/Intermittent Stream

National Wetlands Inventory Wetland Areas

- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Riverine
- NWI Rivers and Streams

Flood Zone Designations

- 100 Year Flood Zone
- Town Boundary

Water Body Segments - Rivers

Category

- 2 - Attaining some uses; other uses not assessed
- 3 - No uses assessed
- 4A -Impaired - TMDL is completed
- 4C - Impairment not caused by a pollutant
- 5 - Impaired - TMDL required

Water Body Segments - Lakes, Estuaries

Category

- 2 - Attaining some uses; other uses not assessed
- 3 - No uses assessed
- 4A -Impaired - TMDL is completed
- 4C - Impairment not caused by a pollutant
- 5 - Impaired - TMDL required

LOCUS MAP

0 3,500
Feet

1:21,000

NOTES

1. Based on USGS Topo Map (1987, 1985, and 1984)
2. MassGIS: 2014 Integrated List Data (2016), Major Drainage Basins (2003), Subbasins (2007), Community Boundary (2017), National Wetlands Inventory (2007), FEMA National Flood Hazard (2017), MassDOT Major Roads (2014)
3. City of Quincy: Outfalls

Notice of Intent
Quincy, Massachusetts

September 2018

Tighe&Bond
Engineers | Environmental Specialists

G:\GIS\MA\Quincy\avproj\NOI\OutfallReceivingWaterMap_24x36.mxd Date Saved: 9/18/2018 User: Ngkoncki

W-3993

Emily J. Scerbo

From: Paul Costello <pcostello@mail.quincyma.gov>
Sent: Tuesday, February 19, 2019 4:20 PM
To: Vuto, Michelle
Cc: Ian Cooke; David A. Murphy; Emily J. Scerbo; Tedder, Newton
Subject: Re: DRAFT Statement Quincy NOI

[Caution - External Sender]

Michelle,

In response to you recent request, please amend the City of Quincy's Notice of Intent, Part III. In accordance with Part 2.2.2.a. of the General Permit, the City of Quincy will meet the requirements of **Part I of Appendix H** with respect to control of **Nitrogen** where direct discharges from the MS4 enter receiving waters within the Neponset River Estuary watershed. Quincy was listed under Part 2.2.2.b.i.1 in error. **Neponset River Segment MA73-04** is located within the Neponset River Estuary, and therefore nitrogen should be considered the limiting nutrient instead of phosphorus.

Thank you for your understanding of this matter and should you need anything further please feel free to contact me or Emily Scerbo at Tighe and Bond.

Paul Costello
City Engineer
City of Quincy
55 Sea Street
Quincy, MA 02169
617-376-1937 (office)
857-939-9079 (mobile)

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 1
5 POST OFFICE SQUARE, SUITE 100
BOSTON, MA 02109-3912

VIA EMAIL

April 5, 2019

Thomas P. Koch
Mayor

And;

Paul Costello, P.E.
City Engineer
55 Sea Street
Quincy, MA. 02169
pcostello@quincyma.gov

Re: National Pollutant Discharge Elimination System Permit ID #: MAR041081, City of Quincy

Dear Paul Costello, P.E.:

The 2016 NPDES General Permit for Stormwater Discharges from Small Municipal Separate Storm Sewer Systems in Massachusetts (MS4 General Permit) is a jointly issued EPA-MassDEP permit. Your Notice of Intent (NOI) for coverage under this MS4 General Permit has been reviewed by EPA and appears to be complete. You are hereby granted authorization by EPA and MassDEP to discharge stormwater from your MS4 in accordance with the applicable terms and conditions of the MS4 General Permit, including all relevant and applicable Appendices. This authorization to discharge expires at midnight on **June 30, 2022.**

For those permittees that certified Endangered Species Act eligibility under Criterion C in their NOI, this authorization letter also serves as EPA's concurrence with your determination that your discharges will have no effect on the listed species present in your action area, based on the information provided in your NOI.

As a reminder, your first annual report is due by **September 30, 2019** for the reporting period from May 1, 2018 through June 30, 2019.

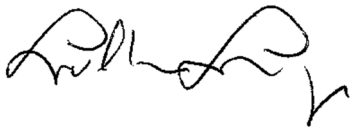
Information about the permit and available resources can be found on our website: https://www.epa.gov/npdes-permits/massachusetts-small-ms4-general-permit. Should you have

any questions regarding this permit please contact Newton Tedder at tedder.newton@epa.gov or (617) 918-1038.

Sincerely,

Thelma Murphy, Chief
Stormwater and Construction Permits Section
Office of Ecosystem Protection
United States Environmental Protection Agency, Region 1

and;



Lealdon Langley, Director
Wetlands and Wastewater Program
Bureau of Water Resources
Massachusetts Department of Environmental Protection

Appendix B

Stormwater Management Program Team

Stormwater Management Program Team

SWMP Team Coordinator

Name	Paul Costello	Title	City Engineer
Department	Engineering		
Phone Number	617-376-1950	Email	pcostello@quincyma.gov
Responsibilities	Administer Stormwater Management Program and oversee Engineering & DPW tasks including Public Education, Public Participation, the IDDE Program and Good Housekeeping; coordinate among departments and with the Neponset River Watershed Association to meet permit requirements.		

SWMP Team

Name	Fred Kapinos	Title	GIS Administrator
Department	Engineering		
Phone Number	617-745-7114	Email	fkapinos@quincyma.gov
Responsibilities	Coordinate stormwater related GIS tasks; update stormwater system mapping as needed and keep track of inspections and outfall sampling.		

Name	Cheung Tsang	Title	Senior Civil Engineer
Department	Engineering		
Phone Number	617-376-1950	Email	ctsang@quincyma.gov
Responsibilities	Assist with stormwater tasks within the Engineering Department, including the IDDE and Good Housekeeping Programs.		

Name	Mark Vialpando	Title	General Foreman
Department	Water & Sewer		
Phone Number		Email	mvialpando@quincyma.gov
Responsibilities	Manage maintenance of the stormwater system and scheduling of stormwater related field work including dry weather and wet weather outfall inspections.		

Name	Peter Hoyt	Title	Senior Engineer
Department	Water & Sewer		
Phone Number	617-376-1912	Email	phoyt@quincyma.gov
Responsibilities	Manage maintenance of the stormwater system and scheduling of stormwater related field work including dry weather and wet weather outfall inspections.		

Name	Lenny Burnham	Title	DPW Deputy Superintendent
Department	Public Works		
Phone Number	781-897-5980	Email	lburnham@cityofwoburn.com
Responsibilities	Support DPW Superintendent in administering Stormwater Management Program and in executing DPW stormwater tasks.		

Name		Title	
Department	Conservation Commission		
Phone Number		Email	
Responsibilities	Assist the DPW in modifying local construction and post-construction stormwater ordinances and regulations and in developing site inspection policies and procedures.		

Name	Richard Meade	Title	Chairman of Planning Board
Department	Planning Board		
Phone Number		Email	
Responsibilities	Assist the DPW in modifying local construction and post-construction stormwater ordinances and regulations and in developing site inspection policies and procedures.		

Name	James P. Anderson	Title	Chief Building Inspector
Department	Building Department		
Phone Number	617-376-1464	Email	janderson@quincyma.gov
Responsibilities	Assist the DPW in modifying local construction and post-construction stormwater ordinances and regulations and in developing site inspection policies and procedures.		

Name		Title	
Department			
Phone Number		Email	
Responsibilities			

Name		Title	
Department			
Phone Number		Email	
Responsibilities			

Name		Title	
Department			
Phone Number		Email	
Responsibilities			

Appendix C

Summary of 2003 and 2016 MS4 General Permit BMPs

Appendix C
Summary of 2003 and 2016 MS4 General Permit BMPs

BMPs identified in the 2003 General Permit NOI have evolved over the permit term due to staff changes and Stormwater Program modifications. The intent of the 2003 BMPs are being met under the following proposed 2016 General Permit BMPs (BMPS current as of 2017 Annual Report):

PE-1	Flyer Distribution	Now under BMPs 1A-D
PE-2	Informational Mailings	Now under BMPs 1A-D
PE-3	Community Group Meetings	Now under BMPs 1A-D
PE-4	Public Service Announcements	Now under BMPs 1A-D
PE-5	Information Distribution	Now under BMPs 1A-D
PP-1	Storm Drain Stenciling	Now under BMP 2B
PP-2	Hazardous Waste Day	Now under BMP 2B
PP-3	Volunteer Monitoring Efforts	Now under BMP 2A and 2B
PP-4	Stormwater Monitoring Program (SWMP) Volunteer Review	Now under BMP 2A and 2C
ID-1	Visual Inspection	Now under BMP 3D
ID-2	Laboratory Analysis	Now under BMP 3D
ID-3	Identify and Map All Outfalls	Now under BMP 3B
ID-4	Remove Source of Contamination	Now under BMP 3D
ID-5	Develop and Enact Bylaw	Now under BMP 3A
CS-1	Review Current Bylaw and Develop New Bylaw if necessary	Now under BMP 4A
CS-2	Provide Pre-Construction Information	Now under BMPs 4A-4B
CS-3	Site Inspections	Now under BMP 4B
PC-1	Visual Monitoring	Now under BMP 5A
PC-2	Post-Construction Bylaw	Now under BMP 5A
GH-1	Employee Training	Now under BMP 3E
GH-2	Operations and Maintenance Schedule	Now under BMP 6A-6B
GH-3	Operations and Maintenance Implementation	Now under BMP 6A-6B
GH-4	Record Keeping	Now under BMP 6A
GH-5	Proper Storage of Materials	Now under BMP 6A-6D
GH-6	Catch Basin Cleanout	Now under BMP 6B and 6D
GH-7	Storm Sewer Maintenance and Improvements	Now under BMP 6B and 6D

Appendix D

Endangered Species Act Eligibility Criteria Documentation

Endangered Species Act Eligibility Certification

TO: City of Quincy Stormwater Management Program Files

FROM: Tighe & Bond

COPY: Paul Costello, City Engineer

DATE: August 29, 2018

Tighe & Bond has completed the National Endangered Species Eligibility Determination screening process in accordance with Part 1.9.1 and Appendix C of U.S. EPA's National Pollutant Discharge Elimination System (NPDES) General Permits for Stormwater Discharges from Small Municipal Separate Storm Sewer Systems (MS4s) in Massachusetts (see Attachment A of this memorandum), effective July 1, 2018, and determined that the **City of Quincy** meets **Criterion C**, where informal consultation with U.S. Fish and Wildlife Service (USFWS) resulted in a finding that the stormwater discharges and discharge related activities will have "no affect" on listed species or critical habitat.

Tighe & Bond followed EPA's screening process required by the 2016 Small MS4 General Permit as follows:

Tighe & Bond went to the USFWS Information for Planning and Consultation (IPaC) website[1] and created an IPaC Trust Resources Report, included in Attachment B to this memorandum. This Report lists the following species that may occur or could potentially be affected by activities in the City:

- Northern Long-eared Bat.

This report documents that there are no critical habitats in Quincy.

Tighe & Bond then went to the USFWS New England Field Office website for Endangered Species Reviews/Consultations[2] and selected the Massachusetts state list[3] to review which Cities and Towns have federally-listed species. A copy of the list of Federally Listed Endangered and Threatened Species in Massachusetts is included in Attachment C to this memorandum. Based on review of this list, the Northern Long-eared Bat is listed statewide.

Tighe & Bond then reviewed Step 1 Part B of the USFWS endangered species consultation, and visited the Massachusetts Natural Heritage and Endangered Species Program (NHESP) species information and conservation website about the Northern Long-eared Bat[4]. The NHESP website included a map showing the known locations of the Northern Long-eared Bat within Massachusetts. Attachment D includes a map showing there are no roost trees or hibernating locations within Quincy. Based on the results of the NHESP website review, Tighe & Bond determined there is no potential habitat for any USFWS listed endangered species within the action area and therefore no further coordination is required with the USFWS. Attachment E provides the results of Tighe & Bond's informal consultation on behalf of the

[1] http://ecos.fws.gov/ipac/
[2] https://www.fws.gov/newengland/EndangeredSpec-Consultation_Project_Review.htm
[3] https://www.fws.gov/newengland/pdfs/MA%20species%20by%20town.pdf
[4] http://www.mass.gov/eea/agencies/dfg/dfw/natural-heritage/species-information-and-conservation/rare-mammals/northern-long-eared-bat.html

City of Quincy with USFWS "no species present" letter that states "no species are known to occur in the project area".

Step 1 – Determine if you can meet USFWS Criterion A

"USFWS Criterion A: You can certify eligibility, according to USFWS Criterion A, for coverage by this permit if, upon completing the Information, Planning, and Conservation (IPaC) online system process, you printed and saved the preliminary determination which indicated that federally listed species or designated critical habitats are not present in the action area. See Attachment 1 to Appendix C for instructions on how to use IPaC."

No, the City of Quincy's IPaC action area contains the Northern Long-eared Bat.

Step 2 – Determine if You Can Meet Eligibility USFWS Criteria B

"USFWS Criterion B: You can certify eligibility according to USFWS Criteria B for coverage by this permit if you answer "Yes" to **all** of the following questions:

1) Does your action area contain one or more of the following species: Sandplain gerardia, Small whorled Pogonia, American burying beetle, Dwarf wedgemussel, Northeastern bulrush, Piping Plover, Northern Red-bellied cooter, Bog Turtle, Roseate Tern, Puritan tiger beetle, and Northeastern beach tiger beetle?"

   No, the City of Quincy's action area does not contain any of the above species.

Step 3 – Determine if You Can Meet Eligibility USFWS Criteria C

"You can certify eligibility according to USFWS Criterion C for coverage by this permit if you answer "Yes" to both of the following questions:

1) Does your action area contain one or more of the following species: Northern Long-eared Bat, Sandplain gerardia, Small whorled Pogonia and/or American burying beetle and does not contain any following species: Dwarf wedgemussel, Northeastern bulrush, Piping Plover, Northern Red-bellied cooter, Bog Turtle, Roseate Tern, Puritan tiger beetle, and Northeastern beach tiger beetle?

   Yes, the City of Quincy's action area contains the Northern Long-eared Bat, but none of the other subsequent species.

2) Did the assessment of your discharge and discharge related activities indicate that there would be "no affect" on listed species or critical habitat and EOA provided concurrence with your determination?

   Yes, Tighe & Bond performed an informal consultation with USFWS and determined that the City's discharges and discharge related activities will have "no affect" on listed species or critical habitat (see discussion above).

3) Do you agree that if, during the course of the permit term, you plan to install a structural BMP not identified in the NOI that you will conduct an endangered species screening for the proposed site and contact the USFWS if you determine that the new activity "may affect" or is "not likely to adversely affect" listed species or critical habitat under the jurisdiction of the USFWS."

Yes, during the course of the permit term the City of Quincy agrees to conduct an endangered species screening for the proposed site and contact USFWS if they plan to install a structural BMP not identified in the NOI.

Tighe & Bond's review of all five questions under Step 3 resulted in "Yes" and thereby we determined the City of Quincy's action area meets the endangered species' eligibility requirements included in Criterion C.

J:\Q\Q0019 Quincy, MA Consultant Review Services\Q0019-022\NOI\Appendix C - ESA\Endangered Species Act Eligibility Certification_Final.docx

Attachment A

Appendix C of U.S. EPA's National Pollutant Discharge Elimination System (NPDES) General Permits for Stormwater Discharges from Small Municipal Separate Storm Sewer Systems (MS4s) in Massachusetts

APPENDIX C
ENDANGERED SPECIES GUIDANCE

A. Background

In order to meet its obligations under the Clean Water Act and the Endangered Species Act (ESA), and to promote the goals of those Acts, the Environmental Protection Agency (EPA) is seeking to ensure the activities regulated by this general permit do not adversely affect endangered and threatened species or critical habitat. Applicants applying for permit coverage must assess the impacts of their stormwater discharges and discharge-related activities on federally listed endangered and threatened species ("listed species") and designated critical habitat ("critical habitat") to ensure that those goals are met. Prior to obtaining general permit coverage, applicants must meet the ESA eligibility provisions of this permit by following the steps in this Appendix[1].

Applicants also have an independent ESA obligation to ensure that their activities do not result in any prohibited "take" of listed species[12]. The term "Take" is used in the ESA to include harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, collect, or attempt to engage in any such conduct. "Harm" is further defined to include significant habitat modification or degradation that results in death or injury to listed species by significantly impairing essential behavioral patterns including breeding, feeding, or sheltering. "Harass" is defined as intentional or negligent actions that create the likelihood of injury to listed species to such an extent as to significantly disrupt normal behavior patterns which include, but are not limited to, breeding, feeding, or sheltering. Many of the measures required in this general permit and in these instructions to protect species may also assist in ensuring that the applicant's activities do not result in a prohibited take of species in violation of section 9 of the ESA. If the applicant has plans or activities in an area where endangered and threatened species are located, they may wish to ensure that they are protected from potential take liability under ESA section 9 by obtaining an ESA section 10 permit or by requesting formal consultation under ESA section 7. Applicants that are unsure whether to pursue a section 10 permit or a section 7 consultation for takings protection should confer with the appropriate United States Fish and Wildlife Service (USFWS) office or the National Marine Fisheries Service (NMFS), (jointly the Services).

Currently, there are 20 species of concern for applicants applying for permit coverage, namely the Dwarf wedgemussel *(Alasmidonta heterodon)*, Northeastern bulrush (*Scirpus ancistrochaetus*), Sandplain gerardia *(Agalinis acuta)*, Piping Plover (*Charadrius melodus*), Roseate Tern (*Sterna dougallii*), Northern Red-bellied cooter (*Pseudemys rubriventis)*, Bog Turtle (*Glyptemys muhlenbergii*), Small whorled Pogonia (*Isotria medeoloides*), Puritan tiger beetle (*Cicindela puritana*), American burying beetle (*Nicrophorus americanus*), Northeastern beach tiger beetle (*Cicindela dorsalis*), Northern Long-eared Bat *(Myotis septentriolis)*Atlantic Sturgeon *(Acipenser oxyrinchus*), Shortnose Sturgeon *(Acipenser brevirostrum)*, North Atlantic Right Whale (*Eubalaena glacialis*) Humpback Whale *(Megaptera novaengliae)*, Fin Whale (*Balaenoptera physalus)*, Kemp's Ridley Sea Turtle *(Lepidochelys kempii)*, Loggerhead Sea Turtle *(Caretta caretta)*, Leatherback Sea Turtle *(Dermochelys coriacea)*, and the Green Turtle *(Chelonia*

[1] EPA strongly encourages applicants to begin this process at the earliest possible stage to ensure the notification requirements for general permit coverage are complete upon Notice of Intent (NOI) submission.
[2] Section 9 of the ESA prohibits any person from "taking" a listed species (e.g. harassing or harming it) unless: (1) the taking is authorized through an "incidental take statement" as part of completion of formal consultation according to ESA section 7; (2) where an incidental take permit is obtained under ESA section 10 (which requires the development of a habitat conversion plan; or (3) where otherwise authorized or exempted under the ESA. This prohibition applies to all entities including private individuals, businesses, and governments.

mydas). The Atlantic Sturgeon, Shortnose Sturgeon, North Atlantic Right Whale, Humpback Whale, Fin Whale, Loggerhead Sea Turtle, Kemp's Ridley Sea Turtle, Leatherback Sea Turtle and Green Turtle are listed under the jurisdiction of NMFS. The Dwarf wedgemussel, Northeastern bulrush, Sandplain gerardia, Piping Plover, Northern Red-bellied cooter, Bog Turtle, Small whorled Pogonia, Roseate Tern, Puritan tiger beetle, Northeastern beach tiger beetle, Northern Long-eared Bat and American burying beetle are listed under the jurisdiction of the U.S. Fish and Wildlife Service.

Any applicant seeking coverage under this general permit, must consult with the Services where appropriate. When listed species are present, permit coverage is only available if EPA determines, or the applicant determines and EPA concurs, that the discharge or discharge related activities will have "no affect" on the listed species or critical habitat, or the applicant or EPA determines that the discharge or discharge related activities are "not likely to adversely affect" listed species or critical habitat and formal or informal consultation with the Services has been concluded and results in written concurrence by the Services that the discharge is "not likely to adversely affect" an endangered or threatened species or critical habitat.

EPA may designate the applicants as non-Federal representatives for the general permit for the purpose of carrying out formal or informal consultation with the Services (See 50 CFR §402.08 and §402.13). By terms of this permit, EPA has automatically designated operators as non-Federal representatives for the purpose of conducting formal or informal consultation with the U.S. Fish and Wildlife Service. EPA has not designated operators as non-Federal representatives for the purpose of conducting formal or informal consultation with the National Marine Fisheries Service. EPA has determined that discharges from MS4s are not likely to adversely affect listed species or critical habitat under the jurisdiction of the National Marine Fisheries Service. EPA has initiated informal consultation with the National Marine Fisheries Service on behalf of all permittees and no further action is required by permittees in order to fulfill ESA requirements of this permit related to species under the jurisdiction of NMFS

B. The U.S. Fish and Wildlife Service ESA Eligibility Process

Before submitting a notice of intent (NOI) for coverage by this permit, applicants must determine whether they meet the ESA eligibility criteria by following the steps in Section B of this Appendix. Applicants that cannot meet the eligibility criteria in Section B must apply for an individual permit.

The USFWS ESA eligibility requirements of this permit relating to the Dwarf wedgemussel, Northeastern bulrush, Sandplain gerardia, Piping Plover, Northern Red-bellied cooter, Bog Turtle, Small whorled Pogonia, Roseate Tern, Puritan tiger beetle, Northeastern beach tiger beetle, Northern Long-eared Bat and American burying beetle may be satisfied by documenting that one of the following criteria has been met:

USFWS Criterion A: No endangered or threatened species or critical habitat are in proximity to the stormwater discharges or discharge related activities.

USFWS Criterion B: In the course of formal or informal consultation with the Fish and Wildlife Service, under section 7 of the ESA, the consultation resulted in either a no jeopardy opinion (formal consultation) or a written concurrence by USFWS on a finding that the stormwater discharges and

discharge related activities are "not likely to adversely affect" listed species or critical habitat (informal consultation).

USFWS Criterion C: Using the best scientific and commercial data available, the effect of the stormwater discharge and discharge related activities on listed species and critical habitat have been evaluated. Based on those evaluations, a determination is made by EPA, or by the applicant and affirmed by EPA, that the stormwater discharges and discharge related activities will have "no affect" on any federally threatened or endangered listed species or designated critical habitat under the jurisdiction of the USFWS.

1. The Steps to Determine if the USFWS ESA Eligibility Criteria Can Be Met

To determine eligibility, you must assess the potential effects of your known stormwater discharges and discharge related activities on listed species or critical habitat, PRIOR to completing and submitting a Notice of Intent (NOI). You must follow the steps outlined below and document the results of your eligibility determination.

Step 1 – Determine if you can meet USFWS Criterion A

USFWS Criterion A: You can certify eligibility, according to USFWS Criterion A, for coverage by this permit if, upon completing the Information, Planning, and Conservation (IPaC) online system process, you printed and saved the preliminary determination which indicated that federally listed species or designated critical habitats are not present in the action area. See Attachment 1 to Appendix C for instructions on how to use IPaC.

If you have met USFWS Criterion A skip to Step # 4.

If you have not met USFWS Criterion A, go to Step # 2.

Step 2 – Determine if You Can Meet Eligibility USFWS Criteria B

USFWS Criterion B: You can certify eligibility according to USFWS Criteria B for coverage by this permit if you answer "Yes" to **all** of the following questions:

1) Does your action area contain one or more of the following species: Sandplain gerardia, Small whorled Pogonia, American burying beetle, Dwarf wedgemussel, Northeastern bulrush, Piping Plover, Northern Red-bellied cooter, Bog Turtle, Roseate Tern, Puritan tiger beetle, and Northeastern beach tiger beetle?
   AND
2) Did your assessment of the discharge and discharge related activities indicate that the discharge or discharge related activities "may affect" or are "not likely to adversely affect" listed species or critical habitat?
   AND
3) Did you contact the USFWS and did the formal or informal consultation result in either a "no jeopardy" opinion by the USFWS (for formal consultation) or concurrence by the

USFWS that your activities would be "not likely to adversely affect" listed species or critical habitat (for informal consultation)?
AND

4) Do you agree to implement all measures upon which the consultation was conditioned?
5) Do you agree that if, during the course of the permit term, you plan to install a structural BMP not identified in the NOI that you will re-initiate informal or formal consultation with USFWS as necessary?

Use the guidance below Step 3 to understand effects determination and to answer these questions.

If you answered "Yes" to all four questions above, you have met eligibility USFWS Criteria B. Skip to Step 4.

If you answered "No" to any of the four questions above, go to Step 3.

Step 3 – Determine if You Can Meet Eligibility USFWS Criterion C

USFWS Criterion C: You can certify eligibility according to USFWS Criterion C for coverage by this permit if you answer "Yes" to both of the following question:

1) Does your action area contain one or more of the following species: Northern Long-eared Bat, Sandplain gerardia, Small whorled Pogonia and/or American burying beetle and **does not** contain one any following species: Dwarf wedgemussel, Northeastern bulrush, Piping Plover, Northern Red-bellied cooter, Bog Turtle, Roseate Tern, Puritan tiger beetle, and Northeastern beach tiger beetle?[3]
OR
2) Did the assessment of your discharge and discharge related activities and indicate that there would be "no affect" on listed species or critical habitat and EPA provided concurrence with your determination?
3) Do you agree that if, during the course of the permit term, you plan to install a structural BMP not identified in the NOI that you will to conduct an endangered species screening for the proposed site and contact the USFWS if you determine that the new activity "may affect" or is "not likely to adversely affect" listed species or critical habitat under the jurisdiction of the USFWS.

Use the guidance below to understand effects determination and to answer these questions.

If you answered "Yes" to both the question above, you have met eligibility USFWS Criterion C. Go to Step 4.

If you answered "No" to either of the questions above, you are not eligible for coverage by this permit. You must submit an application for an individual permit for your stormwater discharges. (See 40 CFR 122.21).

USFWS Effects Determination Guidance:

If you are unable to certify eligibility under USFWS Criterion A, you must assess whether your stormwater discharges and discharge-related activities "may affect", will have "no affect" or are "not likely to adversely affect" listed species or critical habitat. "Discharge-related activities" include: activities which cause, contribute to, or result in point source stormwater pollutant discharges; and measures to provide treatment for stormwater discharges including the siting, construction and operational procedures to control, reduce or prevent water pollution. Please be aware that no protection from incidental take liability is provided under this criterion.

The scope of effects to consider will vary with each system. If you are having difficulty in determining whether your system is likely to cause adverse effects to a listed species or critical habitat, you should contact the USFWS for assistance. In order to complete the determination of effects it may be necessary to follow the formal or informal consultation procedures in section 7 of the ESA.

Upon completion of your assessment, document the results of your effects determination. If your results indicate that stormwater discharges or discharge related activities will have "no affect" on threatened or endangered species or critical habitat and EPA concurs with your determination, you are eligible under USFWS Criterion C of this Appendix. Your determination may be based on measures that you implement to avoid, eliminate, or minimized adverse effects.

If the determination is "May affect" or "not likely to adversely affect" you must contact the USFWS to discuss your findings and measures you could implement to avoid, eliminate, or minimize adverse effects. If you and the USFWS reach agreement on measures to avoid adverse effects, you are eligible under USFWS Criterion B. Any terms and/or conditions to protect listed species and critical habitat that you relied on in order to complete an adverse effects determination, must be incorporated into your Storm Water Management Program (required by this permit) and implemented in order to maintain permit eligibility.

If endangered species issues cannot be resolved: If you cannot reach agreement with the USFWS on measures to avoid or eliminate adverse effects then you are not eligible for coverage under this permit. You must seek coverage under an individual permit.

Effects from stormwater discharges and discharge-related activities which could pose an adverse effect include:

- *Hydrological:* Stormwater discharges may cause siltation, sedimentation, or induce other changes in receiving waters such as temperature, salinity or pH. These effects will vary with the amount of stormwater discharged and the volume and condition of the receiving water. Where a discharge constitutes a minute portion of the total volume of the receiving water, adverse hydrological effects are less likely.
- *Habitat:* Excavation, site development, grading and other surface disturbance activities, including the installation or placement of treatment equipment may adversely affect listed species or their habitat. Stormwater from the small MS4 may inundate a listed species habitat.

- *Toxicity:* In some cases, pollutants in the stormwater may have toxic effects on listed species.

Step 4 - Document Results of the Eligibility Determination

Once the USFWS ESA eligibility requirements have been met, you shall include documentation of USFWS ESA eligibility in the Storm Water Management Program required by the permit. Documentation for the various eligibility criteria are as follows:

- USFWS Criterion A: A copy of the IPaC generated preliminary determination letter indicating that no listed species or critical habitat is present within your action area. You shall also include a statement on how you determined that no listed species or critical habitat are in proximity to your stormwater system or discharges.
- USFWS Criterion B: A dated copy of the USFWS letter of concurrence on a finding of "no jeopardy" (for formal consultation) or "not likely to adversely affect" (for informal consultation) regarding the ESA section 7 consultation.
- USFWS Criterion C: A dated copy of the EPA concurrence with the operator's determination that the stormwater discharges and discharge-related activities will have "no affect" on listed species or critical habitat.

C. Submittal of Notice of Intent

Once the ESA eligibility requirements of Part C of this Appendix have been metyoumay submit the Notice of Intent indicating which Criterion you have met to be eligible for permit coverage. Signature and submittal of the NOI constitutes your certification, under penalty of law, of eligibility for permit coverage under 40 CFR 122.21.

D. Duty to Implement Terms and Conditions upon which Eligibility was Determined

You must comply with any terms and conditions imposed under the ESA eligibility requirements to ensure that your stormwater discharges and discharge related activities do not pose adverse effects or jeopardy to listed species and/or critical habitat. You must incorporate such terms and conditions into your Storm Water Management Program as required by this permit. If the ESA eligibility requirements of this permit cannot be met, then you may not receive coverage under this permit and must apply for an individual permit.

E. Services Information

United States Fish and Wildlife Service Office

National websites for Endangered Species Information:
Endangered Species home page: http://endangered.fws.gov
ESA Section 7 Consultations: http://endangered.fws.gov/consultation/index.html
Information, Planning, and Conservation System (IPAC): http://ecos.fws.gov/ipac/

U.S. FWS – Region 5
Supervisor

New England Field Office
U.S. Fish and Wildlife Services
70 Commercial Street, Suite 300
Concord, NH 03301

Natural Heritage Network

The Natural Heritage Network comprises 75 independent heritage program organizations located in all 50 states, 10 Canadian provinces, and 12 countries and territories located throughout Latin America and the Caribbean. These programs gather, manage, and distribute detailed information about the biological diversity found within their jurisdictions. Developers, businesses, and public agencies use natural heritage information to comply with environmental laws and to improve the environmental sensitivity of economic development projects. Local governments use the information to aid in land use planning.

The Natural Heritage Network is overseen by NatureServe, the Network's parent organization, and is accessible on-line at: http://www.natureserve.org/nhp/us_programs.htm, which provides websites and other access to a large number of specific biodiversity centers.

U.S. Fish and Wildlife IPaC system instructions

Use the following protocol to determine if any federally listed species or designated critical habitats under USFWS jurisdiction exist in your action area:

Enter your project specific information into the "Initial Project Scoping" feature of the Information, Planning, and Conservation (IPaC) system mapping tool, which can be found at the following location:

http://ecos.fws.gov/ipac/

a. Indicate the action area[1] for the MS4 by either:
    a. Drawing the boundary on the map or by uploading a shapefile.
    Select "Continue"

c. Click on the "SEE RESOURCE LIST" button and on the next screen you can export a trust resources list.This will provided a list of natural resources of concern, which will include an Endangered Species Act Species list. You may also request an official species list under "REGULATORY DOCUMENTS" Save copies and retain for your records

[1] The action area is defined by regulation as all areas to be affected directly or indirectly by the action and not merely the immediate area involved in the action (50 CFR §402.02). This analysis is not limited to the "footprint" of the action nor is it limited by the Federal agency's authority. Rather, it is a biological determination of the reach of the proposed action on listed species. Subsequent analyses of the environmental baseline, effects of the action, and levels of incidental take are based upon the action area.

The documentation used by a Federal action agency to initiate consultation should contain a description of the action area as defined in the Services' regulations and explained in the Services' consultation handbook. If the Services determine that the action area as defined by the action agency is incorrect, the Services should discuss their rationale with the agency or applicant, as appropriate. Reaching agreement on the description of the action area is desirable but ultimately the Services can only consult when an action area is defined properly under the regulations.

For storm water discharges or discharge related activities, the action area should encompass the following:

- The immediate vicinity of, or nearby, the point of discharge into receiving waters.
- The path or immediate area through which or over which storm water flows from the municipality to the point of discharge into the receiving water. This includes areas in the receiving water downstream from the point of discharge.
- Areas that may be impacted by construction or repair activities. This extends as far as effects related to noise (from construction equipment, power tools, etc.) and light (if work is performed at night) may reach.

The action area will vary with the size and location of the outfall pipe, the nature and quantity of the storm water discharges, and the type of receiving waters, among other factors.

Attachment B

Quincy IPaC Trust Resources Report

United States Department of the Interior

FISH AND WILDLIFE SERVICE
New England Ecological Services Field Office
70 Commercial Street, Suite 300
Concord, NH 03301-5094
Phone: (603) 223-2541 Fax: (603) 223-0104
http://www.fws.gov/newengland

In Reply Refer To:
Consultation Code: 05E1NE00-2018-SLI-2889
Event Code: 05E1NE00-2018-E-06805
Project Name: Quincy MS4 NOI

August 27, 2018

Subject: List of threatened and endangered species that may occur in your proposed project location, and/or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)(c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF

Please be aware that bald and golden eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 *et seq.*), and projects affecting these species may require development of an eagle conservation plan (http://www.fws.gov/windenergy/eagle_guidance.html). Additionally, wind energy projects should follow the wind energy guidelines (http://www.fws.gov/windenergy/) for minimizing impacts to migratory birds and bats.

Guidance for minimizing impacts to migratory birds for projects including communications towers (e.g., cellular, digital television, radio, and emergency broadcast) can be found at: http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/towers.htm; http://www.towerkill.com; and http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Tracking Number in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List

Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

New England Ecological Services Field Office
70 Commercial Street, Suite 300
Concord, NH 03301-5094
(603) 223-2541

Project Summary

Consultation Code: 05E1NE00-2018-SLI-2889

Event Code: 05E1NE00-2018-E-06805

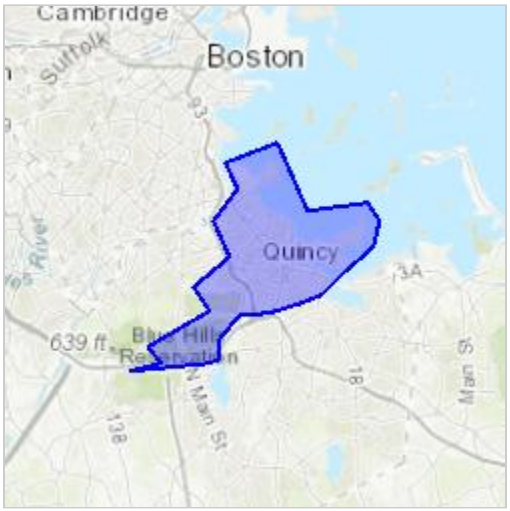
Project Name: Quincy MS4 NOI

Project Type: ** OTHER **

Project Description: Appendix C of MS4 Notice of Intent

Project Location:

Approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/place/42.256112547547396N70.99508449823024W



Counties: Norfolk, MA | Suffolk, MA

Endangered Species Act Species

There is a total of 1 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries[1], as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

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1. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

Mammals

NAME	STATUS
Northern Long-eared Bat *Myotis septentrionalis* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9045	Threatened

Critical habitats

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

Attachment C

Federally Listed Endangered and Threatened Species in Massachusetts

FEDERALLY LISTED ENDANGERED AND THREATENED SPECIES IN MASSACHUSETTS

COUNTY	SPECIES	FEDERAL STATUS	GENERAL LOCATION/HABITAT	TOWNS
Barnstable	Piping Plover	Threatened	Coastal Beaches	All Towns
	Roseate Tern	Endangered	Coastal beaches and the Atlantic Ocean	All Towns
	Northeastern beach tiger beetle	Threatened	Coastal Beaches	Chatham
	Sandplain gerardia	Endangered	Open areas with sandy soils.	Sandwich and Falmouth.
	Northern Red-bellied Cooter	Endangered	Inland Ponds and Rivers	Bourne (north of the Cape Cod Canal)
	Red Knot[1]	Threatened	Coastal Beaches and Rocky Shores, sand and mud flats	Coastal Towns
	Northern Long-eared Bat	Threatened Final 4(d) Rule	Winter- mines and caves, Summer – wide variety of forested habitats	Statewide
Berkshire	Bog Turtle	Threatened	Wetlands	Egremont and Sheffield
	Northern Long-eared Bat	Threatened Final 4(d) Rule	Winter- mines and caves, Summer – wide variety of forested habitats	Statewide
Bristol	Piping Plover	Threatened	Coastal Beaches	Fairhaven, Dartmouth, Westport
	Roseate Tern	Endangered	Coastal beaches and the Atlantic Ocean	Fairhaven, New Bedford, Dartmouth, Westport
	Northern Red-bellied Cooter	Endangered	Inland Ponds and Rivers	Taunton
	Red Knot[1]	Threatened	Coastal Beaches and Rocky Shores, sand and mud flats	Coastal Towns
	Northern Long-eared Bat	Threatened Final 4(d) Rule	Winter- mines and caves, Summer – wide variety of forested habitats	Statewide
Dukes	Roseate Tern	Endangered	Coastal beaches and the Atlantic Ocean	All Towns
	Piping Plover	Threatened	Coastal Beaches	All Towns
	Northeastern beach tiger beetle	Threatened	Coastal Beaches	Aquinnah and Chilmark
	Sandplain gerardia	Endangered	Open areas with sandy soils.	West Tisbury
	Red Knot[1]	Threatened	Coastal Beaches and Rocky Shores, sand and mud flats	Coastal Towns
	Northern Long-eared Bat	Threatened Final 4(d) Rule	Winter- mines and caves, Summer – wide variety of forested habitats	Statewide

Updated 02/05/2016

FEDERALLY LISTED ENDANGERED AND THREATENED SPECIES IN MASSACHUSETTS

COUNTY	SPECIES	FEDERAL STATUS	GENERAL LOCATION/HABITAT	TOWNS
Essex	Small whorled Pogonia	Threatened	Forests with somewhat poorly drained soils and/or a seasonally high water table	Gloucester, Essex and Manchester
	Piping Plover	Threatened	Coastal Beaches	Gloucester, Essex, Ipswich, Rowley, Revere, Newbury, Newburyport and Salisbury
	Red Knot[1]	Threatened	Coastal Beaches and Rocky Shores, sand and mud flats	Coastal Towns
	Northern Long-eared Bat	Threatened Final 4(d) Rule	Winter- mines and caves, Summer – wide variety of forested habitats	Statewide
Franklin	Northeastern bulrush	Endangered	Wetlands	Montague, Warwick
	Dwarf wedgemussel	Endangered	Mill River	Whately
	Northern Long-eared Bat	Threatened Final 4(d) Rule	Winter- mines and caves, Summer – wide variety of forested habitats	Statewide
Hampshire	Small whorled Pogonia	Threatened	Forests with somewhat poorly drained soils and/or a seasonally high water table	Hadley
	Puritan tiger beetle	Threatened	Sandy beaches along the Connecticut River	Northampton and Hadley
	Dwarf wedgemussel	Endangered	Rivers and Streams.	Hatfield, Amherst and Northampton
	Northern Long-eared Bat	Threatened Final 4(d) Rule	Winter- mines and caves, Summer – wide variety of forested habitats	Statewide
Hampden	Small whorled Pogonia	Threatened	Forests with somewhat poorly drained soils and/or a seasonally high water table	Southwick
	Northern Long-eared Bat	Threatened Final 4(d) Rule	Winter- mines and caves, Summer – wide variety of forested habitats	Statewide
Middlesex	Small whorled Pogonia	Threatened	Forests with somewhat poorly drained soils and/or a seasonally high water table	Groton
	Northern Long-eared Bat	Threatened Final 4(d) Rule	Winter- mines and caves, Summer – wide variety of forested habitats	Statewide
Nantucket	Piping Plover	Threatened	Coastal Beaches	Nantucket
	Roseate Tern	Endangered	Coastal beaches and the Atlantic Ocean	Nantucket
	American burying beetle	Endangered	Upland grassy meadows	Nantucket
	Red Knot[1]	Threatened	Coastal Beaches and Rocky Shores, sand and mud flats	Coastal Towns
	Northern Long-eared Bat	Threatened Final 4(d) Rule	Winter- mines and caves, Summer – wide variety of forested habitats	Statewide

Updated 02/05/2016

FEDERALLY LISTED ENDANGERED AND THREATENED SPECIES IN MASSACHUSETTS

COUNTY	SPECIES	FEDERAL STATUS	GENERAL LOCATION/HABITAT	TOWNS
Plymouth	Piping Plover	Threatened	Coastal Beaches	Scituate, Marshfield, Duxbury, Plymouth, Wareham and Mattapoisett
	Northern Red-bellied Cooter	Endangered	Inland Ponds and Rivers	Kingston, Middleborough, Carver, Plymouth, Bourne, Wareham, Halifax, and Pembroke
	Roseate Tern	Endangered	Coastal beaches and the Atlantic Ocean	Plymouth, Marion, Wareham, and Mattapoisett.
	Red Knot[1]	Threatened	Coastal Beaches and Rocky Shores, sand and mud flats	Coastal Towns
	Northern Long-eared Bat	Threatened Final 4(d) Rule	Winter- mines and caves, Summer – wide variety of forested habitats	Statewide
Suffolk	Piping Plover	Threatened	Coastal Beaches	Revere, Winthrop
	Red Knot[1]	Threatened	Coastal Beaches and Rocky Shores, sand and mud flats	Coastal Towns
	Northern Long-eared Bat	Threatened Final 4(d) Rule	Winter- mines and caves, Summer – wide variety of forested habitats	Statewide
Worcester	Small whorled Pogonia	Threatened	Forests with somewhat poorly drained soils and/or a seasonally high water table	Leominster
	Northern Long-eared Bat	Threatened Final 4(d) Rule	Winter- mines and caves, Summer – wide variety of forested habitats	Statewide

[1]Migratory only, scattered along the coast in small numbers

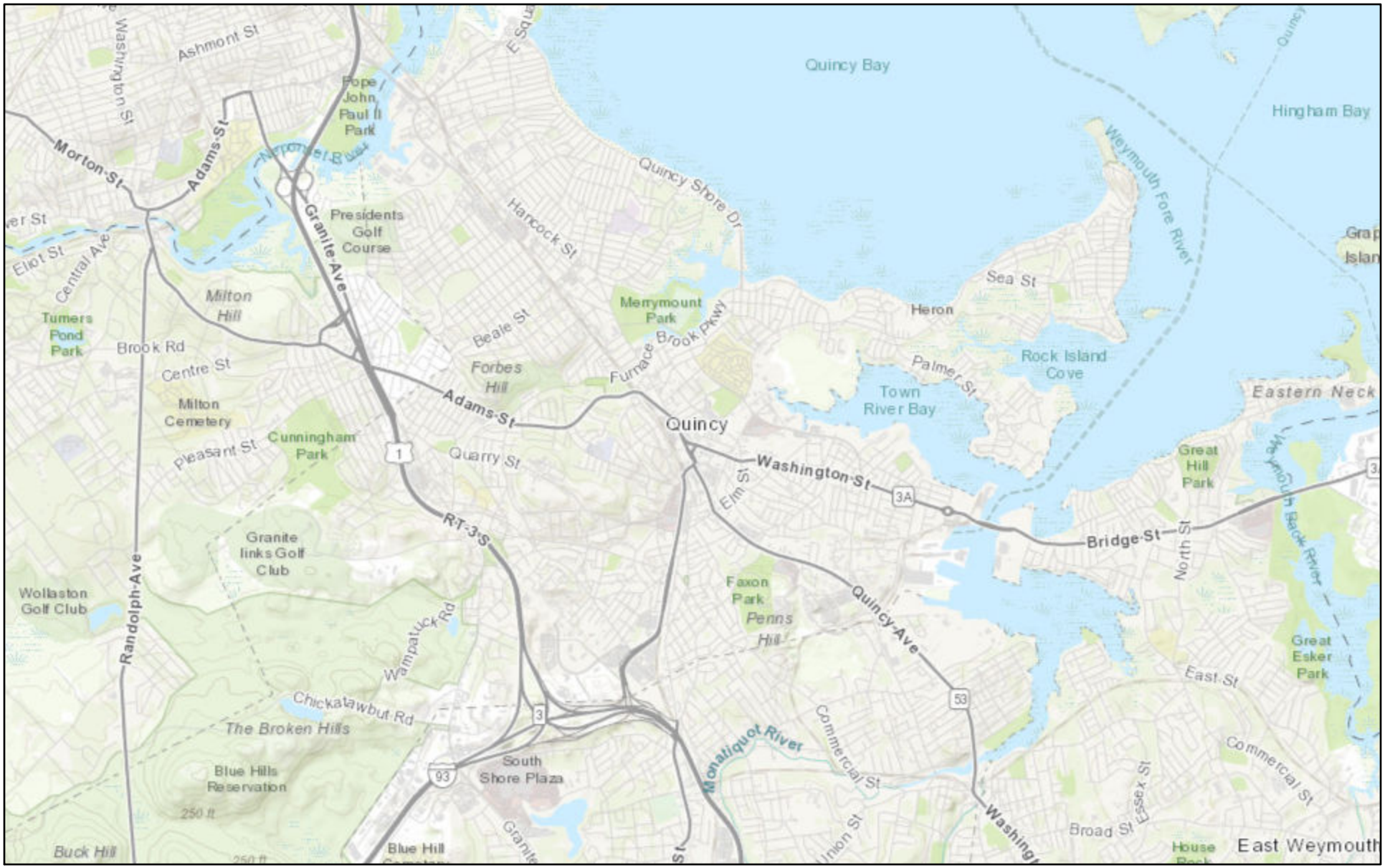
-Eastern cougar and gray wolf are considered extirpated in Massachusetts.
-Endangered gray wolves are not known to be present in Massachusetts, but dispersing individuals from source populations in Canada may occur statewide.
-Critical habitat for the Northern Red-bellied Cooter is present in Plymouth County.

Updated 02/05/2016

Attachment D

Northern Long-eared Bat Location Map

NHESP No. Long-eared Bat Locations



August 28, 2018

1:72,224

0 0.45 0.9 1.8 mi

0 0.75 1.5 3 km

MA_NHESP_NLEB_Maternity_Roost_Tree_Locations

MA_Northern_Long_eared_Bat_Winter_Hibernacula

Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri

Attachment E

U.S. Fish and Wildlife Review Letter

United States Department of the Interior

FISH AND WILDLIFE SERVICE

New England Field Office
70 Commercial Street, Suite 300
Concord, NH 03301-5087
http://www.fws.gov/newengland

January 8, 2018

To Whom It May Concern:

This project was reviewed for the presence of federally listed or proposed, threatened or endangered species or critical habitat per instructions provided on the U.S. Fish and Wildlife Service's New England Field Office website:

http://www.fws.gov/newengland/EndangeredSpec-Consultation.htm (accessed January 2018)

Based on information currently available to us, no federally listed or proposed, threatened or endangered species or critical habitat under the jurisdiction of the U.S. Fish and Wildlife Service are known to occur in the project area(s). Preparation of a Biological Assessment or further consultation with us under section 7 of the Endangered Species Act is not required. No further Endangered Species Act coordination is necessary for a period of one year from the date of this letter, unless additional information on listed or proposed species becomes available.

Thank you for your cooperation. Please contact David Simmons of this office at 603-227-6425 if we can be of further assistance.

Sincerely yours,

Thomas R. Chapman
Supervisor
New England Field Office

Appendix E

Historic Properties Eligibility Criteria Documentation

National Historic Preservation Act Eligibility Certification

TO: Town of Quincy Stormwater Management Program Files

FROM: Tighe & Bond

COPY: Paul Costello, City Engineer

DATE: August 29, 2018

Tighe & Bond has completed the National Historic Preservation Act Eligibility Determination screening process in accordance with Part 1.9.2 and Appendix D of U.S. EPA's National Pollutant Discharge Elimination System (NPDES) General Permits for Stormwater Discharges from Small Municipal Separate Storm Sewer Systems (MS4s) in Massachusetts (see Attachment A of this memorandum), effective July 1, 2018, and determined that the **City of Quincy** meets **Criterion A: The discharges do not have the potential to cause effects on historic properties.**

Tighe & Bond followed the screening process included in Appendix D and has determined Quincy is an existing facility authorized by the previous permit and therefore meets Criterion A (see Question 1 in Appendix D of the Permit) and is not, as part of developing and submitting the Notice of Intent for permit coverage, undertaking any activity involving subsurface land disturbance less than an acre. Based on this screening process, the City of Quincy's stormwater discharges, allowable non-stormwater discharges, and stormwater discharge-related activities will not have an effect on a property that is listed or eligible for listing on the National Register of Historic Properties (NRHP) and no further action is necessary at this time.

Attachment B to this memorandum includes a list of the federal- and state-listed historic areas, buildings, burial grounds, objects, and structures downloaded from the Massachusetts Cultural Resource Information System (MACRIS) that is current as of August 29, 2018. If the City undertakes construction on or around a property that is listed or eligible for listing, the City will coordinate with the State Historic Preservation Officer (SHPO) (i.e. the Massachusetts Historical Commission) by submitting a Project Notification Form and associated documentation for the project. As applicable for each project, the City will implement measures to avoid or minimize adverse impacts on places listed, or eligible for listing, on the NRHP, including any conditions imposed by the SHPO or THPO. If the City fails to document and implement such measures, those discharges are ineligible for coverage under EPA's Small MS4 General Permit.

Attachment A

Appendix D of U.S. EPA's National Pollutant Discharge Elimination System (NPDES) General Permits for Stormwater Discharges from Small Municipal Separate Storm Sewer Systems (MS4s) in Massachusetts

Appendix D
National Historic Preservation Act Guidance

Background

Section 106 of the National Historic Preservation Act (NHPA) requires federal agencies to take into account the effects of Federal "undertakings" on historic properties that are either listed on, or eligible for listing on, the National Register of Historic Places. The term federal "undertaking" is defined in the NHPA regulations to include a project, activity, or program of a federal agency including those carried out by or on behalf of a federal agency, those carried out with federal financial assistance, and those requiring a federal permit, license or approval. See 36 CFR 800.16(y). Historic properties are defined in the NHPA regulations to include prehistoric or historic districts, sites, buildings, structures, or objects that are included in, or are eligible for inclusion in, the National Register of Historic Places. This term includes artifacts, records, and remains that are related to and located within such properties. See 36 CFR 800.16(1).

EPA's issuance of a National Pollutant Discharge Elimination System (NPDES) General Permit is a federal undertaking within the meaning of the NHPA regulations and EPA has determined that the activities to be carried out under the general permit require review and consideration, in order to be in compliance with the federal historic preservation laws and regulations. Although individual submissions for authorization under the general permit do not constitute separate federal undertakings, the screening processes provides an appropriate site-specific means of addressing historic property issues in connection with EPA's issuance of the permit. To address any issues relating to historic properties in connection with the issuance of this permit, EPA has included a screening process for applicants to identify whether properties listed or eligible for listing on the National Register of Historic Places are within the path of their discharges or discharge-related activities (including treatment systems or any BMPs relating to the discharge or treatment process) covered by this permit.

Applicants seeking authorization under this general permit must comply with applicable, State, Tribal, and local laws concerning the protection of historic properties and places and may be required to coordinate with the State Historic Preservation Officer (SHPO) and/or Tribal Historic Preservation Officer (THPO) and others regarding effects of their discharges on historic properties.

Activities with No Potential to Have an Effect on Historic Properties

A determination that a federal undertaking has no potential to have an effect on historic properties fulfills an agency's obligations under NHPA. EPA has reason to believe that the vast majority of activities authorized under this general permit will have no potential effects on historic properties. This permit typically authorizes discharges from existing facilities and requires control of the pollutants discharged from the facility. EPA does not anticipate effects on historic properties from the pollutants in the authorized discharges. Thus, to the extent EPA's issuance of this general permit authorizes discharges of such constituents, confined to existing channels, outfalls or natural drainage areas, the permitting action does not have the potential to cause effects on historical properties.

In addition, the overwhelming majority of sources covered under this permit will be facilities that are seeking renewal of previous permit authorization. These existing dischargers should have already addressed NHPA issues in the previous general permit as they were required to certify that they were either not affecting historic properties or they had obtained written agreement from

the applicable SHPO or THPO regarding methods of mitigating potential impacts. To the extent this permit authorizes renewal of prior coverage without relevant changes in operations the discharge has no potential to have an effect on historic properties.

Activities with Potential to Have an Effect on Historic Properties

EPA believes this permit may have some potential to have an effect on historic properties the applicant undertakes the construction and/or installation of control measures that involve subsurface disturbance that involves less than 1 acre of land. (Ground disturbances of 1 acre or more require coverage under the Construction General Permit.) Where there is disturbance of land through the construction and/or installation of control measures, there is a possibility that artifacts, records, or remains associated with historic properties could be impacted. Therefore, if the applicant is establishing new or altering existing control measures to manage their discharge that will involve subsurface ground disturbance of less than 1 acre, they will need to ensure (1) that historic properties will not be impacted by their activities or (2) that they are in compliance with a written agreement with the SHPO, THPO, or other tribal representative that outlines all measures the applicant will carry out to mitigate or prevent any adverse effects on historic properties.

Examples of Control Measures Which Involve Subsurface Disturbance

The type of control measures that are presumptively expected to cause subsurface ground disturbance include:

- Dikes
- Berms
- Catch basins, drainage inlets
- Ponds, bioretention areas
- Ditches, trenches, channels, swales
- Culverts, pipes
- Land manipulation; contouring, sloping, and grading
- Perimeter Drains
- Installation of manufactured treatment devices

EPA cautions applicants that this list is non-inclusive. Other control measures that involve earth disturbing activities that are not on this list must also be examined for the potential to affect historic properties.

Certification

Upon completion of this screening process the applicant shall certify eligibility for this permit using one of the following criteria on their Notice of Intent for permit coverage:

> **Criterion A**: The discharges do not have the potential to cause effects on historic properties.

Criterion B: A historic survey was conducted. The survey concluded that no historic properties are present. Discharges do not have the potential to cause effects on historic properties.

Criterion C: The discharges and discharge related activities have the potential to have an effect on historic properties, and the applicant has obtained and is in compliance with a written agreement with the State Historic Preservation Officer (SHPO), Tribal Historic Preservation Officer (TPHO), or other tribal representative that outlines measures the applicant will carry out to mitigate or prevent any adverse effects on historic properties.

Authorization under the general permit is available only if the applicant certifies and documents permit eligibility using one of the eligibility criteria listed above. Small MS4s that cannot meet any of the eligibility criteria in above must apply for an individual permit.

Screening Process

Applicants or their consultant need to answer the questions and follow the appropriate procedures below to assist EPA in compliance with 36 CFR 800.

Question 1*:* Is the facility an existing facility authorized by the previous permit or a new facility and the applicant is not undertaking any activity involving subsurface land disturbance less than an acre?

YES - The applicant should certify that fact in writing and file the statement with the EPA. This certification must be maintained as part of the records associated with the permit.
The applicant should certify eligibility for this permit using Criterion A on their Notice of Intent for permit coverage. The applicant does not need to contact the state Historic Commission. Based on that statement, EPA will document that the project has "no potential to cause effects" (36 CFR 800.3(a)(1)). There are no further obligations under the Section 106 regulations.

NO- Go to Question 2.

Question 2*:* Is the property listed in the National Register of Historic Places or have prior surveys or disturbances revealed the existence of a historic property or artifacts?

NO - The applicant should certify that fact in writing and file the statement with the EPA. This certification must be maintained as part of the records associated with the permit.
The applicant should certify eligibility for this permit using Criterion B on their Notice of Intent for permit coverage. The applicant does not need to contact the state Historic Commission. Based on that statement, EPA will document that the project has "no potential to cause effects" (36 CFR 800.3(a)(1)). There are no further obligations under the Section 106 regulations.

YES - The applicant or their consultant should prepare a complete information submittal to the SHPO. The submittal consists of:

- Completed Project Notification Form- forms available at http://www.sec.state.ma.us/mhc/mhcform/formidx.htm;

- USGS map section with the actual project boundaries clearly indicated; and
- Scaled project plans showing existing and proposed conditions.

(1) Please note that the SHPO does not accept email for review. Please mail a paper copy of your submittal (Certified Mail, Return Receipt Requested) or deliver a paper copy of your submittal (and obtain a receipt) to:

State Historic Preservation Officer
Massachusetts Historical Commission
220 Morrissey Blvd.
Boston MA 02125.

(2) Provide a copy of your submittal and the proof of MHC delivery showing the date MHC received your submittal to:

NPDES Permit Branch Chief
US EPA Region 1 (OEP06-1)
5 Post Office Square, Suite 100
Boston MA 02109-3912.

The SHPO will comment within thirty (30) days of receipt of complete submittals, and may ask for additional information. Consultation, as appropriate, will include EPA, the SHPO and other consulting parties (which includes the applicant). The steps in the federal regulations (36 CFR 800.2 to 800.6, etc.) will proceed as necessary to conclude the Section 106 review for the undertaking. **The applicant should certify eligibility for this permit using Criterion C on their Notice of Intent for permit coverage.**

Attachment B

Massachusetts Cultural Resource Information System (MACRIS)
List of federal- and state-listed historic areas, buildings, burial grounds, objects, and structures

Massachusetts Cultural Resource Information System

MACRIS

MACRIS Search Results

Search Criteria: Town(s): Quincy; Resource Type(s): Area, Building, Burial Ground, Object, Structure;

Inv. No.	Property Name	Street	Town	Year
QUI.A	President's Hill - Hospital Hill - Cranch Hill		Quincy	
QUI.B	Merrymount Road - Saville Avenue Area		Quincy	
QUI.C	Hancock Street Area		Quincy	
QUI.D	Bicknell Street Area		Quincy	
QUI.E	Hough's Neck - Great Hill		Quincy	
QUI.F	Central Business District		Quincy	
QUI.G	South Weymouth Naval Air Station		Quincy	
QUI.H	Liberty Park - Taber Street - Green, The		Quincy	
QUI.I	Quincy Streetscape		Quincy	
QUI.J	Wollaston Hill		Quincy	
QUI.K	Tubular Rivet and Stud Company Complex		Quincy	
QUI.L	Squantum Air Base		Quincy	
QUI.M	Adams Birthplace Historic District		Quincy	
QUI.N	Blue Hills Multiple Resource Area		Quincy	
QUI.O	Baxter Street Historic District		Quincy	
QUI.P	Quincy Center Local Historic District		Quincy	
QUI.Q	Quincy Multiple Resource Area		Quincy	
QUI.R	Southwest Quincy		Quincy	
QUI.S	Smith Streetscape		Quincy	
QUI.T	School Streetscape		Quincy	
QUI.U	Furnace Brook Parkway Streetscape		Quincy	
QUI.W	Prospect Streetscape		Quincy	
QUI.X	Sagamore Streetscape		Quincy	
QUI.Y	Bicknell Streetscape		Quincy	
QUI.Z	Bedford Streetscape		Quincy	
QUI.AA	Independence Avenue Streetscape		Quincy	
QUI.AB	Faxon Park Road Streetscape		Quincy	

Inv. No.	Property Name	Street	Town	Year
QUI.AC	Bennington Streetscape		Quincy	
QUI.AD	Water Supply System of Metropolitan Boston		Quincy	
QUI.AE	Adams National Historic Site Complex		Quincy	
QUI.AF	Fore River - Quincy Shipyard		Quincy	
QUI.AG	Boston Harbor Islands Archaeological District		Quincy	
QUI.AH	Metropolitan Park System of Greater Boston		Quincy	
QUI.AI	U. S. Naval Reserve Center		Quincy	
QUI.AJ	Edinboro Road - Fifth Avenue Area		Quincy	
QUI.AK	U. S. Housing Corporation - River Street Tract		Quincy	
QUI.AL	U. S. Housing Corporation - Arnold Street Tract		Quincy	
QUI.AM	Mount Wollaston Cemetery		Quincy	
QUI.AN	Adams Academy		Quincy	
QUI.AO	U. S. Housing Corporation - Cleverly Court Terrace		Quincy	
QUI.AP	U. S. Housing Corporation - Baker Yacht Basin Trac		Quincy	
QUI.AQ	Quincy Shore Drive		Quincy	
QUI.AR	Blue Hills Reservation Parkways		Quincy	
QUI.AS	Furnace Brook Parkway		Quincy	
QUI.AU	Most Blessed Sacrament Roman Catholic Church		Quincy	
QUI.AV	Saint Boniface Roman Catholic Church Complex		Quincy	
QUI.AW	Star of the Sea Roman Catholic Chapel Complex		Quincy	
QUI.AX	Saint Ann's Roman Catholic Church Complex		Quincy	
QUI.AY	Revere Road and Mechanic Street Area		Quincy	
QUI.936	Lyon's Turning Mill and Fuller Quarry Site		Quincy	1894
QUI.379	Adams Elementary School	Abigail Ave	Quincy	1913
QUI.181	Adams Academy	8 Adams St	Quincy	1872
QUI.910	Ten Mile Stone	8 Adams St	Quincy	c 1730
QUI.911	World War I Memorial Tablet	8 Adams St	Quincy	1928
QUI.912	Hancock, John Bust	8 Adams St	Quincy	1951
QUI.182	Tune Up America Gas Station	21 Adams St	Quincy	1940
QUI.183	Carrill Building	24 Adams St	Quincy	1966
QUI.184	Howlan, Charles A. House	26 Adams St	Quincy	c 1870
QUI.185	McAnarney, Jeremiah J. House	36 Adams St	Quincy	1924
QUI.186	South Shore Buick Auto Showroom	40-64 Adams St	Quincy	1940
QUI.187		63-65 Adams St	Quincy	1913
QUI.188		77 Adams St	Quincy	c 1970
QUI.189	Eye Health Services Building	101 Adams St	Quincy	c 1980

Inv. No.	Property Name	Street	Town	Year
QUI.190	Children's Development Disabilities Center	105 Adams St	Quincy	c 1910
QUI.3	Adams National Historic Site - Old House	135 Adams St	Quincy	1731
QUI.939	Adams Birthplace - Wood Post Fence	135 Adams St	Quincy	1896
QUI.948	Adams National Historic Site - Duckpond	135 Adams St	Quincy	1821
QUI.949	Adams National Historic Site - Garden Paths	135 Adams St	Quincy	r 1735
QUI.1276	Adams National Historic Site - Stone Library	135 Adams St	Quincy	1870
QUI.1277	Adams National Historic Site - Carriage House	135 Adams St	Quincy	1873
QUI.1278	Adams National Historic Site - Greenhouse	135 Adams St	Quincy	r 1875
QUI.1279	Adams National Historic Site - Woodshed	135 Adams St	Quincy	c 1800
QUI.9056	Adams National Historic Site - Front Gates - Wall	135 Adams St	Quincy	1829
QUI.9057	Adams Birthplace - Stone Wall	135 Adams St	Quincy	1873
QUI.9058	Adams National Historic Site - Beale Stone Wall	135 Adams St	Quincy	r 1895
QUI.9061	Adams National Historic Site - Adams Doghouse	135 Adams St	Quincy	r 1915
QUI.9063	Adams Birthplace - Well	135 Adams St	Quincy	r 1650
QUI.79	Yerza, Percy S. House	142 Adams St	Quincy	1930
QUI.24	Emery, J. Henry Carriage House	156 Adams St	Quincy	c 1900
QUI.80	Emery, J. Henry House	156 Adams St	Quincy	c 1900
QUI.81	Edelstein, Israel House	170 Adams St	Quincy	1950
QUI.82		180 Adams St	Quincy	1963
QUI.4	Adams National Historic Site - Beale House	181 Adams St	Quincy	1792
QUI.1280	Adams National Historic Site - Carriage House	181 Adams St	Quincy	r 1880
QUI.1395	Adams National Historic Site - Beale Storage Shed	181 Adams St	Quincy	
QUI.9059	Adams National Historic Site - Hitching Posts	181 Adams St	Quincy	c 1849
QUI.9060	Adams National Historic Site - Well and Pump	181 Adams St	Quincy	r 1750
QUI.9064	Adams National Historic Site - Stone Wall	181 Adams St	Quincy	1873
QUI.83	Haule, Roland House	200 Adams St	Quincy	1975
QUI.5	Tuxford, Burton R. House	205 Adams St	Quincy	1941
QUI.6	Eventide Nursing Home	215 Adams St	Quincy	1936
QUI.84	Baxter - King House	270 Adams St	Quincy	c 1860
QUI.85	Reed, Timothy House	284 Adams St	Quincy	c 1870
QUI.86	Faxon, Job Franklin House	310 Adams St	Quincy	1880
QUI.7	Gilmore, Robert O. House	360 Adams St	Quincy	1935
QUI.8		390 Adams St	Quincy	1931
QUI.9	DiRico, Francesco House	416 Adams St	Quincy	1933
QUI.511	Beale, Ezra House	707 Adams St	Quincy	c 1780
QUI.1034		10 Adeline Pl	Quincy	1960
QUI.122	Merrymount Elementary School	4 Agawam Rd	Quincy	1929

Inv. No.	Property Name	Street	Town	Year
QUI.1	Adams Shore Evangelical Church	175 Albatross Rd	Quincy	1918
QUI.191	Haskell, Albert A. Laundry	14 Alleyne St	Quincy	1923
QUI.37	MacKay, David H. House	87 Appleton St	Quincy	c 1870
QUI.38	McCallum, J. W. - Grass, Henry J. House	38-40 Apthorp St	Quincy	c 1927
QUI.557	Washburn, William S. House	207-209 Arlington St	Quincy	c 1860
QUI.558	Adams, Boylston House	243 Arlington St	Quincy	1825
QUI.25	Darr, Alexander House	68-72 Atlantic St	Quincy	1928
QUI.26	Hall, Charles A. House	164 Atlantic St	Quincy	c 1900
QUI.600	Hinds, James P. House	4 Avon Way	Quincy	1917
QUI.87	Crane, Frank W. House	11 Avon Way	Quincy	c 1902
QUI.601		12 Avon Way	Quincy	1898
QUI.602	Sampson, Charles House	14 Avon Way	Quincy	1915
QUI.88	Sidelinger, George A. House	19 Avon Way	Quincy	c 1904
QUI.603		22 Avon Way	Quincy	1917
QUI.604	Townsend, Arthur S. House	27 Avon Way	Quincy	1912
QUI.605	Tourtellot, Olive P. House	28 Avon Way	Quincy	1916
QUI.606	Allen, Abbie L. House	34 Avon Way	Quincy	r 1900
QUI.502		11 Bass St	Quincy	1890
QUI.9099	Winged Migration #2	1 Batterymarch Pk	Quincy	1980
QUI.1234		19-21 Baxter St	Quincy	c 1880
QUI.1235		25-27 Baxter St	Quincy	c 1880
QUI.1236		26-28 Baxter St	Quincy	c 1880
QUI.306		32-34 Baxter St	Quincy	c 1880
QUI.116	Bayview Avenue, 32	32 Bayview Ave	Quincy	c 1880
QUI.59	Taylor House	2 Bayview Rd	Quincy	c 1890
QUI.498	U. S. Post Office - Wollaston Branch	5 Beach St	Quincy	1940
QUI.499	Atkins, William House	29 Beach St	Quincy	c 1900
QUI.500	Fraser, Robert House	38 Beach St	Quincy	c 1900
QUI.501	Chapman, Hazen B. House	86 Beach St	Quincy	c 1900
QUI.927	Beale Street Wall	Beale St	Quincy	c 1880
QUI.487	Wollaston Theatre	14 Beale St	Quincy	1926
QUI.488	Wollaston Methodist Church	40 Beale St	Quincy	1924
QUI.489	Crane Memorial Public Library, The	41 Beale St	Quincy	1922
QUI.577	Wollaston Fire Station	111 Beale St	Quincy	1900
QUI.578	Smith, A. C. and Company Gas Station	117 Beale St	Quincy	1926
QUI.579	Wollaston Unitarian Church	155 Beale St	Quincy	c 1890
QUI.580	Wollaston Elementary School	205 Beale St	Quincy	1913
QUI.581	Whitman, H. T. House	247 Beale St	Quincy	c 1860

Inv. No.	Property Name	Street	Town	Year
QUI.582		269 Beale St	Quincy	c 1870
QUI.518	McClintock House	340 Beale St	Quincy	c 1890
QUI.99		41-43 Bedford St	Quincy	c 1910
QUI.1258	Gustafson, Victor House	47-49 Bedford St	Quincy	c 1910
QUI.1259		51-53 Bedford St	Quincy	c 1910
QUI.1260		55-57 Bedford St	Quincy	c 1910
QUI.1261	Mattson, Sven House	59-61 Bedford St	Quincy	c 1910
QUI.440		85 Bellevue Rd	Quincy	1910
QUI.1408	Star of the Sea Roman Catholic Chapel	105 Bellevue Rd	Quincy	c 1957
QUI.9092	Star of the Sea Chapel - Statue of the Virgin	105 Bellevue Rd	Quincy	c 1957
QUI.1409	Star of the Sea Roman Catholic Chapel Rectory	107 Bellevue Rd	Quincy	c 1957
QUI.9091	Star of the Sea Chapel - Statue of the Virgin Mary	107 Bellevue Rd	Quincy	c 1957
QUI.441	Uppling, Joseph D. House	195 Bellevue Rd	Quincy	c 1910
QUI.562	Montclair Elementary School	8 Belmont St	Quincy	1912
QUI.544	Sprague, Arthur C. House	416 Belmont St	Quincy	1892
QUI.389	McAuliffe, Christopher House	15 Bennington St	Quincy	r 1900
QUI.1267	Rich, George G. House	19 Bennington St	Quincy	r 1900
QUI.1268	Field, George H. House	23 Bennington St	Quincy	r 1900
QUI.1269	Ward, Leon House	25-27 Bennington St	Quincy	r 1900
QUI.1270	Ross, William House	29-31 Bennington St	Quincy	r 1900
QUI.1271		37-39 Bennington St	Quincy	r 1900
QUI.1272	Vergobbi, Simone House	43-45 Bennington St	Quincy	r 1900
QUI.490	Fenno, Thomas House	3 Berlin St	Quincy	c 1900
QUI.491	Fenno, Thomas House	4 Berlin St	Quincy	c 1900
QUI.48	Sailors' Snug Harbor	9 Bicknell St	Quincy	1907
QUI.49	Brown - Hodgkinson House	42 Bicknell St	Quincy	1832
QUI.50	Holmes, Capt. Elisha - Hodgkinson, Benjamin House	52 Bicknell St	Quincy	1832
QUI.51	Holmes, Naaman B. House	53 Bicknell St	Quincy	1840
QUI.52	Prior, Hiram - Tinkham, Jeremiah House	76 Bicknell St	Quincy	c 1832
QUI.54	Higgins, Samuel House	80 Bicknell St	Quincy	c 1832
QUI.55	Bennett, Winifred S. House	86 Bicknell St	Quincy	c 1880
QUI.56	Swift, M. House	90 Bicknell St	Quincy	c 1860
QUI.57		94 Bicknell St	Quincy	c 1870
QUI.58	Hodgkinson, Michael House	100 Bicknell St	Quincy	1837
QUI.1413	Miller, Charles W. House	25 Bigelow St	Quincy	1894
QUI.1414	Chase, Richard D. House	33-35 Bigelow St	Quincy	1915

Inv. No.	Property Name	Street	Town	Year
QUI.1415	Chase, Richard D. House	39-41 Bigelow St	Quincy	1915
QUI.240	Faxon, Henry Munroe House	44 Bigelow St	Quincy	r 1915
QUI.241	Howe, William E. House	61 Bigelow St	Quincy	c 1890
QUI.1368		35-49 Billings Rd	Quincy	1916
QUI.27	White, Charles E. House	101 Billings Rd	Quincy	c 1905
QUI.28	Parker, Francis W. Elementary School	148 Billings Rd	Quincy	1917
QUI.29	Moxon, Stephen O. House	47 Billings St	Quincy	c 1850
QUI.30	Curtin, James E. House	140 Billings St	Quincy	c 1880
QUI.504	Crosby - Bass - Quincy - Wendell House	7 Blake St	Quincy	1740
QUI.9079	Blue Hills Reservation Culvert System	Blue Hills Reserv	Quincy	r 1920
QUI.380	Duggan, William E. House	1-3 Bradford St	Quincy	1913
QUI.381		39 Bradford St	Quincy	c 1910
QUI.382		41-43 Bradford St	Quincy	c 1910
QUI.383	Saunders, William L. House	47 Bradford St	Quincy	c 1890
QUI.1275		23-25 Bridge St	Quincy	c 1900
QUI.192	Monahan, John D. House	28 Bridge St	Quincy	1912
QUI.193	McDonnell, Thomas House	31 Bridge St	Quincy	c 1890
QUI.1274	McDonnell, Thomas Barn	33 Bridge St	Quincy	c 1890
QUI.46	Spear, Elijah House	2 Brockton Ave	Quincy	1803
QUI.569	McFarland Hardware Store	9 Brook St	Quincy	c 1890
QUI.570	Corthell, Wendel B. House	42 Brook St	Quincy	c 1900
QUI.571	Beacon Apartments	61-63 Brook St	Quincy	c 1890
QUI.413	Lincoln Elementary School	100 Brooks Ave	Quincy	1892
QUI.442	Nelson, John R. House	4 Brunswick St	Quincy	1908
QUI.406	Linder, Carl W. A. House	5-7 Buckley St	Quincy	c 1910
QUI.407		46-48 Buckley St	Quincy	c 1890
QUI.408	Finnish Evangelical Mission Church of Quincy	47 Buckley St	Quincy	1900
QUI.932	Quincy Granite Railway	Bunker Hill Ln	Quincy	1826
QUI.913	Monti Sculpture	Burgin Pkwy	Quincy	1981
QUI.9095	Adams, John Statue	Burgin Pkwy	Quincy	1977
QUI.202	Quincy Homestead	34 Butler Rd	Quincy	1686
QUI.203	Dorothy Q Apartments	36 Butler Rd	Quincy	1929
QUI.204	Cavanagh, John T. House	56 Butler Rd	Quincy	1895
QUI.456	Haggerty, Charles House	21 California Ave	Quincy	c 1860
QUI.1035		15 Cedar Pl	Quincy	1940
QUI.554	Perry, Augustus House	105 Cedar St	Quincy	c 1925
QUI.403	Brooks - Piper House	206 Centre St	Quincy	1856
QUI.229	Bradford, William A. Building - Bradford Hall	6-10 Chestnut St	Quincy	c 1907

Inv. No.	Property Name	Street	Town	Year
QUI.230	Strand Theatre	12-14 Chestnut St	Quincy	1927
QUI.231		16-20 Chestnut St	Quincy	1929
QUI.1416	Smith, Loran Barber Shop - Brown Gift Shop	17-19 Chestnut St	Quincy	c 1930
QUI.232		24 Chestnut St	Quincy	1947
QUI.233	Faxon Town House	26 Chestnut St	Quincy	1874
QUI.234	Faxon, Dr. William Lyman Townhouse	28 Chestnut St	Quincy	1874
QUI.235	Faxon Town House	30 Chestnut St	Quincy	1874
QUI.1417	Nelson, Arthur T. Block	31-39 Chestnut St	Quincy	1948
QUI.236	Chase, Richard D. and Company Insurance Building	32 Chestnut St	Quincy	c 1980
QUI.918	Chickatawbut Observation Tower	Chickatawbut Rd	Quincy	r 1935
QUI.935	Massachusetts Hornfels - Braintree Slate Quarry	Chickatawbut Rd	Quincy	
QUI.9077	Blue Hills Reservation Parkway - Chickatawbut Road	Chickatawbut Rd	Quincy	1897
QUI.309	Glidden, Henry House	96 Chubbuck St	Quincy	c 1840
QUI.486		139-141 Clay St	Quincy	c 1860
QUI.1036		9 Clifton St	Quincy	1915
QUI.1037		10 Clifton St	Quincy	c 1915
QUI.1038		15 Clifton St	Quincy	c 1915
QUI.1039		16 Clifton St	Quincy	c 1915
QUI.1040		17 Clifton St	Quincy	c 1915
QUI.1041		20 Clifton St	Quincy	1956
QUI.197	District Courthouse of East Quincy	12-24 Coddington St	Quincy	1911
QUI.198	Coddington School	26-44 Coddington St	Quincy	1909
QUI.199		51 Coddington St	Quincy	c 1860
QUI.220	Quincy Technical Education School	52 Coddington St	Quincy	1967
QUI.200	Hersey, Ebenezer B. House	57 Coddington St	Quincy	1843
QUI.201	Quincy High School	70 Coddington St	Quincy	1924
QUI.404	Barnicoat, S. H. Monuments	114 Columbia St	Quincy	c 1890
QUI.42	Roberts House	87 Conant Rd	Quincy	c 1915
QUI.9097	Granite Worker, The	Copeland St	Quincy	1994
QUI.458	West Quincy Fire Station	160 Copeland St	Quincy	1939
QUI.459	Woddick, John House	329 Copeland St	Quincy	1876
QUI.1419	Kincaide, Henry L. Building	1-13 Cottage Ave	Quincy	1909
QUI.237	Hall, John Funeral Home	19 Cottage Ave	Quincy	1927
QUI.1420	Shea, Henry J. Building	23-29 Cottage Ave	Quincy	1947
QUI.1421	Richards, George A. Building	24 Cottage Ave	Quincy	1924
QUI.447	Frediani, J. House	19 Crabtree Rd	Quincy	1935

Inv. No.	Property Name	Street	Town	Year
QUI.448	Oakes, Owen F. House	40 Crabtree Rd	Quincy	1929
QUI.449	Holmes, Daniel J. House	66 Crabtree Rd	Quincy	1928
QUI.804	Hall Place Cemetery	Crescent St	Quincy	c 1840
QUI.931	Winthrop, John Jr. Iron Furnace	Crescent St	Quincy	1644
QUI.461	Saint Mary's Catholic Church	115 Crescent St	Quincy	1917
QUI.805	Saint Mary's Cemetery	115 Crescent St	Quincy	c 1840
QUI.462	Badger, William E. House	116 Crescent St	Quincy	c 1890
QUI.1369		136 Crescent St	Quincy	1910
QUI.463	Burke, James F. House	33 Cross St	Quincy	c 1860
QUI.464	Hayes, Daniel House	64 Cross St	Quincy	c 1870
QUI.1404	Saint Thomas Aquinas Hall	40 Darrow Rd	Quincy	c 1965
QUI.117	Cavanagh, John T. House	35 Darrow St	Quincy	1906
QUI.118	Hodgkinson Farm Summer House	39 Darrow St	Quincy	1902
QUI.496	Chase, William M. House	192 Davis St	Quincy	c 1900
QUI.1422	Norfolk County District Courthouse	1 Dennis Ryan Pkwy	Quincy	1972
QUI.607		43 Dimmock St	Quincy	r 1930
QUI.608	Bornstein, Estelle House	44 Dimmock St	Quincy	1902
QUI.609	Daniele, Benedette House	46-48 Dimmock St	Quincy	c 1938
QUI.610	Grossman, Joseph B. II House	70 Dimmock St	Quincy	1941
QUI.611	Bennett, Edwin C. House	79 Dimmock St	Quincy	1915
QUI.612	Yerxa, Percy S. House	82 Dimmock St	Quincy	1927
QUI.613	Karp, David House	85 Dimmock St	Quincy	c 1948
QUI.614		91-93 Dimmock St	Quincy	1902
QUI.615	Thomas, Sadie E. House	117-119 Dimmock St	Quincy	c 1925
QUI.616	Slate, Paul B. House	118 Dimmock St	Quincy	c 1955
QUI.617		126 Dimmock St	Quincy	1926
QUI.618	Burgin, Thomas S. House	11 Dixwell Ave	Quincy	1952
QUI.619	McIntire, Isabel S. House	17 Dixwell Ave	Quincy	1917
QUI.620	Neal, Forest I. House	20 Dixwell Ave	Quincy	c 1920
QUI.90	McIntire, Herman F. House	21 Dixwell Ave	Quincy	c 1904
QUI.621	Warriner, Robert House	27 Dixwell Ave	Quincy	1917
QUI.622	Glover, Maud F. House	31 Dixwell Ave	Quincy	1914
QUI.623		32 Dixwell Ave	Quincy	1941
QUI.624	Howland, Helen M. House	37 Dixwell Ave	Quincy	c 1915
QUI.625		43 Dixwell Ave	Quincy	1923
QUI.91	Parker, Albert M. House	49 Dixwell Ave	Quincy	c 1900
QUI.92	McIntire, Herman House	55 Dixwell Ave	Quincy	c 1900
QUI.626	Faxon, Henry M. House	65 Dixwell Ave	Quincy	1930

Inv. No.	Property Name	Street	Town	Year
QUI.627	Keyes, John Brooks House	66 Dixwell Ave	Quincy	1924
QUI.628	Beck, Jeffrey House	69 Dixwell Ave	Quincy	1981
QUI.629	Wall, Ruth W. House	74 Dixwell Ave	Quincy	c 1925
QUI.630	Alden, Arthur H. House	80 Dixwell Ave	Quincy	1929
QUI.93	Papani, Nicholas House	85 Dixwell Ave	Quincy	1938
QUI.631	Grossi, Virgilio House	86 Dixwell Ave	Quincy	c 1976
QUI.632	Fowler, Ada G. House	94 Dixwell Ave	Quincy	c 1925
QUI.633	McClintock, Dr. Walter A. House	95 Dixwell Ave	Quincy	c 1940
QUI.634	Allen, Robert J. House	99 Dixwell Ave	Quincy	1935
QUI.635	Faxon, H. M. House	100 Dixwell Ave	Quincy	1923
QUI.636	Westland, Russell House	103 Dixwell Ave	Quincy	1924
QUI.637	Jackson, Merton House	110 Dixwell Ave	Quincy	1948
QUI.638	DiPanfilo, Nazzareno House	111 Dixwell Ave	Quincy	c 1955
QUI.639	Wardwell, William House	116 Dixwell Ave	Quincy	c 1948
QUI.640		117 Dixwell Ave	Quincy	1981
QUI.94	Hall, Edward House	122 Dixwell Ave	Quincy	1836
QUI.922	Standish, Miles Cairn	Dorchester St	Quincy	1895
QUI.937	Squaw Rock Park	Dorchester St	Quincy	1976
QUI.503	Gardner Hall - Eastern Nazarene College	23 East Elm Ave	Quincy	1930
QUI.950	Water Tank and Fire Pump Station	97 East Howard St	Quincy	1968
QUI.951	Oil Storage Pit	97 East Howard St	Quincy	1922
QUI.952	Outfitting Pier #1	97 East Howard St	Quincy	1910
QUI.953	Outfitting Pier #2	97 East Howard St	Quincy	1901
QUI.954	Outfitting Pier #3	97 East Howard St	Quincy	c 1942
QUI.955	Outfitting Pier #4	97 East Howard St	Quincy	
QUI.956	Assembly Basin #6	97 East Howard St	Quincy	
QUI.957	Assembly Basin #7	97 East Howard St	Quincy	
QUI.958	Assembly Basin #8	97 East Howard St	Quincy	
QUI.959	Construction Basin #11	97 East Howard St	Quincy	
QUI.960	Construction Basin #12	97 East Howard St	Quincy	
QUI.961	North Welding Platen	97 East Howard St	Quincy	
QUI.962	South Welding Platen	97 East Howard St	Quincy	
QUI.963	Welding Platen #1	97 East Howard St	Quincy	
QUI.964	Welding Platen #2	97 East Howard St	Quincy	
QUI.966	Gantry Crane	97 East Howard St	Quincy	
QUI.967	Nielson Gantry Crane	97 East Howard St	Quincy	1968
QUI.968	XYZ Gantry Crane and Towers	97 East Howard St	Quincy	1917
QUI.969	Dravo Revolving Cranes and Tower	97 East Howard St	Quincy	1939

Inv. No.	Property Name	Street	Town	Year
QUI.970	Nielson Gantry Crane	97 East Howard St	Quincy	1964
QUI.971	Shawbox Gantry Crane	97 East Howard St	Quincy	1958
QUI.972	American Revolving Crane	97 East Howard St	Quincy	c 1940
QUI.973	Washington Revolving Crane	97 East Howard St	Quincy	1958
QUI.974	American Revolving Crane	97 East Howard St	Quincy	1949
QUI.975	Clyde Revolving Crane	97 East Howard St	Quincy	c 1957
QUI.976	American Revolving Crane	97 East Howard St	Quincy	c 1957
QUI.977	Wellman - Seaver Gantry Crane	97 East Howard St	Quincy	1901
QUI.978	Whiting Gantry Crane	97 East Howard St	Quincy	1939
QUI.979	Clyde Revolving Crane	97 East Howard St	Quincy	1978
QUI.980	McMyler Hammerhead Revolving Crane	97 East Howard St	Quincy	1916
QUI.981	Goliath Gantry Crane	97 East Howard St	Quincy	1975
QUI.982	Hedde - Linden Revolving Crane	97 East Howard St	Quincy	1984
QUI.983	High Structure and Cranes	97 East Howard St	Quincy	1942
QUI.984	Fore River Railroad and Diesel Engines	97 East Howard St	Quincy	c 1901
QUI.985	Vessel Docking Pilings	97 East Howard St	Quincy	
QUI.986	Diving Barge	97 East Howard St	Quincy	
QUI.987	Dredging Barge	97 East Howard St	Quincy	
QUI.988	Fuel Oil Storage Tanks	97 East Howard St	Quincy	
QUI.989	Warming Shed	97 East Howard St	Quincy	
QUI.990	Punch-out Sheds	97 East Howard St	Quincy	1940
QUI.1282	Number 6 Warehouse	97 East Howard St	Quincy	1941
QUI.1283	Number 2 Warehouse	97 East Howard St	Quincy	1901
QUI.1284	Weld Assembly Building	97 East Howard St	Quincy	1941
QUI.1285	Number 4 Warehouse	97 East Howard St	Quincy	1930
QUI.1286	Angle Layout Shop	97 East Howard St	Quincy	1901
QUI.1287	Lumber Storage Building	97 East Howard St	Quincy	1916
QUI.1288	Number 8 Warehouse	97 East Howard St	Quincy	1941
QUI.1289	Pipe and Copper Shop	97 East Howard St	Quincy	1917
QUI.1290	Joiner and Sheet Metal Shops	97 East Howard St	Quincy	1916
QUI.1291	Main Office Building	97 East Howard St	Quincy	1911
QUI.1292	Machine Shop	97 East Howard St	Quincy	1901
QUI.1293	Fabrication Shop Number 1	97 East Howard St	Quincy	1916
QUI.1294	Paint Spray Shop	97 East Howard St	Quincy	1968
QUI.1295	Yard Garage	97 East Howard St	Quincy	1937
QUI.1296	Main Gate House	97 East Howard St	Quincy	1917
QUI.1297	Main Gate House	97 East Howard St	Quincy	1913
QUI.1298	Liquid Propane Gas Station	97 East Howard St	Quincy	1959

Inv. No.	Property Name	Street	Town	Year
QUI.1299	South Street Gate House	97 East Howard St	Quincy	1943
QUI.1300	Research and Development Building	97 East Howard St	Quincy	1941
QUI.1301	Maintenance - Carpenter Shop	97 East Howard St	Quincy	1917
QUI.1302	Administration Building	97 East Howard St	Quincy	1930
QUI.1303	Toilet and Office Building	97 East Howard St	Quincy	1910
QUI.1304	Number 5 Warehouse	97 East Howard St	Quincy	1919
QUI.1305	Small Parts Factory and Blast Building	97 East Howard St	Quincy	1910
QUI.1306	Paint Shop	97 East Howard St	Quincy	1916
QUI.1307	Yard Office Building Number 1	97 East Howard St	Quincy	1920
QUI.1308	Compressor Station Number 1	97 East Howard St	Quincy	1958
QUI.1309	Number 1 Power House	97 East Howard St	Quincy	1917
QUI.1310	Central Food Station	97 East Howard St	Quincy	1965
QUI.1311	Blacksmith Shop	97 East Howard St	Quincy	1905
QUI.1312	Electrical Shop	97 East Howard St	Quincy	1905
QUI.1313	Shot Blast and Paint Facility	97 East Howard St	Quincy	1972
QUI.1314	North Food Station	97 East Howard St	Quincy	1968
QUI.1315	Pre-Operations Warehouse	97 East Howard St	Quincy	1983
QUI.1316	Maintenance - Plant Engineering Building	97 East Howard St	Quincy	1915
QUI.1317	Apprentice School	97 East Howard St	Quincy	1916
QUI.1318	Battery Charging Station	97 East Howard St	Quincy	1960
QUI.1319	Structural Office Building	97 East Howard St	Quincy	1930
QUI.1320	Phosphate Flushing Building	97 East Howard St	Quincy	1970
QUI.1321	Maintenance Department Storage	97 East Howard St	Quincy	1942
QUI.1322	Shape Shop - New Fabrication Wing	97 East Howard St	Quincy	1984
QUI.1323	Outside Machinists Shop	97 East Howard St	Quincy	1941
QUI.1324	Auxiliary Boiler House	97 East Howard St	Quincy	1943
QUI.1325	Number 2 Pipe Shop and Tanks	97 East Howard St	Quincy	1958
QUI.1326	Number 7 Warehouse	97 East Howard St	Quincy	1941
QUI.1329	Industrial Relations Building	97 East Howard St	Quincy	1942
QUI.1331	Way Foreman's Office	97 East Howard St	Quincy	1941
QUI.1334	Toilet and Locker Building	97 East Howard St	Quincy	1941
QUI.1336	Miscellaneous Storage Building	97 East Howard St	Quincy	1941
QUI.1337	Yard Office Building Number 2	97 East Howard St	Quincy	1941
QUI.1338	Number 2 Substation	97 East Howard St	Quincy	1941
QUI.1339	Asbestos Facility	97 East Howard St	Quincy	1941
QUI.1340	South Fire Pump Station	97 East Howard St	Quincy	1968
QUI.1341	Weld School and Graphic Arts Building	97 East Howard St	Quincy	1941
QUI.1342	Yard Office Building Number 3	97 East Howard St	Quincy	1942

Inv. No.	Property Name	Street	Town	Year
QUI.1344	Annealing Furnace Building	97 East Howard St	Quincy	1943
QUI.1345	Pre-Outfitting Building A	97 East Howard St	Quincy	1969
QUI.1346	Pre-Outfitting Building B	97 East Howard St	Quincy	1969
QUI.1347	Acetelyne Generating Building	97 East Howard St	Quincy	1959
QUI.1348	Rigging Loft	97 East Howard St	Quincy	1941
QUI.1349	Maintenance Sheet Metal Shop	97 East Howard St	Quincy	1942
QUI.1350	Number 3 Fabrication Shop	97 East Howard St	Quincy	1942
QUI.1351	Welding Substation - Pier 3	97 East Howard St	Quincy	1942
QUI.1352	Bulk Argon Storage Facility	97 East Howard St	Quincy	1982
QUI.1353	Toilet Building - Pier 3	97 East Howard St	Quincy	1943
QUI.1354	Main Hospital	97 East Howard St	Quincy	1943
QUI.1355	Toilet - First Aid Bldg. - Woman's Welding School	97 East Howard St	Quincy	1943
QUI.1356	Acetelyne Storage Building	97 East Howard St	Quincy	1942
QUI.1357	Welding Substation - Pier 2	97 East Howard St	Quincy	1941
QUI.1358	Way Foreman's Office	97 East Howard St	Quincy	1942
QUI.1359	Welding Substation - Basin Number 11	97 East Howard St	Quincy	1941
QUI.1360	Outfitting Building	97 East Howard St	Quincy	1943
QUI.1361	Quincy Diesel Locomotive Shop	97 East Howard St	Quincy	1968
QUI.1362	Bulk Argon Carbon Dioxide Facility	97 East Howard St	Quincy	1982
QUI.1403	Fore River Shipyard - X-Ray Building	97 East Howard St	Quincy	1942
QUI.934	Moswetuset Hummock	East Squantum St	Quincy	c 1600
QUI.17	Atlantic Methodist Church	50 East Squantum St	Quincy	1926
QUI.18	Waterhouse House	94 East Squantum St	Quincy	c 1870
QUI.19	Halloran, John House	99 East Squantum St	Quincy	1910
QUI.20	Billings, George B. House	185 East Squantum St	Quincy	1853
QUI.21	Gay - Walker - Appleton House	220 East Squantum St	Quincy	1820
QUI.22	Glover House	249 East Squantum St	Quincy	c 1798
QUI.437		935 East Squantum St	Quincy	c 1840
QUI.1042	Angell, Annie M. House	2 Edgemere Rd	Quincy	1905
QUI.1043		5 Edgemere Rd	Quincy	1947
QUI.1044		9 Edgemere Rd	Quincy	c 1909
QUI.1045	Grossman, Morton S. House	10-12 Edgemere Rd	Quincy	1962
QUI.1046	Page, Lotta House	15 Edgemere Rd	Quincy	1950
QUI.1047		16-18 Edgemere Rd	Quincy	r 1928
QUI.1048		17 Edgemere Rd	Quincy	1917
QUI.1049		20-22 Edgemere Rd	Quincy	c 1926
QUI.1050	McDougall, John H. House	24 Edgemere Rd	Quincy	r 1900
QUI.1051		25 Edgemere Rd	Quincy	1918

Inv. No.	Property Name	Street	Town	Year
QUI.216	Nowland, J. Martin House	31 Edgemere Rd	Quincy	1915
QUI.1052		37 Edgemere Rd	Quincy	1908
QUI.1053	Merrymount Manor Nursing Home	38 Edgemere Rd	Quincy	1911
QUI.1054		43 Edgemere Rd	Quincy	c 1912
QUI.1055		46 Edgemere Rd	Quincy	1911
QUI.1056		47 Edgemere Rd	Quincy	c 1928
QUI.1057		49 Edgemere Rd	Quincy	1917
QUI.1058	Pinkham, Charles A. House	53 Edgemere Rd	Quincy	1916
QUI.1059		57 Edgemere Rd	Quincy	1912
QUI.1060	Milwood, Marian C. House	58 Edgemere Rd	Quincy	1917
QUI.1061	Matthews, J. Walter House	62 Edgemere Rd	Quincy	1917
QUI.1062		63 Edgemere Rd	Quincy	1910
QUI.1063	Roberts, Wilbur T. House	68 Edgemere Rd	Quincy	1910
QUI.1064		71 Edgemere Rd	Quincy	1927
QUI.1065	Drake, Marie G. House	72 Edgemere Rd	Quincy	1917
QUI.1066	Stevens, Mabelle H. House	76 Edgemere Rd	Quincy	1916
QUI.1067		84 Edgemere Rd	Quincy	1921
QUI.1068		10 Edgewood Cir	Quincy	c 1915
QUI.1069		11 Edgewood Cir	Quincy	1924
QUI.1070		16-18 Edgewood Cir	Quincy	1924
QUI.1071		17 Edgewood Cir	Quincy	1924
QUI.1072		22 Edgewood Cir	Quincy	1924
QUI.1073		23 Edgewood Cir	Quincy	c 1923
QUI.1074		28 Edgewood Cir	Quincy	c 1916
QUI.1075		29 Edgewood Cir	Quincy	r 1924
QUI.1076		32 Edgewood Cir	Quincy	1915
QUI.1077		36 Edgewood Cir	Quincy	r 1915
QUI.1370		21 Edinboro Rd	Quincy	1928
QUI.1371		27 Edinboro Rd	Quincy	1928
QUI.1366		69 Edison Pk	Quincy	r 1900
QUI.281	Cranshaw, Robert House	25 Edison St	Quincy	c 1890
QUI.282	Souther, Frank A. House	26 Edison St	Quincy	c 1890
QUI.283	Higgins, Abbie House	36 Edison St	Quincy	c 1890
QUI.300	Quincy Point Junior High School	Edwards St	Quincy	1927
QUI.301	Damon, Amos E. House	39 Edwards St	Quincy	c 1880
QUI.287	Davis, Dr. Frank House	25 Elm St	Quincy	c 1890
QUI.288	Cotton, Rev. Henry House	52 Elm St	Quincy	c 1880
QUI.289	Adams, Judge Thomas Boylston House	79 Elm St	Quincy	1800

Inv. No.	Property Name	Street	Town	Year
QUI.568	Field, George H. House	34 Elmwood Ave	Quincy	c 1870
QUI.100	Ericson, Charles A. House	8-10 Euclid Ave	Quincy	1910
QUI.641	Morse, Joseph C. House	16 Fairmount Way	Quincy	1908
QUI.642		21 Fairmount Way	Quincy	c 1983
QUI.643	Nichols, Millie E. House	25 Fairmount Way	Quincy	1914
QUI.644	Groce, Joseph B. House	26 Fairmount Way	Quincy	1914
QUI.645		31 Fairmount Way	Quincy	1982
QUI.646	Underwood, Flora House	34 Fairmount Way	Quincy	1907
QUI.564	Wagner, Hattie C. House	60 Farrington St	Quincy	1908
QUI.565	Wagner, Hattie C. House	64 Farrington St	Quincy	1912
QUI.566		83 Farrington St	Quincy	c 1925
QUI.225	Farmer's Exchange	14 Faxon Ave	Quincy	c 1920
QUI.226		16 Faxon Ave	Quincy	c 1880
QUI.384	Pratt, Thomas - Faxon, Job Milkhouse	69 Faxon Ln	Quincy	c 1806
QUI.385	Pratt - Faxon House	75 Faxon Ln	Quincy	c 1806
QUI.386	Tallaksen, Christian House	139-141 Faxon Park Rd	Quincy	c 1908
QUI.1265	Nicholson, Louis House	147-149 Faxon Park Rd	Quincy	c 1908
QUI.1266	Gullicksen, Theodore House	151-153 Faxon Park Rd	Quincy	c 1908
QUI.919	Faxon Park Wall	Faxon Pk	Quincy	c 1930
QUI.944	Faxon Park	Faxon Pk	Quincy	1885
QUI.40	Foss, Fred R. House	59-63 Faxon Rd	Quincy	c 1910
QUI.572	Bass, J. A. House	275 Fayette St	Quincy	c 1860
QUI.573	Merrill, John C. House	281 Fayette St	Quincy	1910
QUI.367		16 Federal Ave	Quincy	c 1890
QUI.368	Granite Cutters International Association Building	18 Federal Ave	Quincy	1954
QUI.369	Fitts, Everett V. Warehouse	85 Federal Ave	Quincy	c 1910
QUI.506	Quincy Pumping Station	Fenno St	Quincy	1901
QUI.806	Sailor's Home Cemetery	Fenno St	Quincy	1861
QUI.129	Quincy Electric Light and Power Company	76 Field St	Quincy	1902
QUI.1372		25 Fifth Ave	Quincy	1928
QUI.1373		26 Fifth Ave	Quincy	1928
QUI.1374	Fore River Shipbuilding Company Worker Housing	68 Fifth Ave	Quincy	1918
QUI.1375	Fore River Shipbuilding Company Worker Housing	72 Fifth Ave	Quincy	1918
QUI.1376	Fore River Shipbuilding Company Worker Housing	76 Fifth Ave	Quincy	1918
QUI.285	Fore River Club House	Follett St	Quincy	1917
QUI.1367	Saint Paul's Methodist Church	4-14 Fort St	Quincy	1889

Inv. No.	Property Name	Street	Town	Year
QUI.179	Saint Paul's Methodist Church	6 Fort St	Quincy	1888
QUI.180	Bailey, Hanson House	20 Fort St	Quincy	c 1838
QUI.1423	Robinson, Rev. James H. House	15 Foster St	Quincy	1876
QUI.1424	Quincy B. P. O. E. Lodge #943	25 Foster St	Quincy	1876
QUI.1425	Mutual Building Corporation Offices	29 Foster St	Quincy	1953
QUI.323	Baxter, George Lewis House	40 Franklin St	Quincy	c 1850
QUI.324	Curtis, Charles House	76 Franklin St	Quincy	1845
QUI.325		103-107 Franklin St	Quincy	1940
QUI.326	Phipps - Wild - Kincaide House	106 Franklin St	Quincy	1921
QUI.327	Phipps - Wild - Kincaide House	108 Franklin St	Quincy	c 1890
QUI.328	Curtis, Samuel House	109 Franklin St	Quincy	1832
QUI.329	Rocco and Sons Barber Shop	112 Franklin St	Quincy	1955
QUI.330	Locke, George H. House	116 Franklin St	Quincy	r 1860
QUI.331	Hancock Tire Company Building	117 Franklin St	Quincy	1957
QUI.332	Crane, Joseph House	124-126 Franklin St	Quincy	1832
QUI.333	Adams, John Birthplace	133 Franklin St	Quincy	c 1681
QUI.334	Quincy Savings Bank	138 Franklin St	Quincy	1968
QUI.335	Adams, John Quincy Birthplace	141 Franklin St	Quincy	1663
QUI.336		144-150 Franklin St	Quincy	1925
QUI.337	Spargo House	160 Franklin St	Quincy	c 1890
QUI.338	Spargo, William T. House	164-166 Franklin St	Quincy	1910
QUI.339	Ferguson, Thomas House	172 Franklin St	Quincy	c 1890
QUI.340	Martin, William House	190 Franklin St	Quincy	c 1890
QUI.341	Miller, John L. House	211 Franklin St	Quincy	1892
QUI.342	Swanson, Julia M. House	217 Franklin St	Quincy	1926
QUI.343	Myers, Lemuel House	252 Franklin St	Quincy	c 1860
QUI.344	First Presbyterian Church of Quincy	270 Franklin St	Quincy	1960
QUI.345	Curtis, Thomas House	279 Franklin St	Quincy	c 1851
QUI.346	Curtis, Noah House	313 Franklin St	Quincy	1795
QUI.920	Adams, Abigail Cairn	340 Franklin St	Quincy	1896
QUI.947	Old Colony Railroad Furnace Brook Bridge	Furnace Brook	Quincy	1896
QUI.946	Old Colony Railroad Furnace Brook Parkway Bridge	Furnace Brook Pkwy	Quincy	1924
QUI.9080	Furnace Brook Parkway - Main Segment	Furnace Brook Pkwy	Quincy	1904
QUI.9081	Furnace Brook Parkway - Extension	Furnace Brook Pkwy	Quincy	1904
QUI.9082	Furnace Brook Parkway - I-93 Rotary and Bridges	Furnace Brook Pkwy	Quincy	r 1965
QUI.9083	Furnace Brook Parkway Culverts	Furnace Brook Pkwy	Quincy	r 1920

Inv. No.	Property Name	Street	Town	Year
QUI.9084	Furnace Brook Parkway Tree Canopy	Furnace Brook Pkwy	Quincy	r 1920
QUI.9085	Furnace Brook Parkway Extension - Mitres	Furnace Brook Pkwy	Quincy	r 1920
QUI.9086	Furnace Brook Parkway Extension Culvert	Furnace Brook Pkwy	Quincy	r 1920
QUI.9087	Furnace Brook Parkway Extenison Greenspace Mitres	Furnace Brook Pkwy	Quincy	r 1920
QUI.479		403-405 Furnace Brook Pkwy	Quincy	r 1905
QUI.1244		407-409 Furnace Brook Pkwy	Quincy	r 1905
QUI.1245		411-413 Furnace Brook Pkwy	Quincy	r 1905
QUI.1246		415-417 Furnace Brook Pkwy	Quincy	r 1905
QUI.1247		419-421 Furnace Brook Pkwy	Quincy	r 1905
QUI.1248		423-425 Furnace Brook Pkwy	Quincy	r 1905
QUI.1249		427-429 Furnace Brook Pkwy	Quincy	r 1905
QUI.480	Sandberg, Edward Gas Station	507 Furnace Brook Pkwy	Quincy	c 1929
QUI.556	Fitzgerald, Edmund B. House	563 Furnace Brook Pkwy	Quincy	1925
QUI.465	Crane, Thomas Library - West Quincy Branch	1240 Furnace Brook Pkwy	Quincy	1921
QUI.466	Willard Elementary School	1266 Furnace Brook Pkwy	Quincy	1891
QUI.405	Doble, E. H. House	1300 Furnace Brook Pkwy	Quincy	c 1880
QUI.372	Saint John's Church Rectory	21 Gay St	Quincy	c 1860
QUI.373	Litchfield, Liba House	32 Gay St	Quincy	c 1850
QUI.481	Gilmore Street, 15	15 Gilmore St	Quincy	1908
QUI.1078		6 Gilson Rd	Quincy	c 1962
QUI.215		11 Gilson Rd	Quincy	c 1900
QUI.1079	Cooney, W. G. House	14 Gilson Rd	Quincy	1884
QUI.1080	Gilson House	22 Gilson Rd	Quincy	1888
QUI.1081	Rogers, Harriet G. House	30 Gilson Rd	Quincy	1889
QUI.1082		32 Gilson Rd	Quincy	1888
QUI.647	Sullivan, M. T. House	15 Glendale Rd	Quincy	1917
QUI.648		16 Glendale Rd	Quincy	c 1956
QUI.649		17 Glendale Rd	Quincy	1923
QUI.650	Grossman, Esther L. House	19 Glendale Rd	Quincy	1924
QUI.651		20 Glendale Rd	Quincy	1956
QUI.652	Sullivan, Eleanor G. House	21 Glendale Rd	Quincy	r 1910
QUI.653		23 Glendale Rd	Quincy	r 1926
QUI.654	Dugan, Henry M. House	25 Glendale Rd	Quincy	1924
QUI.95	Neighborhood Club of Quincy	27 Glendale Rd	Quincy	1917
QUI.655		28 Glendale Rd	Quincy	1917
QUI.656	Emery, Walter House	36 Glendale Rd	Quincy	1912
QUI.657	Livingston, Edwin F. House	42 Glendale Rd	Quincy	c 1909

Inv. No.	Property Name	Street	Town	Year
QUI.658	Low, Russell E. House	50 Glendale Rd	Quincy	1911
QUI.659		60 Glendale Rd	Quincy	1918
QUI.660	Grossman, Louis House	63 Glendale Rd	Quincy	1930
QUI.661	Donlin, Edith A. House	64 Glendale Rd	Quincy	1921
QUI.662		67-69 Glendale Rd	Quincy	r 1910
QUI.663	DiTullio, John House	71 Glendale Rd	Quincy	1931
QUI.664	Szathmary, Dena House	72 Glendale Rd	Quincy	1925
QUI.665	Moorhead, Jennie C. House	74 Glendale Rd	Quincy	1914
QUI.666		75 Glendale Rd	Quincy	1916
QUI.667	Wilbas, Gustaf House	77-79 Glendale Rd	Quincy	1921
QUI.668	Clase, Henry J. House	78 Glendale Rd	Quincy	1919
QUI.669	Wilbas, Gustaf House	81-83 Glendale Rd	Quincy	c 1910
QUI.670		82 Glendale Rd	Quincy	1921
QUI.671		84 Glendale Rd	Quincy	1921
QUI.672	Anderson, Carl House	85-87 Glendale Rd	Quincy	c 1910
QUI.673	Lundin, Andrew E. House	89-91 Glendale Rd	Quincy	c 1910
QUI.674	Martin, Annie M. House	94 Glendale Rd	Quincy	1937
QUI.675	Carlson, Nils A. House	97-99 Glendale Rd	Quincy	1910
QUI.676	Peterson, Carl House	101-103 Glendale Rd	Quincy	1911
QUI.677		102 Glendale Rd	Quincy	c 1925
QUI.678		106 Glendale Rd	Quincy	1925
QUI.679		107-109 Glendale Rd	Quincy	1911
QUI.680	Erikson, A. William House	111-113 Glendale Rd	Quincy	r 1910
QUI.681		112 Glendale Rd	Quincy	1925
QUI.682		114 Glendale Rd	Quincy	1924
QUI.683		115-117 Glendale Rd	Quincy	1909
QUI.684		120-122 Glendale Rd	Quincy	1910
QUI.685	Pearson, Charles House	121-123 Glendale Rd	Quincy	1910
QUI.686		124-126 Glendale Rd	Quincy	1909
QUI.687		127-129 Glendale Rd	Quincy	1907
QUI.688		128-130 Glendale Rd	Quincy	1907
QUI.689		131-133 Glendale Rd	Quincy	1908
QUI.690	Cliffe, L. House	132-134 Glendale Rd	Quincy	r 1915
QUI.691	Spear, Mattie M. House	135-139 Glendale Rd	Quincy	r 1915
QUI.692	Ahlstrom, Axel G. House	136-140 Glendale Rd	Quincy	c 1910
QUI.693	Wigren, Charles V. House	142-144 Glendale Rd	Quincy	1906
QUI.694	Thompson, A. J. House	145-147 Glendale Rd	Quincy	r 1907
QUI.695	Gustafson, Shena House	146-150 Glendale Rd	Quincy	1903

Inv. No.	Property Name	Street	Town	Year
QUI.696	Lundgren, Gus E. House	152-156 Glendale Rd	Quincy	1908
QUI.697	Jacobson, Alfred House	158-160 Glendale Rd	Quincy	1906
QUI.698	Fredrikson, C. House	160-164 Glendale Rd	Quincy	c 1907
QUI.699	Erikson, A. William House	166-170 Glendale Rd	Quincy	1906
QUI.700	Person, Per House	172-176 Glendale Rd	Quincy	r 1900
QUI.701	Reis, Andrew E. House	180 Glendale Rd	Quincy	1903
QUI.702	Johnson, Erick House	182 Glendale Rd	Quincy	c 1907
QUI.703	Ahlstrom, Axel G. House	186-188 Glendale Rd	Quincy	r 1900
QUI.370	Stein, Gustaf House	87-89 Goddard St	Quincy	1907
QUI.303	Beth Israel Synagogue	33 Grafton St	Quincy	1918
QUI.1379		74 Graham St	Quincy	1918
QUI.519	Record, Jonathan Dexter House	39-41 Grandview Ave	Quincy	c 1890
QUI.520	Jewell, David L. House	48 Grandview Ave	Quincy	1887
QUI.521	Briggs, Horace House	94 Grandview Ave	Quincy	c 1890
QUI.522		103 Grandview Ave	Quincy	c 1895
QUI.523	Lovell, Lucius House	115 Grandview Ave	Quincy	c 1870
QUI.524		126 Grandview Ave	Quincy	c 1900
QUI.525	Bainbridge, Randolph House	133 Grandview Ave	Quincy	c 1900
QUI.526	Bailey, Herbert B. House	138-140 Grandview Ave	Quincy	c 1890
QUI.574		82 Granger St	Quincy	1929
QUI.575		86 Granger St	Quincy	1929
QUI.901	Burns, Robert Statue	Granite St	Quincy	1925
QUI.1426	Veazie, Francis A. Apartment House	154-164 Granite St	Quincy	1891
QUI.1427	Swedish Methodist Episcopal Church Rectory	166 Granite St	Quincy	c 1923
QUI.101	Salem Lutheran Church	199 Granite St	Quincy	1892
QUI.395	Smith, Alexander B. House	218 Granite St	Quincy	c 1890
QUI.396		267 Granite St	Quincy	c 1870
QUI.397	Gibson, Owen House	279 Granite St	Quincy	c 1860
QUI.398	Nightingale, Moses House	338 Granite St	Quincy	1823
QUI.399	Richard, James House	350 Granite St	Quincy	c 1880
QUI.400	Nightengale, Solomon House	429 Granite St	Quincy	c 1820
QUI.401	South Junior High School	444 Granite St	Quincy	1927
QUI.402	Nightingale, Jeremiah House	445 Granite St	Quincy	c 1839
QUI.1083		17 Greenleaf St	Quincy	1929
QUI.207	Quincy First Church of Christ Scientist	20 Greenleaf St	Quincy	1917
QUI.208	Baxter, Edwin N. House	32 Greenleaf St	Quincy	c 1870
QUI.1084	Merton, Edward House	35 Greenleaf St	Quincy	1893
QUI.1085	Perry, Maud L. House	39-41 Greenleaf St	Quincy	1913

Inv. No.	Property Name	Street	Town	Year
QUI.1086		40 Greenleaf St	Quincy	1984
QUI.1087	Sherman, C. T. House	44 Greenleaf St	Quincy	1892
QUI.1088	Davenport, Thomas B. House	45 Greenleaf St	Quincy	1910
QUI.209	Pierce, Curtis W. House	52 Greenleaf St	Quincy	1914
QUI.1089		53 Greenleaf St	Quincy	1926
QUI.210	Sheppard, Eben W. House	58 Greenleaf St	Quincy	c 1890
QUI.1090		59 Greenleaf St	Quincy	r 1928
QUI.1091		65 Greenleaf St	Quincy	1929
QUI.1092		66 Greenleaf St	Quincy	1973
QUI.1093		69 Greenleaf St	Quincy	1915
QUI.211	Barker, George A. House	74 Greenleaf St	Quincy	c 1870
QUI.1094	MacKay, Martha C. House	75 Greenleaf St	Quincy	1913
QUI.1095		83 Greenleaf St	Quincy	1921
QUI.1096	Crestview Nursing Home	86 Greenleaf St	Quincy	1965
QUI.1097		87 Greenleaf St	Quincy	c 1921
QUI.1098	Southworth, E. House	94 Greenleaf St	Quincy	r 1895
QUI.1099		96 Greenleaf St	Quincy	1950
QUI.212	Curtis, Charles W. House	100 Greenleaf St	Quincy	c 1870
QUI.213	Barker, Henry F. House	103 Greenleaf St	Quincy	1871
QUI.1100	Claflin, R. F. House	106 Greenleaf St	Quincy	1883
QUI.1101		111 Greenleaf St	Quincy	1926
QUI.1102		112 Greenleaf St	Quincy	1959
QUI.1103		115 Greenleaf St	Quincy	1926
QUI.1104		118 Greenleaf St	Quincy	1969
QUI.1105	Swanson, Matthew House	119 Greenleaf St	Quincy	1926
QUI.1106		124 Greenleaf St	Quincy	c 1917
QUI.214	Currier, J. Frank House	125 Greenleaf St	Quincy	1902
QUI.1107		128 Greenleaf St	Quincy	1919
QUI.507	Walker Apartment Building	32 Greenwood Ave	Quincy	c 1932
QUI.310	McLoon House	110-112 Grove St	Quincy	c 1900
QUI.1380	Fuller, F. Wesley House	80 Hall Pl	Quincy	c 1886
QUI.178	Edwards, Clarence House	34 Hancock Ct	Quincy	1843
QUI.161	Quincy Station - MBTA Station and Garage	Hancock St	Quincy	1971
QUI.909	Quincy Doughboy World War I Statue	Hancock St	Quincy	1924
QUI.943	Liberty Tree Park	Hancock St	Quincy	1959
QUI.945	Adams, Abigail Statue	Hancock St	Quincy	1997
QUI.10	Murray and Tregurtha Marine Engine Company	2 Hancock St	Quincy	1918
QUI.11	North Quincy Junior High School	318 Hancock St	Quincy	1926

Inv. No.	Property Name	Street	Town	Year
QUI.12	Adams - Jenkins House	350 Hancock St	Quincy	1855
QUI.1381		385-393 Hancock St	Quincy	c 1908
QUI.13	Sacred Heart Church	386 Hancock St	Quincy	1948
QUI.14	Rawson - Billings House	472 Hancock St	Quincy	1810
QUI.470	Saint Chrysostom's Episcopal Church	529 Hancock St	Quincy	1950
QUI.471		595 Hancock St	Quincy	1907
QUI.472	Quincy Trust Company	651 Hancock St	Quincy	c 1930
QUI.473		652 Hancock St	Quincy	c 1910
QUI.474	Saint Ann's Roman Catholic Church	755 Hancock St	Quincy	1940
QUI.1410	Saint Ann's Roman Catholic Church Garage	755 Hancock St	Quincy	c 1940
QUI.1411	Saint Ann's Roman Catholic Church Shed	755 Hancock St	Quincy	c 2000
QUI.9093	Saint Ann's Church Ecclesiastical Dioramas	755 Hancock St	Quincy	
QUI.475	Saint Ann's Roman Catholic Church Rectory	757 Hancock St	Quincy	c 1940
QUI.476	Winfield House	853 Hancock St	Quincy	r 1883
QUI.477	Quincy Car Barns	954 Hancock St	Quincy	1929
QUI.478	Pitts, Michael House	968 Hancock St	Quincy	c 1900
QUI.133	Quincy Massachusetts Army National Guard Armory	1000 Hancock St	Quincy	1924
QUI.1402	Quincy Army National Guard Armory Garage	1000 Hancock St	Quincy	1950
QUI.134	Temple Beth El	1001 Hancock St	Quincy	1958
QUI.135		1011 Hancock St	Quincy	1954
QUI.136	Quincy High School	1012 Hancock St	Quincy	1894
QUI.137	Executive House Condominiums	1025 Hancock St	Quincy	1963
QUI.138		1043-1051 Hancock St	Quincy	1923
QUI.1108		1050 Hancock St	Quincy	c 1955
QUI.1109	Mirkin, Michael Block	1052-1060 Hancock St	Quincy	c 1923
QUI.139	Spear, Horace Baxter House	1065 Hancock St	Quincy	c 1900
QUI.140	Spear, Horace Baxter House	1067 Hancock St	Quincy	c 1900
QUI.141	New England Telephone and Telegraph Company	1070 Hancock St	Quincy	1940
QUI.142	Kendon Building	1073 Hancock St	Quincy	1965
QUI.143		1085-1087 Hancock St	Quincy	1916
QUI.144		1089 Hancock St	Quincy	1928
QUI.145		1095 Hancock St	Quincy	1917
QUI.146	Woodward Institute	1098 Hancock St	Quincy	c 1893
QUI.147	Quincy Health Center	1120 Hancock St	Quincy	1950
QUI.148	Goodyear Tire and Auto Service Station	1134 Hancock St	Quincy	1959
QUI.149	Dimmock Building	1143-1163 Hancock St	Quincy	1928

Inv. No.	Property Name	Street	Town	Year
QUI.150		1144 Hancock St	Quincy	1953
QUI.151	Shawmut Bank Building	1150 Hancock St	Quincy	1985
QUI.152	Masonic Temple	1156 Hancock St	Quincy	1926
QUI.153	Quincy Savings Bank	1200 Hancock St	Quincy	1975
QUI.154	Flynn, Charles A. Insurance Office	1205 Hancock St	Quincy	c 1940
QUI.155	Elks Building	1218-1222 Hancock St	Quincy	1924
QUI.156	Munroe Building	1227-1249 Hancock St	Quincy	1929
QUI.157	Savil, Josiah House	1230 Hancock St	Quincy	1829
QUI.158		1246-1250 Hancock St	Quincy	c 1920
QUI.159	Bargain Center	1258-1270 Hancock St	Quincy	1937
QUI.942	Constitution Commons - McIntyre Mall	1267-1299 Hancock St	Quincy	1981
QUI.9100	USS Quincy Memorial	1267-1299 Hancock St	Quincy	1975
QUI.914	McIntyre, Capt. William F. Monument	1269 Hancock St	Quincy	1981
QUI.162	Quincy Town Hall	1305 Hancock St	Quincy	1844
QUI.163	United First Parish Church	1306 Hancock St	Quincy	1828
QUI.802	Hancock Cemetery	1307-1349 Hancock St	Quincy	c 1640
QUI.164	Adams Building	1342-1368 Hancock St	Quincy	c 1889
QUI.165	Town House - School House	1357-1359 Hancock St	Quincy	1817
QUI.166	Quincy Savings Bank	1370 Hancock St	Quincy	1897
QUI.167	Norfolk County Trust Company	1381 Hancock St	Quincy	1924
QUI.168		1384-1388 Hancock St	Quincy	c 1900
QUI.169	Quincy Center Plaza	1385 Hancock St	Quincy	1982
QUI.170		1387-1399 Hancock St	Quincy	1902
QUI.171	Granite Trust Company	1400 Hancock St	Quincy	1929
QUI.172	Greenleaf Building	1419 Hancock St	Quincy	1876
QUI.1429	Anastos Building	1429 Hancock St	Quincy	c 1890
QUI.1430	Durgin and Merrill Block	1433-1439 Hancock St	Quincy	1887
QUI.1431	Fanny Farmer Candy Shop	1441 Hancock St	Quincy	c 1931
QUI.1432	Kresge, S. S. Building	1445-1453 Hancock St	Quincy	1924
QUI.1433	Adelle Millinery Shop	1450 Hancock St	Quincy	c 1945
QUI.1434	Norfolk Building	1452-1462 Hancock St	Quincy	1935
QUI.1435	Guay's System Bakery	1455 Hancock St	Quincy	1929
QUI.173	Adams Arcade	1469-1489 Hancock St	Quincy	1928
QUI.174	Quincy Trust Company Building	1486 Hancock St	Quincy	1918
QUI.1436	Kincaide, Henry L. Building	1495-1497 Hancock St	Quincy	1896
QUI.1437	Kincaide, Henry L. Block	1500 Hancock St	Quincy	1913
QUI.1438	Kincaide, Henry L. Block	1504 Hancock St	Quincy	1913
QUI.175	Music Hall Building	1513-1537 Hancock St	Quincy	1897

Inv. No.	Property Name	Street	Town	Year
QUI.1439	Cliveden Building	1513-1537 Hancock St	Quincy	1915
QUI.1440	Woolworth's Department Store	1543-1557 Hancock St	Quincy	1948
QUI.1441	Asper, Morris Building	1546 Hancock St	Quincy	1927
QUI.1442	Sherman Block	1562 Hancock St	Quincy	1923
QUI.1443	Touraine Building	1563 Hancock St	Quincy	1949
QUI.1482	Sears & Roebuck Department Store - Quincy Theater	1563-1597 Hancock St	Quincy	1940
QUI.1478	Sherman Block	1570-1576 Hancock St	Quincy	1924
QUI.1479	Lamb Building	1586-1594 Hancock St	Quincy	1924
QUI.1480		1596-1602 Hancock St	Quincy	1935
QUI.176	Sternberg, Nathan Block	1625-1639 Hancock St	Quincy	c 1920
QUI.1444	Oyster House Restaurant	1657 Hancock St	Quincy	c 1934
QUI.514		33 Hatherly Rd	Quincy	c 1940
QUI.493	Boston Gear Works	14 Hayward St	Quincy	1909
QUI.290	High School Avenue, 25	25 High School Ave	Quincy	c 1850
QUI.291	Quincy Dispensary	26 High School Ave	Quincy	1916
QUI.292	Crane, Samuel House	30 High School Ave	Quincy	c 1860
QUI.390	White - Glover House	32 High St	Quincy	c 1830
QUI.533	Wiley, Stephen B. House	314-316 Highland Ave	Quincy	c 1890
QUI.534	Faulds, Thomas A. House	346 Highland Ave	Quincy	1925
QUI.535	Richards, Alfred H. House	354 Highland Ave	Quincy	1923
QUI.536	Burgess, Frank House	355 Highland Ave	Quincy	1913
QUI.537	Sparrow, Josiah A. House	380 Highland Ave	Quincy	c 1890
QUI.538		400 Highland Ave	Quincy	c 1880
QUI.539	Jennings, Frederick W. House	401 Highland Ave	Quincy	c 1890
QUI.540	Roach, Charles House	419 Highland Ave	Quincy	1911
QUI.516	Manuelian, Harold House	120 Hillside Ave	Quincy	1934
QUI.443	Squantum Elementary School	50 Huckins Ave	Quincy	1919
QUI.444	Squantum Fire Station	86 Huckins Ave	Quincy	1943
QUI.41	Hunt Street, 51	51 Hunt St	Quincy	c 1910
QUI.1110	Lovejoy, Edward House	32 Huntley St	Quincy	1912
QUI.1111		36 Huntley St	Quincy	1915
QUI.1112		40 Huntley St	Quincy	1915
QUI.1113		44 Huntley St	Quincy	1915
QUI.1114		48 Huntley St	Quincy	1915
QUI.1115		54 Huntley St	Quincy	1915
QUI.1116		58 Huntley St	Quincy	1921
QUI.1117		62 Huntley St	Quincy	1917

Inv. No.	Property Name	Street	Town	Year
QUI.1118		68 Huntley St	Quincy	1917
QUI.347	Barnicoat, Frederick H. House	1 Independence Ave	Quincy	c 1890
QUI.348	Barnicoat, Frederick H. House	7-9 Independence Ave	Quincy	1920
QUI.349	Shell Gas Station	10 Independence Ave	Quincy	1947
QUI.350	Marchionne, A. J. Insurance - Johnson Bakery	11 Independence Ave	Quincy	1955
QUI.351	Adams Service Station	19 Independence Ave	Quincy	1961
QUI.352	Shop and Save Supermarket	20 Independence Ave	Quincy	1947
QUI.353	Milne, Andrew House	38 Independence Ave	Quincy	c 1890
QUI.354	Webber, Louis P. House	51 Independence Ave	Quincy	c 1900
QUI.355	Smith, William A. House	61 Independence Ave	Quincy	r 1900
QUI.1273	Leaman, Oliver House	62 Independence Ave	Quincy	r 1900
QUI.356	Gleason, Jedediah F. House	65 Independence Ave	Quincy	c 1898
QUI.357	Mackedon, Francis House	71 Independence Ave	Quincy	c 1900
QUI.1264	Farquharson, William House	75 Independence Ave	Quincy	r 1900
QUI.425		41-43 Jackson St	Quincy	c 1870
QUI.1119	Taylor, Fannie M. House	14 Johnson Ave	Quincy	1885
QUI.1120	Taylor, Fannie M. House	18 Johnson Ave	Quincy	1885
QUI.47	Braintree - Weymouth Pumping Station	Kilby St	Quincy	1933
QUI.302	Webster, Daniel Elementary School	Lancaster St	Quincy	1916
QUI.1382		74-76 Lawn Ave	Quincy	1918
QUI.742	Jacobson, John House	7 Lawton Rd	Quincy	1938
QUI.433	Malnati Block	121 Liberty St	Quincy	1899
QUI.434		163 Liberty St	Quincy	c 1908
QUI.555	Douse, Charles V. House	10 Lillian Rd	Quincy	1930
QUI.545	Streeter, Wyman H. House	20 Lincoln Ave	Quincy	c 1903
QUI.530	Wollaston Congregational Church	47-57 Lincoln Ave	Quincy	1915
QUI.546	Higgins, Samuel J. House	74 Lincoln Ave	Quincy	c 1890
QUI.547	Frame, Anne M. House	78 Lincoln Ave	Quincy	c 1900
QUI.548	Chandler, Eliab W. House	109 Lincoln Ave	Quincy	c 1890
QUI.1121	Prunier, Matilda E. House	5-7 Linden Ct	Quincy	1923
QUI.1122		9-11 Linden Ct	Quincy	1923
QUI.1123		12-14 Linden Ct	Quincy	1925
QUI.1124		13-15 Linden Ct	Quincy	1925
QUI.492	Tubular Rivet and Stud Company	Linden St	Quincy	1875
QUI.993	Long Island Bridge over Quincy Bay	Long Island	Quincy	1949
QUI.304		5 Main St	Quincy	c 1902
QUI.119	Hough's Neck Congregational Church	308 Manet Ave	Quincy	1931
QUI.228		14-18 Maple St	Quincy	1941

Inv. No.	Property Name	Street	Town	Year
QUI.1125	Tilton, Charles B. House	31 Marginal Rd	Quincy	1922
QUI.996	Nantucket Lightship I - Lightship WAL-612	Marina Bay	Quincy	1950
QUI.505	Wollaston Park Apartments	71 Marlboro St	Quincy	1927
QUI.414	Marsh, Edwin W. House	17 Marsh St	Quincy	c 1851
QUI.415		21 Marsh St	Quincy	c 1895
QUI.416	Penniman, Stephen House	27 Marsh St	Quincy	1845
QUI.267	Hall, John House	1-3 McGrath Hwy	Quincy	1892
QUI.1446	Quincy Rehabilitation and Nursing Center	11 McGrath Hwy	Quincy	1965
QUI.268	Bradford, William A. House	116-118 McGrath Hwy	Quincy	c 1900
QUI.115	Tilley, William House	64 Mears Ave	Quincy	c 1880
QUI.1465	Quincy American Legion Post #95	2 Mechanic St	Quincy	1934
QUI.1466	Brown, William E. House	6-8 Mechanic St	Quincy	1893
QUI.1467	Everett, Bryan D. House	10 Mechanic St	Quincy	c 1910
QUI.1468	Pactovis, Bertha House	15 Mechanic St	Quincy	1928
QUI.1469	Baxter, William Wild House	16 Mechanic St	Quincy	c 1858
QUI.1470	Thomas, Gershom B. House	18 Mechanic St	Quincy	1910
QUI.1471	Hardwick House	28-30 Mechanic St	Quincy	1870
QUI.206	New England Telephone Building	10 Merrymount Rd	Quincy	c 1906
QUI.1126	Wilson, W. B. House	18 Merrymount Rd	Quincy	1891
QUI.1127	Coleman, Mary House	23-25 Merrymount Rd	Quincy	1923
QUI.1128	Tilton, Eliza M. House	24 Merrymount Rd	Quincy	1891
QUI.1129		27 Merrymount Rd	Quincy	1925
QUI.1130		47 Merrymount Rd	Quincy	c 1912
QUI.1131		51 Merrymount Rd	Quincy	c 1912
QUI.1132	MacFarlane, George House	54 Merrymount Rd	Quincy	r 1900
QUI.1133		55 Merrymount Rd	Quincy	1912
QUI.1134		56 Merrymount Rd	Quincy	1924
QUI.1135		58 Merrymount Rd	Quincy	1923
QUI.1136		59 Merrymount Rd	Quincy	1913
QUI.1137	Adams, Carl G. House	64-68 Merrymount Rd	Quincy	1903
QUI.1138		65 Merrymount Rd	Quincy	1912
QUI.1139	Brogan, James House	72 Merrymount Rd	Quincy	1927
QUI.1140	Parker, Alice House	81-83 Merrymount Rd	Quincy	1897
QUI.1141	Whitman, Herbert T. House	87 Merrymount Rd	Quincy	1897
QUI.1142	Cossaboom, E. S. House	91 Merrymount Rd	Quincy	1916
QUI.1143	Horton, Franklin P. House	94 Merrymount Rd	Quincy	r 1900
QUI.1144		95 Merrymount Rd	Quincy	1909
QUI.1145		97-99 Merrymount Rd	Quincy	c 1916

Inv. No.	Property Name	Street	Town	Year
QUI.1146	Bixby, Martha W. House	100 Merrymount Rd	Quincy	1895
QUI.1147		103 Merrymount Rd	Quincy	1911
QUI.1148		105-107 Merrymount Rd	Quincy	1911
QUI.1149		106 Merrymount Rd	Quincy	1940
QUI.1150	Darrah, John House	108-110 Merrymount Rd	Quincy	1924
QUI.1151		113-115 Merrymount Rd	Quincy	1912
QUI.1152		117-119 Merrymount Rd	Quincy	c 1912
QUI.1153	Towler, George A. House	118 Merrymount Rd	Quincy	1899
QUI.1154	Tappenden, Sybil P. House	120 Merrymount Rd	Quincy	r 1900
QUI.1155		121-123 Merrymount Rd	Quincy	1911
QUI.1156		127 Merrymount Rd	Quincy	c 1913
QUI.1157		128-130 Merrymount Rd	Quincy	1911
QUI.1158		129 Merrymount Rd	Quincy	c 1913
QUI.1447	Ricker, Ellen F. House	6-8 Miller Stile Rd	Quincy	1903
QUI.1448	Williams, Mary E. House	16-18 Miller Stile Rd	Quincy	1905
QUI.242	Faxon, Henry Munroe House	30 Miller Stile Rd	Quincy	r 1915
QUI.243	Miller, Edward House	36 Miller Stile Rd	Quincy	c 1830
QUI.743	Gilbert, Yvette House	56 Monroe Rd	Quincy	1931
QUI.744	Howes, Maude M. House	60 Monroe Rd	Quincy	1937
QUI.745	Winer, M. House	65 Monroe Rd	Quincy	c 1922
QUI.746	Faxon, Florence R. House	66 Monroe Rd	Quincy	1915
QUI.747		69 Monroe Rd	Quincy	1914
QUI.748	Emanuel, Costas G. House	72 Monroe Rd	Quincy	1919
QUI.749	DeForest, Samuel D. House	75 Monroe Rd	Quincy	1915
QUI.750	Miller, M. Clarabell House	76 Monroe Rd	Quincy	1920
QUI.751		79 Monroe Rd	Quincy	1919
QUI.752	Crapon, Joseph S. House	85 Monroe Rd	Quincy	1922
QUI.753	Grossman, Esther House	86 Monroe Rd	Quincy	1949
QUI.754	Brown, Harry House	95 Monroe Rd	Quincy	1915
QUI.755	Anderson, Alma M. House	96 Monroe Rd	Quincy	1913
QUI.756	Sedgewick, J. A. House	101 Monroe Rd	Quincy	1915
QUI.757	Groce, Joseph E. House	109 Monroe Rd	Quincy	1926
QUI.758	Morse, Ethel E. House	110 Monroe Rd	Quincy	1908
QUI.96	Wakeman, Samuel W. House	115 Monroe Rd	Quincy	c 1910
QUI.759	Burgin, Clarence House	131 Monroe Rd	Quincy	1931
QUI.760		134 Monroe Rd	Quincy	1951
QUI.761	Milchen, Jacob House	139 Monroe Rd	Quincy	c 1957
QUI.97	Bateman, William R. House	148 Monroe Rd	Quincy	c 1890

Inv. No.	Property Name	Street	Town	Year
QUI.762	Babcock, Walter T. House	151 Monroe Rd	Quincy	1896
QUI.763	Hirshberg, Dr. Sumner D. House	156 Monroe Rd	Quincy	c 1953
QUI.98	McAnarney, J. W. House	159 Monroe Rd	Quincy	c 1900
QUI.764	Bateman, Walter R. House	162 Monroe Rd	Quincy	1903
QUI.765		165 Monroe Rd	Quincy	1948
QUI.766	Wadsworth, D. E. House	180 Monroe Rd	Quincy	1908
QUI.767	Tupper, Frederick E. House	185 Monroe Rd	Quincy	1921
QUI.388	Corsini, Dr. T. Vincent House	18 Mortimer Terr	Quincy	c 1933
QUI.15	Moscow Street, 1-7	1-7 Moscow St	Quincy	c 1900
QUI.497	Quincy, Josiah House	20 Muirhead St	Quincy	1770
QUI.933	Quincy Granite Railway Incline	Mullin Ave	Quincy	c 1830
QUI.311	Granite Railway Company Compressor House	63 Mullin Ave	Quincy	c 1900
QUI.123	Listman, George Leo House	52 Neponset Rd	Quincy	c 1925
QUI.23	Atlantic Memorial Congregational Church Parsonage	65 Newbury Ave	Quincy	1919
QUI.31	Atlantic Memorial Congregational Church	65 Newbury Ave	Quincy	1910
QUI.32	Quincy School	94 Newbury Ave	Quincy	1906
QUI.450	Squantum Pumping Station	36 Newland St	Quincy	1931
QUI.563	Pneumatic Scale Corporation	65 Newport Ave	Quincy	1921
QUI.517	Dewsnap, Mark H. House	238 Norfolk St	Quincy	c 1870
QUI.377	Phipps, Dr. Thomas House	58 North Payne St	Quincy	1794
QUI.482		13-19 Old Colony Ave	Quincy	c 1890
QUI.483	Johnson, Howard D. Company	162-176 Old Colony Ave	Quincy	c 1900
QUI.800	Sailor's Snug Harbor Cemetery	Palmer St	Quincy	c 1856
QUI.900	Shed Memorial	Palmer St	Quincy	1916
QUI.60	Snug Harbor Elementary School	333 Palmer St	Quincy	1953
QUI.1405	Saint Boniface Roman Catholic Church	360 Palmer St	Quincy	1957
QUI.120	Dunham, Wilton A. House	58 Parkhurst St	Quincy	c 1900
QUI.1449	Grossman Building	37-93R Parkingway	Quincy	1948
QUI.1450	Raymond's Department Store	169-191 Parkingway	Quincy	1957
QUI.1451	Beacon Way Fabric Center	200 Parkingway	Quincy	1958
QUI.378		76 Payne St	Quincy	1932
QUI.435	Quincy Water Company Pumping Station	106 Penn St	Quincy	1883
QUI.374	Baxter, Daniel W. House	15-17 Phipps St	Quincy	c 1870
QUI.375	Saint John's Parochial School	28 Phipps St	Quincy	1909
QUI.376	Field, Harvey House	98 Phipps St	Quincy	1846
QUI.576	Barnes, Howard C. House	183 Pine St	Quincy	c 1870
QUI.426	First United Presbyterian Church	16 Pleasant St	Quincy	1899

Inv. No.	Property Name	Street	Town	Year
QUI.560	Morgan, Edward I. House	45 Pope St	Quincy	1916
QUI.561	Dicey, Russell M. House	56 Pope St	Quincy	1918
QUI.286	Saint Joseph's Parochial School	22 Pray St	Quincy	1927
QUI.61	Germantown Yacht Club	28 Prescott Terr	Quincy	c 1890
QUI.358		36 Presidents Ave	Quincy	1952
QUI.359		42 Presidents Ave	Quincy	1947
QUI.360	Keast, John House	46 Presidents Ave	Quincy	c 1890
QUI.361	Doyle, Thomas House	49 Presidents Ave	Quincy	c 1890
QUI.362		50 Presidents Ave	Quincy	1910
QUI.363	McGillvray, Mary House	55-57 Presidents Ave	Quincy	c 1900
QUI.364		56 Presidents Ave	Quincy	r 1920
QUI.365		61 Presidents Ave	Quincy	1926
QUI.366		65 Presidents Ave	Quincy	1926
QUI.67	Presidents Walk	6-14 President's Ln	Quincy	1940
QUI.68	Rice, Harry L. House	13 President's Ln	Quincy	1897
QUI.768	Dasha, Joseph A. House	21 President's Ln	Quincy	1915
QUI.769		22 President's Ln	Quincy	1956
QUI.770	Spear, Lucy M. House	26 President's Ln	Quincy	1922
QUI.771		37 President's Ln	Quincy	1983
QUI.772		40 President's Ln	Quincy	1915
QUI.69	Schenkelberger, Albert F. House	43 President's Ln	Quincy	1896
QUI.773	Stevens, Irene House	46 President's Ln	Quincy	1950
QUI.774	Benham, Blanche House	50 President's Ln	Quincy	1914
QUI.70	Pfaffman, George E. House	51 President's Ln	Quincy	c 1901
QUI.775	Penniman, Charles H. House	56 President's Ln	Quincy	1912
QUI.776	Walker, Harry House	63 President's Ln	Quincy	1952
QUI.777	Abele, George W. House	64 President's Ln	Quincy	c 1910
QUI.778	Gourd, Ernest House	68 President's Ln	Quincy	1901
QUI.779	Angier, Gertrude C. House	76 President's Ln	Quincy	1902
QUI.71	Adams - Angier - Powell House	79 President's Ln	Quincy	1836
QUI.780	Angier, Gertrude C. House	80 President's Ln	Quincy	r 1902
QUI.781		83 President's Ln	Quincy	1987
QUI.782	Burgin, Clarence House	86 President's Ln	Quincy	1912
QUI.783	Burgin, Clarence House	94 President's Ln	Quincy	1913
QUI.72	Burgin, Clarence House	95 President's Ln	Quincy	c 1900
QUI.784	Marinelli, Marianna House	102 President's Ln	Quincy	c 1954
QUI.73	Swallow, Morton T. House	105 President's Ln	Quincy	c 1915
QUI.785		108 President's Ln	Quincy	1970

Inv. No.	Property Name	Street	Town	Year
QUI.786	Sampson, W. C. House	118 President's Ln	Quincy	1909
QUI.74	Lawton, Perry House	121 President's Ln	Quincy	1907
QUI.787		122 President's Ln	Quincy	1916
QUI.788	Norris, Mary E. House	126 President's Ln	Quincy	1915
QUI.789	Townsend, Adelia D. House	129 President's Ln	Quincy	1928
QUI.790	Norris, Ella M. House	132 President's Ln	Quincy	1915
QUI.791		133 President's Ln	Quincy	1934
QUI.792		136 President's Ln	Quincy	1919
QUI.793		137 President's Ln	Quincy	1928
QUI.794	Roth, Elmer C. House	140 President's Ln	Quincy	1917
QUI.795		141 President's Ln	Quincy	1928
QUI.796	Hillmert, Vera House	145 President's Ln	Quincy	1959
QUI.75	Quincy Women's Club	148 President's Ln	Quincy	1840
QUI.797	Ciano, Joseph House	149 President's Ln	Quincy	1959
QUI.798	McGerigle, Esther E. House	154 President's Ln	Quincy	1919
QUI.799		158-160 President's Ln	Quincy	1915
QUI.1000		162 President's Ln	Quincy	c 1915
QUI.1001	Wilson, Sarah E. House	166 President's Ln	Quincy	1914
QUI.1002	Heritage, The	176 President's Ln	Quincy	1967
QUI.1003	Garfield House	179 President's Ln	Quincy	1969
QUI.76	Fenno, Thomas House	195 President's Ln	Quincy	c 1830
QUI.1004		200 President's Ln	Quincy	1928
QUI.1005	Coleman, Mary House	204-206 President's Ln	Quincy	1923
QUI.1006	Lane, Sarah House	205 President's Ln	Quincy	1908
QUI.1007		210-220 President's Ln	Quincy	1928
QUI.1008		211-213 President's Ln	Quincy	1885
QUI.1009	Gullikson, Edward House	217 President's Ln	Quincy	1983
QUI.1010	DiPanifile, Maria House	223 President's Ln	Quincy	1929
QUI.1011		224 President's Ln	Quincy	c 1901
QUI.1012	Watson, T. H. House	231-233 President's Ln	Quincy	1891
QUI.1013		236 President's Ln	Quincy	1888
QUI.1014	Chase, Richard C. House	238 President's Ln	Quincy	r 1900
QUI.1015	Milne, E. M. House	239-241 President's Ln	Quincy	1922
QUI.1016	Chase, R. D. House	240-242 President's Ln	Quincy	1888
QUI.1017	Dunham House	243 President's Ln	Quincy	r 1915
QUI.1018		245-247 President's Ln	Quincy	1926
QUI.77	Marsh, Charles House	248 President's Ln	Quincy	c 1860
QUI.1019	LaCount, Mary House	249-251 President's Ln	Quincy	1926

Inv. No.	Property Name	Street	Town	Year
QUI.78	Torrey - Anderson House	259 President's Ln	Quincy	1840
QUI.541	Waterhouse, Israel House	67 Prospect Ave	Quincy	c 1860
QUI.542	Waterhouse, Frank P. House	70-72 Prospect Ave	Quincy	c 1890
QUI.33		48 Prospect St	Quincy	1909
QUI.1251		50 Prospect St	Quincy	1909
QUI.410	Prout Street, 23-25	23-25 Prout St	Quincy	c 1880
QUI.1159	Jameson, Minnie M. House	78 Putnam St	Quincy	1893
QUI.1160	Thomas House	89-91 Putnam St	Quincy	1911
QUI.1161		95-97 Putnam St	Quincy	1911
QUI.1162	Whitman, Herbert T. House	98 Putnam St	Quincy	1898
QUI.1163	Halquist, Mary E. House	99-101 Putnam St	Quincy	1911
QUI.1164		102-104 Putnam St	Quincy	1900
QUI.1165		103-105 Putnam St	Quincy	1907
QUI.205	Newcomb Place	109 Putnam St	Quincy	c 1830
QUI.1166	Brown, Laura A. House	110 Putnam St	Quincy	1890
QUI.1167		115 Putnam St	Quincy	1923
QUI.1168	Nickerson, A. House	116 Putnam St	Quincy	c 1912
QUI.1169	Cole, Charlotte M. House	119 Putnam St	Quincy	1916
QUI.1170		120 Putnam St	Quincy	1921
QUI.1171	Sheppard, E. W. House	149 Putnam St	Quincy	1910
QUI.1172	Ahlstrom, Augusta S. House	152 Putnam St	Quincy	1922
QUI.1173		153-155 Putnam St	Quincy	c 1923
QUI.1174		154 Putnam St	Quincy	1909
QUI.1175		158 Putnam St	Quincy	1922
QUI.1176		159 Putnam St	Quincy	c 1922
QUI.1177	McQuarrie, Samuel T. House	164 Putnam St	Quincy	1912
QUI.1178	Shepard, Eben W. House	165-167 Putnam St	Quincy	1907
QUI.1179		175 Putnam St	Quincy	1937
QUI.457	Ward High Playground Field House	Quarry St	Quincy	1939
QUI.293	Christ Church	14 Quincy Ave	Quincy	1874
QUI.294	Quincy Fire Alarm House	24 Quincy Ave	Quincy	1917
QUI.295	Central Fire Station	26 Quincy Ave	Quincy	1938
QUI.391		37-39 Quincy Ave	Quincy	c 1850
QUI.392	Parker, William House	43 Quincy Ave	Quincy	c 1860
QUI.296	Clapp - Roundry - Berry House	48-50 Quincy Ave	Quincy	1835
QUI.297	Pratt, Dea. William - Baxter, Charles N. House	200 Quincy Ave	Quincy	1832
QUI.393	Williams, Peter House	203 Quincy Ave	Quincy	c 1860
QUI.298	Sullivan, John J. House	214-218 Quincy Ave	Quincy	c 1880

Inv. No.	Property Name	Street	Town	Year
QUI.1396	Eddie's Diner	382 Quincy Ave	Quincy	c 1952
QUI.994	Fitzgerald, Edmund Tug Boat	Quincy Harbor	Quincy	1924
QUI.9065	Quincy Shore Drive - Segment One	Quincy Shore Dr	Quincy	c 1903
QUI.9066	Quincy Shore Drive - Segment One Median	Quincy Shore Dr	Quincy	r 1920
QUI.9067	Quincy Shore Drive - Bay State Road Jug Handle	Quincy Shore Dr	Quincy	r 1920
QUI.9068	Quincy Shore Drive - Segment One Tree Allee	Quincy Shore Dr	Quincy	r 1920
QUI.9069	Quincy Shore Drive - Segment Two	Quincy Shore Dr	Quincy	1903
QUI.9070	Quincy Shore Drive - Segment Two Median	Quincy Shore Dr	Quincy	r 1920
QUI.9071	Quincy Shore Drive - Greenberg Memorial Bridge	Quincy Shore Dr	Quincy	1915
QUI.9072	Quincy Shore Drive - Black's Creek Tide Gates	Quincy Shore Dr	Quincy	1911
QUI.9073	Quincy Shore Drive - Black's Creek Dam	Quincy Shore Dr	Quincy	1920
QUI.9074	Quincy Shore Drive - Black's Creek Wing Walls	Quincy Shore Dr	Quincy	1963
QUI.9075	Quincy Shore Drive - Segment Three	Quincy Shore Dr	Quincy	1929
QUI.9076	Quincy Shore Drive - Segment Three Tree Border	Quincy Shore Dr	Quincy	r 1920
QUI.43	Sullivan, William H. House	389 Quincy Shore Dr	Quincy	c 1910
QUI.44	Winsloe, Mabel McQuade House	561 Quincy Shore Dr	Quincy	1919
QUI.418	Litchfield, Amos House	11 Quincy St	Quincy	c 1880
QUI.419	Smalley, George House	17 Quincy St	Quincy	1855
QUI.420	Flowers, James House	21 Quincy St	Quincy	c 1860
QUI.421	Nightengale House	24 Quincy St	Quincy	c 1855
QUI.422	Messier, Elphege House	28 Quincy St	Quincy	1912
QUI.423		37 Quincy St	Quincy	c 1860
QUI.424		62 Quincy St	Quincy	c 1876
QUI.495	Massachusetts Fields School	Rawson Rd	Quincy	1896
QUI.45	Pitonof, Lipman House	25 Rawson Rd	Quincy	c 1910
QUI.494	Union Congregational Church	136 Rawson Rd	Quincy	1911
QUI.928	Forbes Hill Standpipe	Reservoir Rd	Quincy	1899
QUI.512	Nordblom, Robert C. House	77 Reservoir Rd	Quincy	1933
QUI.513	White, Edwin House	95 Reservoir Rd	Quincy	1933
QUI.1452		5-9 Revere Rd	Quincy	1925
QUI.1453	Granite City Garage	6 Revere Rd	Quincy	c 1924
QUI.1472	Lofgren, William R. House	31-33 Revere Rd	Quincy	1900
QUI.1473	Lofgren, William R. House	35-37 Revere Rd	Quincy	1924
QUI.1474	Johnson, John F. House	39 Revere Rd	Quincy	1901
QUI.238	Wilson, George H. House	47 Revere Rd	Quincy	1891
QUI.1475	Wilson, George H. House	47 Revere Rd	Quincy	c 1891

Inv. No.	Property Name	Street	Town	Year
QUI.239	Pettengill, C. F. House	53 Revere Rd	Quincy	c 1890
QUI.1476	Parris, Frederick W. House	57 Revere Rd	Quincy	1924
QUI.1477	Hersey, John W. House	65 Revere Rd	Quincy	1886
QUI.1481		14 Revere St	Quincy	1966
QUI.307	Cutler, Abraham House	20 Ring Ave	Quincy	1923
QUI.1281	Spargo House	115 Roberts St	Quincy	c 1900
QUI.992	Robertson Road Bridge over I-93	Robertson Rd	Quincy	1956
QUI.451	Pendis, John House	77 Rogers St	Quincy	c 1870
QUI.995	Route 3A Bridge	Route 3A	Quincy	1927
QUI.1377	Fore River Shipbuilding Company Worker Housing	55-57 Ruggles St	Quincy	1918
QUI.1180	Gilbert, J. H. House	18 Russell Pk	Quincy	1897
QUI.1181	Miller, Marion B. House	23 Russell Pk	Quincy	1897
QUI.1182	Walsh, Ellen L. House	24 Russell Pk	Quincy	1924
QUI.1183	Young, Adeline House	29 Russell Pk	Quincy	1909
QUI.1184	Shea, Frank W. House	30 Russell Pk	Quincy	c 1955
QUI.1185	Prescott, Annie House	33 Russell Pk	Quincy	1908
QUI.1186	Burke, Grace L. House	34 Russell Pk	Quincy	1923
QUI.1187	Russell, Elsie House	38 Russell Pk	Quincy	r 1900
QUI.1188	Weeden, August N. House	39 Russell Pk	Quincy	1922
QUI.1189	Luce, E. J. House	43 Russell Pk	Quincy	1923
QUI.1190		44 Russell Pk	Quincy	1912
QUI.1191		47 Russell Pk	Quincy	c 1920
QUI.1192		50 Russell Pk	Quincy	1920
QUI.1193		53 Russell Pk	Quincy	c 1920
QUI.1194		54 Russell Pk	Quincy	1922
QUI.1195		59 Russell Pk	Quincy	1920
QUI.1196	Smith, Anna C. House	60 Russell Pk	Quincy	1923
QUI.1197		65 Russell Pk	Quincy	1920
QUI.1198		118 Russell Pk	Quincy	c 1900
QUI.34	Barclay, Herbert E. House	75 Russell St	Quincy	c 1900
QUI.35		110-112 Sagamore St	Quincy	1909
QUI.1252		114 Sagamore St	Quincy	1909
QUI.1253		116 Sagamore St	Quincy	1909
QUI.1254		118 Sagamore St	Quincy	1909
QUI.1412	Saint Ann's Roman Catholic Church Parochial School	15 Saint Ann's Rd	Quincy	1955
QUI.9094	Saint Ann's Catholic Church - Virgin Mary Statue	15 Saint Ann's Rd	Quincy	

Inv. No.	Property Name	Street	Town	Year
QUI.62	Hastings - Ketterer House	49 Saint Germain St	Quincy	c 1890
QUI.941	Maypole Park	Samoset Ave	Quincy	c 1920
QUI.221		15 Saville Ave	Quincy	c 1880
QUI.222		18 Saville Ave	Quincy	c 1860
QUI.1199	Carlson, Carl E. House	32-38 Saville Ave	Quincy	1926
QUI.1200	Carlson, Carl F. House	40-42 Saville Ave	Quincy	1891
QUI.223	Everett, Dr. William House	43 Saville Ave	Quincy	c 1860
QUI.1201	Carlson, Carl F. House	44 Saville Ave	Quincy	1915
QUI.1202	Wright, Lillian McLean House	50 Saville Ave	Quincy	c 1920
QUI.224	Wales, Lois K. House	58 Saville Ave	Quincy	c 1890
QUI.1457	Sweeney, Dennis S. - Curry, Edward B. Block	1-5 School St	Quincy	c 1924
QUI.1458	Apthorp Building	7-15A School St	Quincy	1924
QUI.321	Saint John the Baptist Catholic Church	44 School St	Quincy	1853
QUI.1459	Hancock House Apartments	45 School St	Quincy	1973
QUI.803	Christ Church Burial Ground	54-60 School St	Quincy	1737
QUI.1460	Sun Oil Gas Station	59 School St	Quincy	c 1943
QUI.1461	Catler, Joseph Automotive Garage	65 School St	Quincy	1952
QUI.1462	Young Men's Hebrew Association	139 School St	Quincy	1910
QUI.428		165-167 School St	Quincy	1925
QUI.1240		169-171 School St	Quincy	1925
QUI.1241		173 School St	Quincy	1925
QUI.1242		175-177 School St	Quincy	1925
QUI.1243		179-181 School St	Quincy	1925
QUI.429	Baxter, Daniel House	202 School St	Quincy	c 1840
QUI.112	Dunham, Arthur House	30 Sea Ave	Quincy	c 1910
QUI.113		67 Sea Ave	Quincy	c 1900
QUI.114	Baird, Archie F. House	85 Sea Ave	Quincy	1907
QUI.1397	Houghs Neck Lift Station	147 Sea Ave	Quincy	1910
QUI.902	World War II Memorial	Sea St	Quincy	c 1945
QUI.9096	Adams Shore World War II Monument	Sea St	Quincy	
QUI.801	Mount Wollaston Cemetery	20 Sea St	Quincy	1856
QUI.903	Civil War Monument	20 Sea St	Quincy	1868
QUI.904	Fireman's Memorial	20 Sea St	Quincy	1929
QUI.905	Policeman's Memorial	20 Sea St	Quincy	1938
QUI.906	World War I Memorial	20 Sea St	Quincy	1920
QUI.907	World War II Memorial	20 Sea St	Quincy	c 1945
QUI.908	Granite Fountain and Horse Watering Trough	20 Sea St	Quincy	1891
QUI.997	Curtis, Benjamin F. Tomb	20 Sea St	Quincy	1916

Inv. No.	Property Name	Street	Town	Year
QUI.998	Frederick, Eleazar Tomb	20 Sea St	Quincy	1878
QUI.999	Wood, Henry Tomb	20 Sea St	Quincy	1870
QUI.1385	Mount Wollaston Cemetery Office	20 Sea St	Quincy	1936
QUI.1386	Mount Wollaston Cemetery Garage - Tool Shed	20 Sea St	Quincy	1979
QUI.1387	Colella, Alfred F. Mausoleum	20 Sea St	Quincy	1986
QUI.1388	D'Angelo, Frank Mausoleum	20 Sea St	Quincy	1941
QUI.1389	Chiesa, Amelio Della Mausoleum	20 Sea St	Quincy	1975
QUI.1390	Dunham, Wilson A. Mausoleum	20 Sea St	Quincy	1978
QUI.1391	Rogers, Hollis G. Mausoleum	20 Sea St	Quincy	1936
QUI.1392	Terrasi, Stefano Mausoleum	20 Sea St	Quincy	1908
QUI.1393	Thomas, George B. Mausoleum	20 Sea St	Quincy	1963
QUI.1394	Robertson, Joseph W. Tomb	20 Sea St	Quincy	1891
QUI.9000	Mount Wollaston Cemetery Receiving Tomb	20 Sea St	Quincy	1868
QUI.9001	Mount Wollaston Cemetery Circulation System	20 Sea St	Quincy	1855
QUI.9002	Mount Wollaston Cemetery Enclosing Wall	20 Sea St	Quincy	c 1935
QUI.9003	Mount Wollaston Cemetery Merrymount Road Gate	20 Sea St	Quincy	1934
QUI.9004	Mount Wollaston Cemetery Sea Street Gate	20 Sea St	Quincy	1866
QUI.9005	Mount Wollaston Cemetery Southern Artery Gate	20 Sea St	Quincy	c 1935
QUI.9006	Mount Wollaston Cemetery Veteran's Memorial	20 Sea St	Quincy	1848
QUI.9007	Spanish War Veteran's Monument	20 Sea St	Quincy	1908
QUI.9008	World War I Memorial Gun and Gun Carriage	20 Sea St	Quincy	1917
QUI.9009	World War II Memorial	20 Sea St	Quincy	1953
QUI.9010	Mount Wollaston Cemetery Korean War Memorial	20 Sea St	Quincy	r 1965
QUI.9011	Mount Wollaston Cemetery Vietnam War Memorial	20 Sea St	Quincy	1968
QUI.9012	Mount Wollaston Cemetery Elk Statue	20 Sea St	Quincy	r 1935
QUI.9013	Williams, W. S. Statue	20 Sea St	Quincy	1901
QUI.9014	King, Theophilus Granite Sphere	20 Sea St	Quincy	1935
QUI.9015	Adams Brothers Broken Column	20 Sea St	Quincy	r 1840
QUI.9016	Adams, Charles F. Table Marker	20 Sea St	Quincy	1886
QUI.9017	Adams, Brooks Ledger Marker	20 Sea St	Quincy	1927
QUI.9018	Adams, Evelyn Ledger Marker	20 Sea St	Quincy	1926
QUI.9019	Adams, J. Q. Jr. - Fanny C. Monument	20 Sea St	Quincy	1876
QUI.9020	Adams, John Quincy Ledger Marker	20 Sea St	Quincy	1894
QUI.9021	Adams, Fanny Crowinshield Ledger Marker	20 Sea St	Quincy	1911
QUI.9022	Barnicoat, S. Henry Monument	20 Sea St	Quincy	1898
QUI.9023	Baxter, Daniel Sarcophagus	20 Sea St	Quincy	1885

Inv. No.	Property Name	Street	Town	Year
QUI.9024	Baxter, Lemuel Monument	20 Sea St	Quincy	1888
QUI.9025	Bumpus, Edward A. Monument	20 Sea St	Quincy	1901
QUI.9026	Canniff, William F. Monument	20 Sea St	Quincy	1950
QUI.9027	Churchill - Edwards Monument	20 Sea St	Quincy	1879
QUI.9028	Coletti, Domenic Monument	20 Sea St	Quincy	r 1955
QUI.9029	Derringer, John E. Monument	20 Sea St	Quincy	1927
QUI.9030	Duncan, James Monument	20 Sea St	Quincy	1928
QUI.9031	Cooper - Edwards Monument	20 Sea St	Quincy	c 1880
QUI.9032	Falconer, Alexander Monument	20 Sea St	Quincy	1932
QUI.9033	Graham, John R. Obelisk	20 Sea St	Quincy	1915
QUI.9034	Hadden, John Monument	20 Sea St	Quincy	1898
QUI.9035	Hardwick, Charles H. Monument	20 Sea St	Quincy	1894
QUI.9036	Hod Carriers Obelisk	20 Sea St	Quincy	1930
QUI.9037	Hodgkinson, William F. Sarcophagus	20 Sea St	Quincy	1907
QUI.9038	Horrigan, Gerald T. Celtic Cross	20 Sea St	Quincy	1927
QUI.9039	Hultman, Eugene N. Monument	20 Sea St	Quincy	1900
QUI.9040	Hunter, George Monument	20 Sea St	Quincy	1940
QUI.9041	Jones - Tuck Monument	20 Sea St	Quincy	r 1890
QUI.9042	King, John S. Monument	20 Sea St	Quincy	1904
QUI.9043	Milne, Andrew Celtic Cross	20 Sea St	Quincy	1922
QUI.9044	Morse, Stephen Jr. Monument	20 Sea St	Quincy	1904
QUI.9045	Reynolds, William Monument	20 Sea St	Quincy	1911
QUI.9046	Richards, Charles H. Monument	20 Sea St	Quincy	1916
QUI.9047	Richards, William Monument	20 Sea St	Quincy	1928
QUI.9048	Smith, Robert D. Monument	20 Sea St	Quincy	1924
QUI.9049	Spargo, William T. Celtic Cross	20 Sea St	Quincy	1915
QUI.9050	Swingle, Jonathan S. Obelisk	20 Sea St	Quincy	1929
QUI.9051	Turner, William T. Monument	20 Sea St	Quincy	1897
QUI.9052	Veazie, Francis Monument	20 Sea St	Quincy	1916
QUI.9053	Vendret, B. Armand Celtic Cross	20 Sea St	Quincy	1935
QUI.9054	Vogel, Adam Monument	20 Sea St	Quincy	1884
QUI.9055	Wild, J. Q. A. Obelisk	20 Sea St	Quincy	1880
QUI.1398	U. S. Naval Reserve Training Building	85 Sea St	Quincy	1957
QUI.1399	U. S. Naval Reserve Training Building - Garage	85 Sea St	Quincy	1958
QUI.1400	U. S. Naval Reserve Training Building - Shed	85 Sea St	Quincy	
QUI.1401	U. S. Naval Reserve Training Building - Shed	85 Sea St	Quincy	
QUI.9062	U. S. Naval Reserve Training Building - Flagpole	85 Sea St	Quincy	1958
QUI.125	Merrymount Farmhouse	180 Sea St	Quincy	c 1830

Inv. No.	Property Name	Street	Town	Year
QUI.2	Sea Street Getty Gas Station	346 Sea St	Quincy	1931
QUI.106	Most Blessed Sacrament Roman Catholic Rectory	1000 Sea St	Quincy	c 1918
QUI.105	Most Blessed Sacrament Roman Catholic Church	1031 Sea St	Quincy	1918
QUI.9088	Most Blessed Sacrament Church - Pieta Statue	1031 Sea St	Quincy	1962
QUI.9089	Most Blessed Sacrament Church - Statue of Jesus	1031 Sea St	Quincy	1959
QUI.107	Hough's Neck Fire Station	1080 Sea St	Quincy	1947
QUI.108	Hough, Atherton Elementary School	1083 Sea St	Quincy	1911
QUI.109	Tilley, William J. House	1127 Sea St	Quincy	c 1900
QUI.110	Littlefield House	1162 Sea St	Quincy	1823
QUI.111	Quincy Yacht Club	1310 Sea St	Quincy	1888
QUI.284	Shaw, John Jr. House	36 Shea St	Quincy	c 1870
QUI.1406	Saint Boniface Roman Catholic Church Rectory	26 Shed St	Quincy	c 1958
QUI.1407	Saint Boniface Roman Catholic Rectory Garage	26 Shed St	Quincy	c 1958
QUI.9090	Saint Boniface Church - Statue of the Virgin Mary	26 Shed St	Quincy	
QUI.452		10-12 Shirley St	Quincy	1914
QUI.126		121 Shore Ave	Quincy	c 1940
QUI.409		44-46 Smith St	Quincy	c 1890
QUI.1237		48-50 Smith St	Quincy	c 1890
QUI.1238		52-54 Smith St	Quincy	c 1890
QUI.1239		56-58 Smith St	Quincy	c 1890
QUI.550	Coffin, Henry C. House	77 South Central Ave	Quincy	c 1873
QUI.551	Sprague, A. W. House	80 South Central Ave	Quincy	c 1870
QUI.552	Packard, John A. House	108 South Central Ave	Quincy	c 1880
QUI.553	Kent, James D. House	240 South Central Ave	Quincy	c 1880
QUI.1383	Islamic Center of New England	470 South St	Quincy	1964
QUI.923	Adams, Charles Francis III Memorial	Southern Artery	Quincy	1930
QUI.510	Women's Building - Merrymount Park	100 Southern Artery	Quincy	c 1910
QUI.924	Veterans Memorial Stadium	100 Southern Artery	Quincy	1938
QUI.925	Gordon, Ruth Amphitheatre	100 Southern Artery	Quincy	1977
QUI.926	Adams Memorial Monument	100 Southern Artery	Quincy	1926
QUI.938	Merrymount Park	100 Southern Artery	Quincy	1885
QUI.128	Quincy Police Station	442 Southern Artery	Quincy	1925
QUI.131	Souther Tide Mill	610 Southern Artery	Quincy	1854
QUI.929	Souther Tide Mill Dam	610 Southern Artery	Quincy	c 1806
QUI.915	Quincy Oil Filling Station Lighthouse	728 Southern Artery	Quincy	1926
QUI.1378	Fore River Shipbuilding Company Worker	919-921 Southern Artery	Quincy	1918

Inv. No.	Property Name	Street	Town	Year
	Housing			
QUI.308		934 Southern Artery	Quincy	1920
QUI.252	Bethany Congregational Church	18 Spear St	Quincy	1927
QUI.253	Tupper, Frederick E. House	22 Spear St	Quincy	1915
QUI.254		25 Spear St	Quincy	c 1850
QUI.255	Nelson, Albert House	28 Spear St	Quincy	1919
QUI.256		29 Spear St	Quincy	r 1850
QUI.257	Spear, Howard D. House	32 Spear St	Quincy	c 1920
QUI.258		33 Spear St	Quincy	1890
QUI.259		34 Spear St	Quincy	1912
QUI.260		35 Spear St	Quincy	1913
QUI.261	Prescott, George W. House	41-43 Spear St	Quincy	1885
QUI.262		44-46 Spear St	Quincy	c 1890
QUI.263		45 Spear St	Quincy	c 1860
QUI.264	Spear, Seth Homestead	47-49 Spear St	Quincy	1850
QUI.265	Colonial Apartments	57 Spear St	Quincy	1927
QUI.266	Hardwick House	59-61 Spear St	Quincy	c 1850
QUI.484		29-31 Standish Ave	Quincy	1928
QUI.485	Cain, John House	89 Standish Ave	Quincy	c 1890
QUI.991	Stedman Street Bridge over I-93	Stedman St	Quincy	1956
QUI.559	Grass, Henry J. House	20 Sterling St	Quincy	1911
QUI.280	Johnson, Benjamin House	69 Stewart St	Quincy	c 1870
QUI.371	Whicher, John House	25-27 Summer St	Quincy	c 1880
QUI.305		59 Summer St	Quincy	c 1910
QUI.515	Johnson, Howard House	114 Summit Ave	Quincy	1929
QUI.467	Winquist, Karl Gustav House	63 Suomi Rd	Quincy	c 1900
QUI.468	Finnish Lutheran Church	81-83 Suomi Rd	Quincy	1912
QUI.921	Liberty Square Park War Memorial	Taber St	Quincy	1951
QUI.430	Boyle, John House	50 Taber St	Quincy	1888
QUI.431	Lennon, Edward J. House	53 Taber St	Quincy	c 1888
QUI.1363		56 Taber St	Quincy	r 1900
QUI.1364		60 Taber St	Quincy	r 1900
QUI.940	Ship Massachusetts Park	Taffrail Rd	Quincy	1975
QUI.567	Morrissey, Alex House	74 Taylor St	Quincy	1908
QUI.227	Quincy Patriot Ledger Newspaper Office	13-19 Temple St	Quincy	1924
QUI.194	McGrath, Annie House	9-11 Thayer St	Quincy	1913
QUI.195	Spear, G. W. House	15 Thayer St	Quincy	c 1876
QUI.196		25 Thayer St	Quincy	c 1900

Inv. No.	Property Name	Street	Town	Year
QUI.930	Freedom Park	Thomas Burgin Pkwy	Quincy	1976
QUI.704	Granahan, John P. House	11 Thomas Burgin Pkwy	Quincy	1916
QUI.705	Granahan, John P. House	15 Thomas Burgin Pkwy	Quincy	1916
QUI.706	Granahan, John P. House	19 Thomas Burgin Pkwy	Quincy	1916
QUI.707		27 Thomas Burgin Pkwy	Quincy	1913
QUI.708	Donovan, William T. House	31 Thomas Burgin Pkwy	Quincy	c 1910
QUI.709	Parker, Elizabeth House	33 Thomas Burgin Pkwy	Quincy	1915
QUI.710	Welsh, M. House	35 Thomas Burgin Pkwy	Quincy	1905
QUI.711	Page, Eugene A. House	39 Thomas Burgin Pkwy	Quincy	1910
QUI.712	Johnson House	43 Thomas Burgin Pkwy	Quincy	1906
QUI.713	Johnson, Tilly House	45 Thomas Burgin Pkwy	Quincy	1908
QUI.714	Curtis, Jesse F. House	49 Thomas Burgin Pkwy	Quincy	1905
QUI.715	Keating, Thomas V. House	53 Thomas Burgin Pkwy	Quincy	1910
QUI.716	Johnson, Julius House	57 Thomas Burgin Pkwy	Quincy	1903
QUI.717	Mears, William H. House	61 Thomas Burgin Pkwy	Quincy	1902
QUI.718	Bradford, Clara House	67 Thomas Burgin Pkwy	Quincy	1902
QUI.719	McKenzie, Catherine House	69 Thomas Burgin Pkwy	Quincy	1902
QUI.720		75 Thomas Burgin Pkwy	Quincy	c 1902
QUI.721	White, Anastansia O. House	83 Thomas Burgin Pkwy	Quincy	1922
QUI.722	Curry House	99-101 Thomas Burgin Pkwy	Quincy	1922
QUI.723		103 Thomas Burgin Pkwy	Quincy	1900
QUI.724	Coleman, Mary House	105-107 Thomas Burgin Pkwy	Quincy	1922
QUI.725	Jenness, William W. House	109-111 Thomas Burgin Pkwy	Quincy	1899
QUI.726	Whitman, H. T. House	113-115 Thomas Burgin Pkwy	Quincy	1903
QUI.727	Drake, Herbert T. House	117-119 Thomas Burgin Pkwy	Quincy	1903
QUI.728	Foley, Margaret H. House	121-123 Thomas Burgin Pkwy	Quincy	1923
QUI.729	Pinson, Oscar E. House	127-129 Thomas Burgin Pkwy	Quincy	1922
QUI.730		133-135 Thomas Burgin Pkwy	Quincy	1924
QUI.731	Whitman, H. T. House	137-139 Thomas Burgin Pkwy	Quincy	1899
QUI.732	Clark, Cordelia M. House	141-143 Thomas Burgin Pkwy	Quincy	1900
QUI.733	Clark, Cordelia M. House	145-147 Thomas Burgin Pkwy	Quincy	1900
QUI.734	Quincy Center Office Building	159 Thomas Burgin Pkwy	Quincy	1957
QUI.735		179 Thomas Burgin Pkwy	Quincy	c 1925
QUI.736		185 Thomas Burgin Pkwy	Quincy	c 1860
QUI.737		191 Thomas Burgin Pkwy	Quincy	1908
QUI.738	Sunnylea Quincy Square Condominiums	195 Thomas Burgin Pkwy	Quincy	1928
QUI.739		199 Thomas Burgin Pkwy	Quincy	1908
QUI.740		207 Thomas Burgin Pkwy	Quincy	1908

Inv. No.	Property Name	Street	Town	Year
QUI.741		215 Thomas Burgin Pkwy	Quincy	1973
QUI.299	Dogget, Solon House	50 Union St	Quincy	1872
QUI.127	Luce, Stanford L. House	30 Virginia Rd	Quincy	1923
QUI.36	Kolseth, Henry S. House	87 Walker St	Quincy	1900
QUI.16		14 Walnut St	Quincy	c 1860
QUI.9078	Blue Hills Reservation Parkway - Wampatuck Road	Wampatuck Rd	Quincy	1905
QUI.549	Damie, S. T. House	174 Warren Ave	Quincy	c 1870
QUI.543	First Baptist Church of Wollaston	187 Warren Ave	Quincy	1873
QUI.916	Tercentary Monument	Washington St	Quincy	1925
QUI.917	Fore River Bridge	Washington St	Quincy	1934
QUI.9098	Quincy Point Monument	Washington St	Quincy	1987
QUI.244	Stuart Building	33-39 Washington St	Quincy	c 1925
QUI.245	Crane, Thomas Public Library	40 Washington St	Quincy	c 1881
QUI.246	U. S. Post Office - Quincy Main Branch	47 Washington St	Quincy	1909
QUI.247	Quincy Mutual Fire Insurance Building	57-61 Washington St	Quincy	1931
QUI.249	Quincy Central Baptist Church	67 Washington St	Quincy	1923
QUI.248		68-88 Washington St	Quincy	1925
QUI.250	Central Baptist Bible School	69 Washington St	Quincy	c 1905
QUI.1463	Bradford, William R. Block	90-96 Washington St	Quincy	1946
QUI.251	Georgian, The	100 Washington St	Quincy	1929
QUI.269	Assembly of God Church - First Universalist Church	158 Washington St	Quincy	1832
QUI.270	Grant, Freeman W. House	247 Washington St	Quincy	1908
QUI.271	Souther - Drake - Graham House	356 Washington St	Quincy	1815
QUI.272		410 Washington St	Quincy	c 1900
QUI.273	Quincy Point Congregational Church	444 Washington St	Quincy	1838
QUI.274	Merrill, Thomas F. House	556 Washington St	Quincy	c 1900
QUI.275	Bushnell, Edward House	566 Washington St	Quincy	c 1900
QUI.276	Newcomb, Thaddeus House	570 Washington St	Quincy	c 1860
QUI.277	Cleverly, Ebenezer House	591 Washington St	Quincy	c 1860
QUI.278	Quincy Point Fire Station	615 Washington St	Quincy	1941
QUI.279	Proctor and Gamble Manufacturing Company	780 Washington St	Quincy	c 1940
QUI.1464	Ambassador Apartments	91 Washington Street	Quincy	1964
QUI.411	Skoler Building	266 Water St	Quincy	c 1920
QUI.1365	First Presbyterian Church of Quincy	267 Water St	Quincy	1885
QUI.469	Harmon, Josiah House	96 West St	Quincy	c 1840
QUI.1233	Tubular Rivet and Stud Company - Garage	18 Weston Ave	Quincy	c 1875

Inv. No.	Property Name	Street	Town	Year
QUI.217	Burgess, Charles H. House	17 Whitney Rd	Quincy	c 1903
QUI.1203	Crane, Ada P. House	20 Whitney Rd	Quincy	r 1900
QUI.1204	Harris, Arthur W. House	21 Whitney Rd	Quincy	1912
QUI.218	Alden, Arthur House	24 Whitney Rd	Quincy	1909
QUI.1205	Whitman, Edith W. House	29 Whitney Rd	Quincy	1903
QUI.1206	Ames, Carrie W. House	30 Whitney Rd	Quincy	1901
QUI.219	Kincaide, Henry L. House	33 Whitney Rd	Quincy	1908
QUI.1207	Hunting, Nathaniel S. House	36 Whitney Rd	Quincy	1908
QUI.1208	Hunting, Nathaniel S. House	39 Whitney Rd	Quincy	1908
QUI.1209		42 Whitney Rd	Quincy	1905
QUI.1210	Bennett, Percy E. House	43 Whitney Rd	Quincy	1910
QUI.1211		48 Whitney Rd	Quincy	1899
QUI.1212	Cook, Michael E. House	49 Whitney Rd	Quincy	1923
QUI.1213		52 Whitney Rd	Quincy	c 1911
QUI.102	Faxon House - Quincy City Hospital	114 Whitwell St	Quincy	1911
QUI.103	Administration Building - Quincy City Hospital	114 Whitwell St	Quincy	1936
QUI.1020	Mahoney, William S. House	190-192 Whitwell St	Quincy	1924
QUI.104	Cranch Elementary School	270 Whitwell St	Quincy	1900
QUI.1021		271 Whitwell St	Quincy	1897
QUI.1022		276-280 Whitwell St	Quincy	1906
QUI.1023		277 Whitwell St	Quincy	1897
QUI.1024	Skinner, James House	281-283 Whitwell St	Quincy	1900
QUI.1025	Person, Hannah House	282-286 Whitwell St	Quincy	1907
QUI.1026	Johnson, G. A. House	285 Whitwell St	Quincy	1913
QUI.1027	Person, Hanna House	288-292 Whitwell St	Quincy	1909
QUI.1028		289 Whitwell St	Quincy	1899
QUI.1029	Faxon, Henry M. House	293 Whitwell St	Quincy	1906
QUI.1030	Faxon, Henry M. House	299 Whitwell St	Quincy	c 1915
QUI.1031	Gotlieb, Lawrence House	300 Whitwell St	Quincy	1952
QUI.1032	Faxon, Henry M. House	305 Whitwell St	Quincy	c 1915
QUI.1033	Covenant Congregational Church	315 Whitwell St	Quincy	1956
QUI.453	Enderly House	22 Willard St	Quincy	c 1840
QUI.454	Willard Street, 92	92 Willard St	Quincy	c 1830
QUI.455	Bryant, Gridley Elementary School	111 Willard St	Quincy	1896
QUI.1384		629 Willard St	Quincy	c 1898
QUI.446	Emmons, Henry T. House	1 Winslow Rd	Quincy	c 1910
QUI.528		10 Winthrop Ave	Quincy	1911
QUI.529	Gordon, Ruth Birthplace	41 Winthrop Ave	Quincy	c 1890

Inv. No.	Property Name	Street	Town	Year
QUI.531	Pinkham House	79 Winthrop Ave	Quincy	c 1870
QUI.532	Slack, Eveline E. House	110 Winthrop Ave	Quincy	1883
QUI.508	Smith, Henry R. House	49 Wollaston Ave	Quincy	c 1890
QUI.1214	Davenport, Thomas B. House	9 Woodward Ave	Quincy	r 1895
QUI.1215		10-12 Woodward Ave	Quincy	1923
QUI.1216	Davenport, Thomas B. House	11 Woodward Ave	Quincy	1887
QUI.1217	Fay, William H. House	15 Woodward Ave	Quincy	1898
QUI.1218		16 Woodward Ave	Quincy	1922
QUI.1219	Durain, Alonzo G. House	19 Woodward Ave	Quincy	1906
QUI.1220		20 Woodward Ave	Quincy	1922
QUI.1221		21-23 Woodward Ave	Quincy	1922
QUI.1222	McIntyre, J. B. House	24-26 Woodward Ave	Quincy	c 1923
QUI.1223		25-27 Woodward Ave	Quincy	c 1921
QUI.1224	Bogg, Leila C. House	28-30 Woodward Ave	Quincy	r 1910
QUI.1225	Durgin, Alonzo G. House	29 Woodward Ave	Quincy	1885
QUI.1226		35-37 Woodward Ave	Quincy	1923
QUI.1227	Angell, Annie M. House	38 Woodward Ave	Quincy	1905
QUI.1228	Walker, James House	39-41 Woodward Ave	Quincy	1916
QUI.1229		50 Woodward Ave	Quincy	1947
QUI.1230		54 Woodward Ave	Quincy	1914
QUI.1231	Young, Pauline House	57 Woodward Ave	Quincy	1925
QUI.1232	Ahlstrom, Carl E. House	62 Woodward Ave	Quincy	1925

Appendix F

Reference Documents

Pollutant Impacts on Water Quality	
Sediment	Sediment is a common component of stormwater, and can be a pollutant. Sediment can be detrimental to aquatic life (primary producers, benthic invertebrates, and fish) by interfering with photosynthesis, respiration, growth, reproduction, and oxygen exchange in water bodies. Sediment can transport other pollutants that are attached to it including nutrients, trace metals, and hydrocarbons. Sediment is the primary component of total suspended solids (TSS), a common water quality analytical parameter.
Nutrients	Nutrients including nitrogen and phosphorous are the major plant nutrients used for fertilizing landscapes, and are often found in stormwater. These nutrients can result in excessive or accelerated growth of vegetation, such as algae, resulting in impaired use of water in lakes and other sources of water supply. For example, nutrients have led to a loss of water clarity in Lake Tahoe. In addition, un-ionized ammonia (one of the nitrogen forms) can be toxic to fish.
Bacteria and Viruses	Bacteria and viruses are common contaminates of stormwater. For separate storm drain systems, sources of these contaminants include animal excrement and sanitary sewer overflow. High levels of indicator bacteria in stormwater have led to the closure of beaches, lakes, and rivers to contact recreation such as swimming.
Oil and Grease	Oil and grease includes a wide array of hydrocarbon compounds, some of which are toxic to aquatic organisms at low concentrations. Sources of oil and grease include leakage, spills, cleaning and sloughing associated with vehicle and equipment engines and suspensions, leaking and breaks in hydraulic systems, restaurants, and waste oil disposal.
Metals	Metals including lead, zinc, cadmium, copper, chromium, and nickel are commonly found in stormwater. Many of the artificial surfaces of the urban environment (e.g., galvanized metal, paint, automobiles, or preserved wood) contain metals, which enter stormwater as the surfaces corrode, flake, dissolve, decay, or leach. Over half the trace metal load carried in stormwater is associated with sediments. Metals are of concern because they are toxic to aquatic organisms, can bioaccumulate (accumulate to toxic levels in aquatic animals such as fish), and have the potential to contaminate drinking water supplies.
Organics	Organics may be found in stormwater at low concentrations. Often synthetic organic compounds (adhesives, cleaners, sealants, solvents, etc.) are widely applied and may be improperly stored and disposed. In addition, deliberate dumping of these chemicals into storm drains and inlets causes environmental harm to waterways.
Pesticides	Pesticides (including herbicides, fungicides, rodenticides, and insecticides) have been repeatedly detected in stormwater at toxic levels, even when pesticides have been applied in accordance with label instructions. As pesticide use has increased, so too have concerns about the adverse effects of pesticides on the environment and human health. Accumulation of these compounds in simple aquatic organisms, such as plankton, provides an avenue for biomagnification through the food web, potentially resulting in elevated levels of toxins in organisms that feed on them, such as fish and birds.
Gross Pollutants	Gross Pollutants (trash, debris and floatables) may include heavy metals, pesticides, and bacteria in stormwater. Typically resulting from an urban environment, industrial sites and construction sites, trash and floatables may create an aesthetic “eye sore” in waterways. Gross pollutants also include plant debris (such as leaves and lawn-clippings from landscape maintenance), animal excrement, street litter, and other organic matter. Such substances may harbor bacteria, viruses, vectors, and depress the dissolved oxygen levels in streams, lakes and estuaries sometimes causing fish kills.
Vector Production	Vector production (e.g., mosquitoes, flies, and rodents) is frequently associated with sheltered habitats and standing water. Unless designed and maintained properly, standing water may occur in treatment control BMP’s for 72 hours or more, thus providing a source for vector habitat and reproduction (Metzger, 2002).

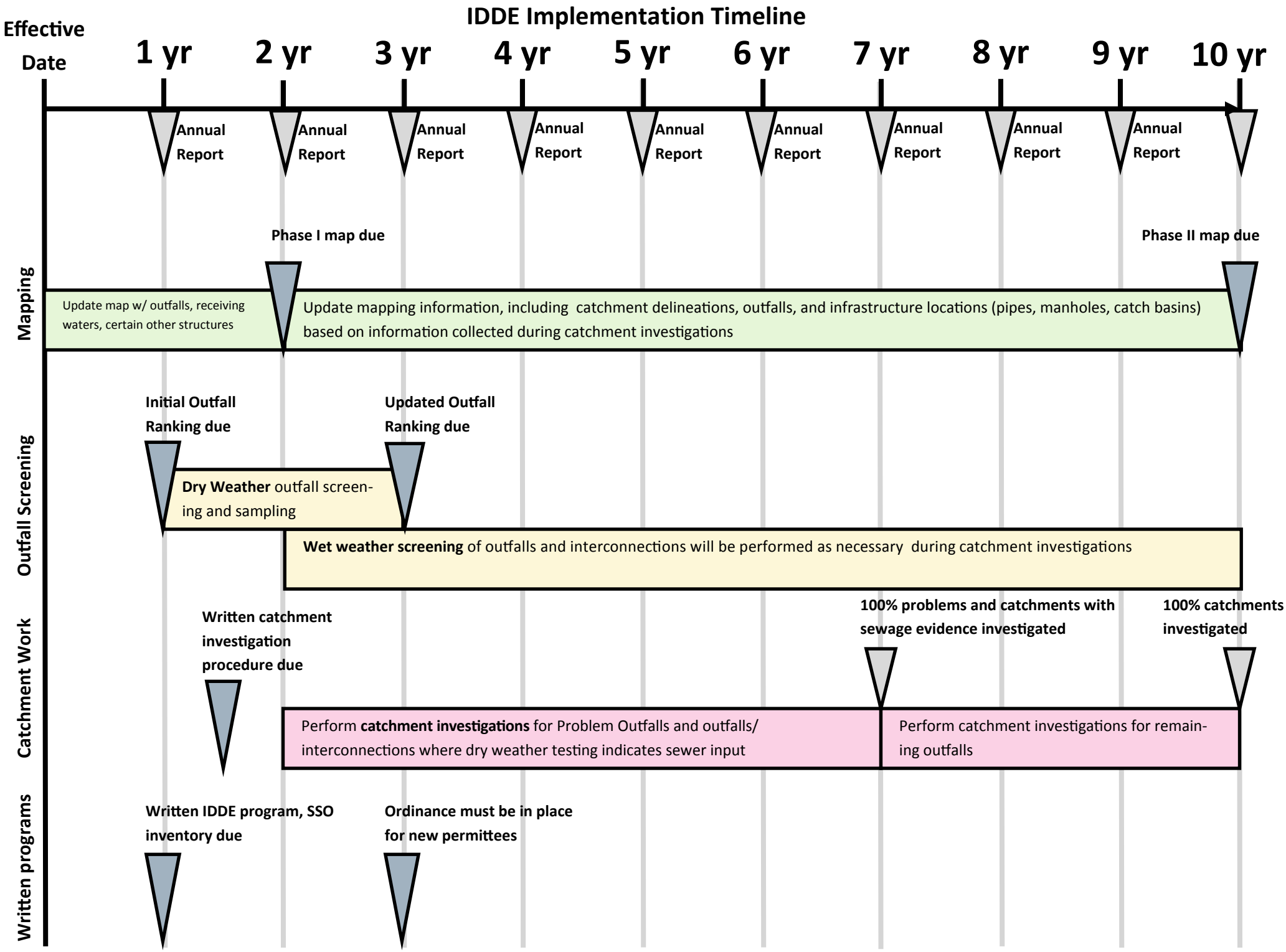
Source: California Stormwater Quality Association, Stormwater BMP Handbook, 2003.

Potential pollutants likely associated with specific *municipal facilities*

Municipality Facility Activity	Potential Pollutants								
	Sediment	Nutrients	Trash	Metals	Bacteria	Oil & Grease	Organics	Pesticides	Oxygen Demanding Substances
Building and Grounds Maintenance and Repair	X	X	X	X	X	X	X	X	X
Parking/Storage Area Maintenance	X	X	X	X	X	X	X		X
Waste Handling and Disposal	X	X	X	X	X	X	X	X	X
Vehicle and Equipment Fueling			X	X		X	X		
Vehicle and Equipment Maintenance and Repair				X		X	X		
Vehicle and Equipment Washing and Steam Cleaning	X	X	X	X		X	X		
Outdoor Loading and Unloading of Materials	X	X	X	X		X	X	X	X
Outdoor Container Storage of Liquids		X		X		X	X	X	X
Outdoor Storage of Raw Materials	X	X	X			X	X	X	X
Outdoor Process Equipment	X		X	X		X	X		
Overwater Activities			X	X	X	X	X	X	X
Landscape Maintenance	X	X	X		X			X	X
Source: California Stormwater BMP Handbook (http://www.cabmphandbooks.com/)(slightly modified)									

Potential pollutants likely associated with *municipal activities*

Municipal Program	Activities	Potential Pollutants								
		Sediment	Nutrients	Trash	Metals	Bacteria	Oil & Grease	Organics	Pesticides	Oxygen Demanding Substances
Roads, Streets, and Highways Operation and Maintenance	Sweeping and Cleaning	X		X	X		X			X
	Street Repair, Maintenance, and Striping/Painting	X		X	X		X	X		
	Bridge and Structure Maintenance	X		X	X		X	X		
Plaza, Sidewalk, and Parking Lot Maintenance and Cleaning	Surface Cleaning	X	X			X	X			X
	Graffiti Cleaning	X	X		X			X		
	Sidewalk Repair	X		X						
	Controlling Litter	X		X		X	X			X
Fountains, Pools, Lakes, and Lagoons Maintenance	Fountain and Pool Draining		X					X		
	Lake and Lagoon Maintenance	X	X	X		X			X	X
Landscape Maintenance	Mowing/Trimming/Planting	X	X	X		X			X	X
	Fertilizer & Pesticide Management	X	X						X	
	Managing Landscape Wastes			X					X	X
	Erosion Control	X	X							
Drainage System Operation and Maintenance	Inspection and Cleaning of Stormwater Conveyance Structures	X	X	X		X		X		X
	Controlling Illicit Connections and Discharges	X	X	X	X	X	X	X	X	X
	Controlling Illegal Dumping	X	X	X	X	X	X	X	X	X
	Maintenance of Inlet and Outlet Structures	X		X	X		X			X
Waste Handling and Disposal	Solid Waste Collection		X	X	X	X	X	X		X
	Waste Reduction and Recycling			X	X					X
	Household Hazardous Waste Collection			X	X		X	X	X	
	Controlling Litter			X	X	X		X		X
	Controlling Illegal Dumping	X		X		X	X		X	X
Water and Sewer Utility Operation and Maintenance	Water Line Maintenance	X				X	X			
	Sanitary Sewer Maintenance	X				X	X			X
	Spill/Leak/Overflow Control, Response, and Containment	X	X			X		X		X
Source: California Stormwater BMP Handbook (http://www.cabmphandbooks.com/)										


IDDE Implementation Timeline
Effective Date
1 yr
2 yr
3 yr
4 yr
5 yr
6 yr
7 yr
8 yr
9 yr
10 yr
Annual Report
Mapping
Phase I map due
Phase II map due
Update map w/ outfalls, receiving waters, certain other structures
Update mapping information, including catchment delineations, outfalls, and infrastructure locations (pipes, manholes, catch basins) based on information collected during catchment investigations
Outfall Screening
Initial Outfall Ranking due
Updated Outfall Ranking due
Dry Weather outfall screening and sampling
Wet weather screening of outfalls and interconnections will be performed as necessary during catchment investigations
Catchment Work
Written catchment investigation procedure due
100% problems and catchments with sewage evidence investigated
100% catchments investigated
Perform catchment investigations for Problem Outfalls and outfalls/ interconnections where dry weather testing indicates sewer input
Perform catchment investigations for remaining outfalls
Written programs
Written IDDE program, SSO inventory due
Ordinance must be in place for new permittees

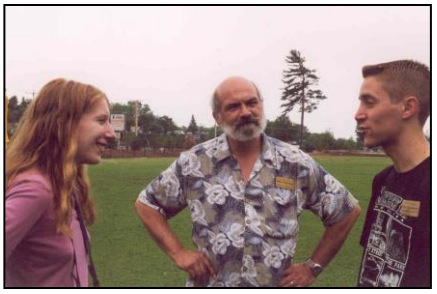
Tips for Organizing and Conducting Volunteer Clean-up Events

By: Jen Drociak –Acting Coordinator / Volunteer, Manchester Urban Ponds Restoration Program (UPRP)

Step 1: Plan Your Clean-Up Event

A. Land and / or Shore? Determine the Location(s): Determine where, in proximity to the waterbody, your group wishes to concentrate its efforts on during a clean-up event. To find heavily-littered areas, and / or areas that are prone to illegal dumping, walk along the shore, in advance, to identify location(s) for the clean-up event. Identify accessible paths along the shoreline and / or on public trails that are easy for people to walk. The location(s) may be largely determined by public (or lake / homeowner association) access points such as a public beach, boat-launch, or park. If the location is large, consider identifying smaller locations within the larger location which can be managed by individual group leaders and groups. Determining the location(s) will provide you with an idea of the footwear that may be needed for the task based upon the terrain. If the clean-up event will be located at a beach or a dry area, sandals or sneakers may be adequate. If it will be located in a wetland or mucky area, knee-boots may be appropriate. If it will be located in water, hip-boots may be most appropriate. Determining the location(s) will also provide you with a sense of how many volunteers your group is seeking for the clean-up event.

The UPRP typically focuses clean-up efforts in the parks adjacent to the ponds by skirting around the ponds themselves. This involves differing terrain, and thus footwear. There have been occasions, however, where one or more volunteers have also used a small fishing boat to retrieve trash from the water that is too deep to obtain via hip-waders.



B. Obtain Landowner Permission: Whether the location(s) of your clean-up event is / are municipally-owned or privately-owned, determine who owns the property in advance in order to obtain permission. If you do not know who the property owner is, visit your municipality's on-line assessor's website to review the tax map(s) and property card(s) associated with the area. It is typically easy to obtain permission to organize a clean-up on municipally-owned / public land. If the location(s) are on privately-owned land, talk to the land owner(s) and explain why you are organizing a clean-up in that area, along with the benefits of doing so. Obtain permission from them in writing, if you can, by considering they sign a form. Verbal permission may be adequate, however.

The UPRP organizes clean-up events on land owned by Public Works and Parks, Recreation, and Cemetery Departments. We have not had to seek private landowner permission. We simply notify the Manchester Public Works Department and Parks, Recreation, and Cemetery Department of the dates of the clean-up events.

C. Determine the Task(s) at Hand: Determine what you will request of your volunteers. Will it be the removal of trash only? If so, will it be the removal of large items only or all items including the minutia? Will it be the removal of yard waste only? Graffiti removal or other vandalism? All of the above? Determining the task(s) at hand will provide you with an idea of the supplies (and hours) you will need to perform the task(s).

The UPRP typically removes trash only. We typically do not pick up the minutia (cigarette butts, bottle caps, etc.) due to the large volume of trash we collect and the limited amount of time and volunteers we have at each clean-up event.

D. Determine the Check-In Location: Based upon the chosen location(s) of the clean-up event, consider and determine the most appropriate location for volunteers to initially gather to check in and obtain supplies, as well as to reconvene at the end of the clean-up event. This may be a kiosk, boat-launch, or specific location on a beach or in a park. Try to stay away from busy roads or areas that are difficult to access.

The UPRP typically requests that volunteers meet in one central / well-known location such as a kiosk in a parking lot or boat-launch. We have kept the initial meeting location at each clean-up event consistent over the years.

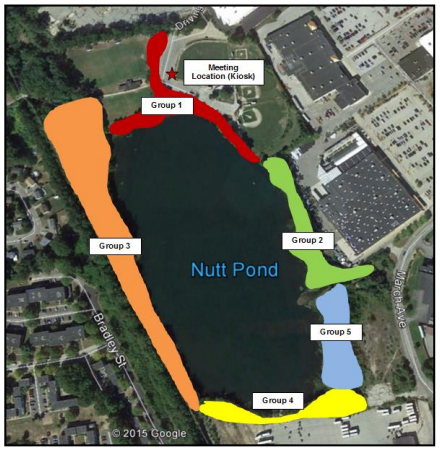
E. Determine the Most Appropriate Age(s) of Your Volunteers: Based upon the task(s) at hand, determine the most appropriate age(s) of your volunteers. Are you seeking adults only? Children? Both? Do you have tasks that all can partake in, or are the tasks age-specific?

The UPRP generally seeks volunteers of all ages for clean-up events and encourage everyone, despite their age or ability, to participate in a manner of how they most feel comfortable.

F. Determine the Desired Number of Volunteers: Based upon the number and location(s) that are chosen for the clean-up event, determine the desired number of volunteers to partake in the event.

The UPRP typically splits the area adjacent to the ponds into several areas, or groups of volunteers.

G. Create Map(s) of the Location(s) <u>OR</u> Plan on Designating a "Group Leader" for Each Location: If the location(s) is / are large enough to break into more than one group during the clean-up event, consider making aerial photographic "maps" (or using topographic maps) of each group's area, indicating on the map the original meeting location, and the group's start and end point.



The UPRP has created aerial maps to use in the past. However, what we consider to be more helpful is having a "group leader" (returning volunteer or someone familiar with the area) lead a small group of other volunteers in each designated area.

Step 2: Schedule Your Clean-Up Event

A. Choose a Date: Choose a date for the clean-up event at a time of year that makes the most sense to your group. Keep in mind that while lakes and ponds have year-round residents, the majority of residents are likely seasonal and may not arrive for the season, or on or around Memorial Day weekend. Thus, a late-spring or late-fall cleanup may not be the most appropriate time as it may not garner the most volunteers. An early or mid-summer cleanup may be the most appropriate. Consider, perhaps, scheduling the event in conjunction with an annual lake association meeting or holiday barbeque. Also consider scheduling the date of the clean-up event at least a month in advance to allow time to prepare (gather supplies and recruit volunteers). Lastly, consider a rain date.

The UPRP typically schedules annual pond and park cleanups on Saturday mornings during the last two weeks in April and the first one or two weeks in May. This is because a) this time of year is typically after the snow has melted and b) this time of year is typically before "leaf-in" (and in the case of some of these areas, this is important, as the areas are overtaken with thick stands of invasive species). We do not offer rain dates.

B. Choose a Time: Determine the amount of time it may take to clean up the area(s) of your choosing. Will it take one hour? Two hours? More? This is also a factor of the number of volunteers that attend (typically the more volunteers that attend the least amount of time the clean-up will take). If you believe the area(s) may take more than two hours, it may be best to schedule a two-part clean-up event. Also consider the time of day most appropriate to your group, especially if it is scheduled in conjunction with (or before or after) another event such as an annual meeting or holiday barbeque.

The UPRP has realized that 1 ½ - 2 hours is a sufficient amount of time to allot to clean-up events. We also realize that volunteers typically do not have the time or patience to commit to any more time in one day than that. We have also typically scheduled the clean-up events from 9:00AM to 11:00AM, with a meeting time of no later than 8:50AM. Early-morning clean-up events afford volunteers to have the remainder of the day for other things.

Step 3: Determine and Obtain Necessary Supplies

A. Determine the Necessary Supplies: Determining the task(s) at hand will determine your necessary supplies. If your clean-up event is strictly a trash removal cleanup, you may only need to obtain latex gloves and trash bags. If your clean-up event also includes yard-waste removal, you may need to obtain paper yard-waste bags, rakes and / or other tools.

Since the UPRP clean-up events are strictly focused on trash-removal, the only supplies we must procure are latex gloves (medium sized) and trash bags. We also have a few hand-held trash-grabbers since some volunteers find them helpful in reaching difficult areas and / or to prevent excessive bending.

B. Obtain the Necessary Supplies: Determine how you will obtain the necessary supplies. Does your group have a budget? Will your group be purchasing your supplies? Will your group fundraise to purchase supplies? Will your group borrow supplies, from perhaps the town or city?

The UPRP typically obtains supplies from the Manchester Parks, Recreation, and Cemetery Department. These supplies typically only include latex gloves and trash bags, but have included, in the past, rakes, other tools and yard waste bags. We also typically have a large container of hand-sanitizer available.

C. Obtain a First-Aid Kit: Consider obtaining one or more First Aid kits (for one or more groups of volunteers) in case it is needed. It is better to be proactively safe!

The UPRP has one First-Aid kit for use.

D. Consider Providing Water and Snacks: If your group has the financial means, consider providing water and snacks to your volunteers for afterwards. If your group does not have the financial means, consider soliciting donations from local establishments or having your group bake some treats, and bring a large cooler of ice water (or iced-tea) and some paper (or reusable plastic) cups.

The UPRP does not regularly provide water and snacks to volunteers since we do not have a budget to do so. On occasion, we have been able to obtain donations for yogurt snacks from Stonyfield Farm. On occasion we have also brought or made a baked good.

Step 4: Determine Your Waste Disposal Options

A. Determine Your Waste Disposal Options: At the end of your clean-up event, determine how and where you will dispose of the trash that was collected. Is there a dumpster on site that your group has permission to use? Are there already trash and / or recycling carts on site that your group has permission to use? If not, consider contacting your municipality's Highway Department, Parks & Recreation Department, or Road Agent, at least a month in advance, who may be able to coordinate trash and / or recycling pickup from your municipality's vendor (i.e. Waste Management, Pinard, etc.). Determine when the trash and / or recycling will be picked up and what the requirements for pickup are (especially with items such as vehicular tires and batteries, etc.). In addition, consider recruiting volunteers with pick-up trucks, especially if your group is cleaning multiple areas, and trash must be stockpiled in one area at the end of the event. Similarly, if you cannot obtain trash pick-up services, volunteers with pick-up trucks, and a municipal sticker (or permission) may be able to haul the trash and / or recycling to your local landfill or transfer station for free.

The UPRP typically sends notification of the clean-up schedule to the Manchester Public Works Director as soon as the dates are calendared. The Public Works Director, or staff, has coordinated with Manchester's solid waste collection staff to collect the trash on the Monday following the cleanup event (which have been held on Saturdays). While there have been a few times the Public Works Department has made one or more 95-gallon recycling carts available for the clean-up events, they are generally not available, and therefore, recycling is not typically sorted from other debris. All (tied / secure) bags of trash have been neatly placed in the same locations over the years; typically underneath or adjacent to the informational kiosks. Trash collected that does not fit into bags is also neatly placed adjacent to the bagged trash. We also recruit volunteers with pick-up trucks so that trash from different areas of the cleanup can be taken to one designated location at the end of the event. In addition, one of our volunteers separates steel and other scrap metal and takes it to a scrap metal recycling facility.

Step 5: Advertise Your Clean-Up Event / Recruit Volunteers

A. Determine Any Project Partners: In addition to volunteers who live around the waterbody, and any other residents of the town, determining any existing local groups or clubs that may be able to assist with the clean-up event is always helpful. Is there a local middle school, high school, or even college (if nearby) environmental club? A local chapter of the Student Conservation Association (SCA)? Any other organization, volunteer group, or club? A lot of these groups and / or clubs seek new community service projects and can help you garner additional / new volunteers.

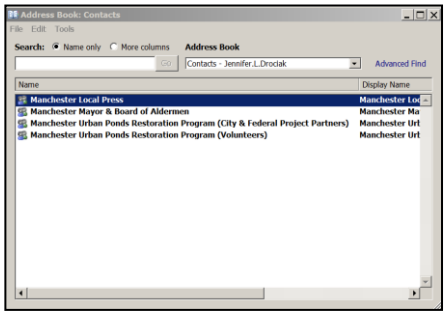
The UPRP has partnered with the Student Conservation Association, local high school ecology clubs, local boy-scout troops, trout-fishing clubs, geo-cashing groups, and others in the past. This has helped garner additional / new volunteers.

B. Determine the Best Way(s) to Advertise Your Clean-Up Event: Determine the target audience of volunteers and consider the best way(s) to advertise your clean-up event. Is it by e-mail? Website? Post-card? Posting of a flyer on a community bulletin board and / or kiosk? An annual lake association newsletter? An advertisement in a local newspaper? TV? Radio? facebook / social media? All of the above? Remember, printed materials and postage cost money, as typically do newspaper and radio advertisements. If your group has available funds for this, that is one thing. If not, instead of

simply placing a paid advertisement in a newspaper, try reaching out to a local news reporter to see if s/he will write a story about your cleanup (or write and submit an op-ed piece). This is usually good, free, advertisement. Also determine the most appropriate time to advertise for the clean-up event. Will you be advertising only once, or multiple times before the event?

The UPRP has typically advertised clean-up events in the following manners: 1) The UPRP webpage, 2) The City of Manchester website "Calendar of Events", 3) the UPRP facebook page, and 4) E-newsletter / e-mail. Local newspapers are also always gracious to cover the event(s) in a story beforehand. The UPRP typically sends posts the clean-up events on the website, and sends out an e-mail approximately three weeks in advance of the cleanup. The UPRP will then send weekly e-mails.

C. Create an E-Mail Distribution List: If you don't already have an e-mail distribution list, consider creating one. This may include names and e-mail addresses of lake association members, conservation commissioners, selectmen, municipal employees / department heads and others you know who may be interested. You can add to this with each clean-up event your group coordinates. If you have access to Constant Contact, Mailer, Mail Chimp, or other similar e-mail platform, this may be easier and more appropriate to use. If not, e-mail is a good starting place.



The UPRP has an e-mail distribution list which consists of approximately 200 individuals consisting of city aldermen, city department heads, conservation commissioners, media contacts, active school groups and other environmental organizations, and former volunteers. With every e-mail sent, an option is sent to opt-out of receiving e-mails by having a name and e-mail address removed from the list. This list is updated at least twice a year.

D. Before You Mail, Post, (or Hit the Send Button): Before you mail or post your flyer, or hit the send button to your e-mail distribution list, be sure to include the Who, What, Where, When, Why, and How to ensure all information is readily available. Why are you seeking volunteers? Who are you seeking as volunteers? What tasks are you seeking of volunteers? Where (general location and specific meeting location) are you seeking volunteers? When (date / time) are you seeking volunteers? Is there a rain date? How will the tasks be conducted? What should the volunteers wear or bring? What will be provided? Are you requesting an RSVP? For more information, who should they contact? Prepare your volunteers by letting them know what time to arrive, what to wear (clothes that can get dirty or wet, long pants, work gloves, boots or sturdy shoes, etc.), what to bring (sunscreen, insect repellant, water) and what to do in case of bad weather (rain date or cancellation information / phone number).

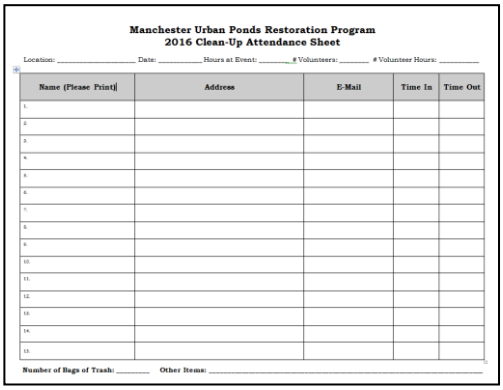
For Example: Seeking volunteers of all ages to assist in an annual trash clean-up at Black Brook and Blodget Park in Manchester on Saturday, April 23, 2016 from 9:00AM – 11:00AM. Volunteers will partner to clean the park and skirt the edges of the brook and wetland complex to remove accumulated trash. Please dress appropriately for weather as no rain date is scheduled. Latex gloves and trash bags will be provided, but please wear knee-boots, or hip-waders if you have them. No RSVP necessary. For more information, please visit www.manchesternh.gov/urbanponds or contact Jen Drociak at email@gmail.com or (603) ### - ####. We look forward to seeing you there!

Step 6: Conduct Your Clean-Up Event

A. Arrive Early: Consider arriving 15 minutes to one hour earlier than your volunteers so that you can set up at your check in location. Consider setting up the following: "Clean-Up Attendance Sheet", water and / or refreshments, first aid and safety, trash bags and clean-up supplies, organizational information (flyers, fact sheets, reports, etc.). Consider also walking around the location(s) to identify any new trash and / or safely concerns that may have accrued / arisen since your last visit.

The UPRP coordinator(s) typically meet on-site approximately 15-30 minutes in advance of volunteers to set up trash bags, latex gloves, and the "Clean-Up Attendance Sheet". We also survey the site to identify any new trash or safety hazards to relay to volunteers.

B. Welcome Your Volunteers and Ask Them to Sign-In: Welcome each volunteer upon arrival and ask that they sign a "Clean-Up Attendance Sheet" so that your group may account for number of volunteers and volunteer hours contributed to the clean-up event. Consider leaving the "Clean-Up Attendance Sheet" at the check-in location for those volunteers who may have to leave (and sign out) earlier than the full allotted time.



Manchester Urban Ponds Restoration Program
2016 Clean-Up Attendance Sheet

Location: _____ Date: _____ Hours at Event: _____ # Volunteers: _____ # Volunteer Hours: _____

	Name (Please Print)	Address	E-Mail	Time In	Time Out
1.					
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					
13.					
14.					
15.					

Number of Bags of Trash: _____ Other Items: _____

The UPRP "Clean-Up Attendance Sheet" typically notes the location and date of the event, and has room to tally the number of volunteers, number of volunteer hours, number of bags of trash and other debris. It also has fields for volunteers to print their name, address, and e-mail, and note the time they checked in, and the time they checked out.

C. Ask Volunteers to Sign a Liability Waiver and Photo-Release Form: Trash found in a waterbody will likely be dirty, rusty, slimy, and sharp. In addition, your group may find broken glass, hypodermic needles and hazardous wastes. Heavy items should not be lifted alone. Caution is needed when handling all trash in order to avoid cuts and other injuries. Consider asking volunteers to sign a liability waiver and photo-release form. These can be two documents, or combined into one. The form should explain any dangers associated with the clean-up event and reminds volunteers to act responsibly for their own safety. The form helps protect you and your organization from potential liability if a volunteer is injured. In addition, with their permission, it allows you to use photographs taken that day. Examples of these forms can be found on-line.

D. Introduce Yourself and Provide Opening Remarks: Introduce yourself, thank special guests, sponsors / project partners (who have helped by providing goods or services), and volunteers. If the media is there, they may want to interview you or for you to provide a brief quote. Consider preparing remarks ahead-of-time, and allowing any special guests to also provide opening remarks to the group.

The UPRP coordinators typically introduce themselves, and thank any special guests (city aldermen, city employees, etc.), sponsors (municipal and local), and volunteers themselves.

E. Provide Volunteers with a Brief Background / History of the Area(s): To acquaint new volunteers to your group / program and to the area, consider providing a brief background / history about the waterbody / area, distinguishing features, and its importance to the community. Consider showing volunteers a map of the waterbody and / or watershed. Also consider providing information such as points of interest, recent (or upcoming) restoration projects in the area, and / or information relative to water quality / monitoring, exotic species, other volunteer opportunities, etc.

Many of the UPRP volunteers are returning volunteers. However, with any new volunteers, we typically offer basic information on the program itself, as well as the watershed, inlet / outlet, history fun-facts, and any recent / upcoming restoration projects. We have fact sheets on each of our ponds on our website, which we can also direct them to for more information.

Manchester Urban Ponds Restoration Program

Nutts Pond Facts

- **Namesake:** Named after a local circus performer, "Commodore" George Washington Nutt
- **Location:** Driving Park Road, off of South Willow Street in south Manchester
- **Type of Waterbody:** Natural Pond fed by Tannery Brook
- **Inlet/Outlet:** Tannery Brook, flowing into Nutts Pond to the south of Home Depot, and emptying into the Merrimack River near the Riverwalk in downtown Manchester
- **Watershed Area:** 635 acres
- **Waterbody Size:** 16.1 acres
- **Volume of Water:** 260,500 m³
- **Mean/Average Water Depth:** 13.12 feet
- **Maximum Water Depth:** 30.10 feet
- **Shoreline Length:** 3,116 feet
- **Elevation:** 237 feet
- **Uses:** Paddling, fishing
- **Public Boat Launch:** Gravel, trailer or car-top
- **Amenities:** Prescourt Park athletic fields
- **Local Legend:** "Commodore" Nutt the circus performer who toured with the P.T. Barnum Circus show with Tom Thumb

Manchester Urban Ponds Restoration Program

The History of Nutts Pond

"Commodore" Nutt

Manchester Urban Ponds Restoration Program

Nutts Pond Stormwater Best Management Practices (BMP) Summary

F. Provide Necessary Supplies to Your Volunteers: Ensure your volunteers have ample supplies for the duration of the clean-up event. If they did not bring their own work gloves, request that they take two pairs of Latex gloves (in case one pair rips), and more than one trash bag, depending on the designated location(s). If your group is also removing yard waste, provide your volunteers with rakes and lawn-waste bags. Request that they return any unused pair of gloves, trash bags, and any supplies to you at the end of the clean-up event. Consider also leaving supplies out in a designated location along with the "Clean-Up Attendance Sheet" for volunteers who may show up late.

Many of the UPRP bring their own work gloves. We then issue two pairs of Latex gloves to each volunteer as well as multiple trash bags, depending on the specific area they will be cleaning up. We request that all unused supplies be returned at the end of the clean-up.

G. Provide Your Volunteers with Instructions for the Clean-Up Event: Provide your volunteers with instructions for the clean-up event such as what they will be retrieving (large trash only, all trash, etc.) what not to pick up (hypodermic needles, cigarette butts, etc.), if they are to separate trash from recycling or not (in which case they may carry two bags at once – different colors may be helpful - one for trash and one for recycling), what is considered recyclable if they are separating recycling from trash (this differs in each community and some vendors may not accept unclean / dirty recyclables from clean-up events), etc. Also provide your volunteers with safety tips and a general schedule of the clean-up event including the location to reconvene at the end and where to place trash. Ensure everyone knows there to focus their efforts and then to stop.

The UPRP typically only picks up large items, and does not typically separate trash from recycling, due to limited means. However, we have done so in the past and have provided volunteers with two trash bags – one for recycling, and one for trash.

H. Make It Fun! Play One or More Games While You're at It! Why not make things fun while you're out there picking up trash? Consider playing one or more games (especially if some of the volunteers are children) such as a scavenger hunt, who can find the most interesting or unusual piece of trash, who can find the largest piece of trash, who collects the most trash, etc. Consider offering a prize and / or certificate to the winner(s) of one or more of the games you play.

The UPRP has, for many years, asked volunteers to find the "Most Interesting or Unusual Piece of Trash" at each clean-up event. At the end of the clean-up, volunteers will place their found items in one location for "judging" by the coordinator(s) of the clean-up event. Certificates and / or prizes have been awarded to the winner(s), and photos have been taken. We have found some really interesting an unusual pieces of trash over the years, and have kept a list!

I. Relinquish Groups of Volunteers / Group Leader(s) to Designated Area(s): If you are separating volunteers into more than one group for your clean-up event, relinquish the groups to their designated location(s). If you don't have a group leader for each group, relinquish them with their maps in hand. If you have a group leader be sure to introduce the volunteers in each group to their group leader before relinquishing them to their designated location(s). Remember to consider that not all locations may need the same number of volunteers.

The UPRP typically asks one or more returning volunteers if they would agree to be group leaders. Not all locations require the same amount of volunteers, however. This is decided based upon the area of the designated location(s), as well as the amount of trash to be removed in the designated location(s). For example, one small area along the shoreline may only require two volunteers, but a larger area in another location with a lot of trash may require 4-6 or more volunteers.

J. Reconvene at Initial Check-In Area at Designated Time: After the allotted period of time has elapsed for the clean-up event, reconvene at your initial check-in area. Account for all volunteers that did not sign out early.

The UPRP always meets at our initial check-in area. We then account for each group leader and group of volunteers (who did not sign out early) to ensure all have safely returned.

K. Count Full Bags of Trash (or Weigh All Trash): Count all full bags of trash that were collected and returned. If one or more bags are returned and are not considered full, consider consolidating them to make full bags of trash. That way, your measurements of "full bags" collected for this, and any other clean-up events, are consistently measured / counted. If your group has access to a scale, you consider weighing your bags of trash, and any other trash, to account for pounds of trash collected. Another option is to ask if the vendor who is charged with collecting the trash after the event can inform your group of the weight of the collection when the truck enters the scale at the weigh-station before drop-off at the refuse facility.

Since trash collected at UPRP clean-up events has not been weighed by a scale, and trash has been weighed by vendor truck only occasionally, to be consistent, we always count full bags at the site, and consolidate bags of trash that are returned not full in order to make full bags.

L. Account for and Count Other Items: Account for and count the quantity of other items of trash collected that cannot fit into bags.

The UPRP always accounts for and counts any trash that is collected that cannot be bagged. This typically includes vehicular tires, shopping carts, wood debris, construction debris, or any other items that have been illegally dumped.

***M.* Share the Data with Volunteers:** Once you have tallied the final numbers of bags of trash and other items collected during the clean-up event, announce them to your volunteers so they know just how much trash and other debris they removed from the area, know how important their contribution of time and efforts were, and have immediate results of their work!

N. Tally Final Numbers on Clean-Up Attendance Sheet: Once you have tallied everything collected, write these numbers on your "Clean-Up Attendance Sheet".

O. Take Photographs: To commemorate the success of your clean-up event, take a photo of the trash collected, and of the group of volunteers who helped collect it!

The UPRP always photographs the trash collected (in and out of bags), as well as takes a group photograph in front of or aside the trash collected.

P. Award a Prize, or Two, or Three: If you played one or more games during the clean-up event, consider awarding a certificate or prize to your winner(s) and photographing them with their winning piece of trash!

The UPRP has, for many years, asked volunteers to find the "Most Interesting or Unusual Piece of Trash" at each clean-up event. At the end of the clean-up, volunteers will place their found items in one location for "judging" by the coordinator(s) of the clean-up. Certificates and / or prizes have been awarded to the winner(s), and photos have been taken.

Q. Thank the Volunteers: Before parting ways, be sure to thank your volunteers for their assistance! Encourage them to volunteer again. Be sure to individually thank any special guests (aldermen / selectmen, city employees, media, etc.).

At the end of each clean-up event, the UPRP notes upcoming clean-up events in order to encourage volunteers to return for the next event.

Above Left: Volunteers at the 100th Cleanup of the Manchester Urban Ponds Restoration Program.

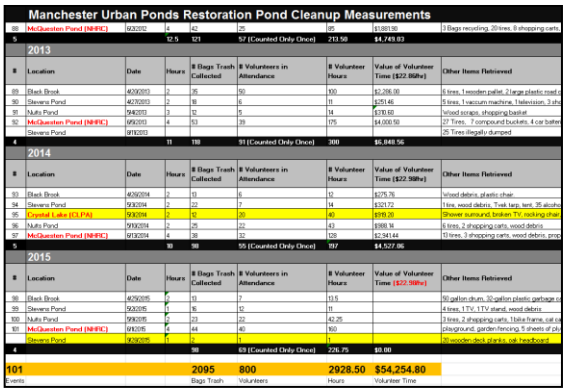
Above Right: Cake served to volunteers at the 100th official cleanup of the Manchester Urban Ponds Restoration Program .

R. Consider Having a Picnic / Cookout / or Lunch: If you have the financial means, consider having a picnic / cookout / lunch afterwards to celebrate your accomplishment. Or, consider soliciting local vendors for food donations in exchange for sponsor / partnership recognition at your clean-up event. If you're not able to make or supply lunch, consider encouraging volunteers to bring a brown-bag lunch for afterwards.

Step 7: Follow Up After the Clean-Up Event

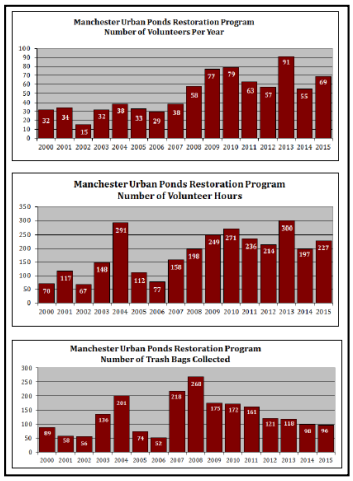
A. Update Your Electronic Records: Now is the time to transpose the information collected on the "Clean-Up Attendance Sheet" into an electronic record-retention system if you have access to one. Perhaps you have access to a database. If not, consider using a Microsoft Excel workbook / spreadsheet system to track measurements from your clean-up events. Now is also the time to update your existing e-mail distribution list with the names and e-mail addresses of those volunteers who participated in your clean-up event.

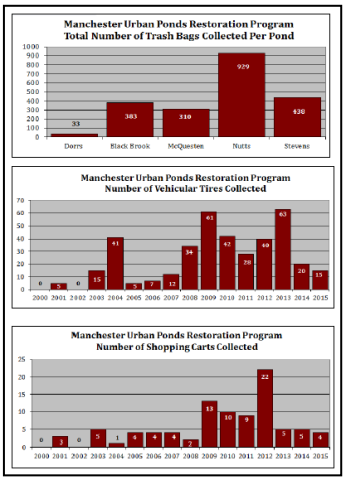
The UPRP has consistently used Microsoft Excel to track clean-up measurements. In the first worksheet of the workbook, we account for the number of our clean-up event, the location, date, hours spent at the event, numbers of bags of trash collected at the event, number of volunteers at the event, number of volunteer hours at the event, total value of volunteer time for the event, and other items retrieved at the event. For each year tracked, we created a "total" line with auto-calculations to account for the total of each year. To account for the value of volunteer time, we use figures taken from www.independentsector.org. In the second worksheet of the workbook, we account for pond cleanup attendees, where, for each clean-up event, we list the location, date, names (in alphabetical order), address, and hours at event. Similarly, for each year tracked, we created a "total" line. In the third worksheet of the workbook, we have created graphs based upon each year's total metrics. We then transpose these graphs to a Microsoft Word document, then an Adobe PDF document, and post on our website, and at the kiosks.



Manchester Urban Ponds Restoration Pond Cleanup Measurements

#	Location	Date	Hours	# Bags Trash Collected	# Volunteers in Attendance	# Volunteer Hours	Value of Volunteer Time ($22.95/hr)	Other Items Retrieved
88	McQuesten Pond (NHFIC)	4/3/2012	4	42	25	85	$1,881.30	3 Bags recycling, 20 tires, 8 shopping carts
5			12.5	121	57 (Counted Only Once)	213.50	$4,749.93	
	2013							
89	Black Brook	4/29/2013	2	35	50	100	$2,295.00	6 tires, 1 wooden pallet, 2 large plastic road c
90	Stevens Pond	4/29/2013	2	16	6	11	$251.46	5 tires, 1 vacuum machine, 1 television, 2 sh
91	Nutts Pond	5/4/2013	3	12	5	14	$310.60	Wood scraps, shopping basket
92	McQuesten Pond (NHFIC)	6/5/2013	4	53	39	175	$4,000.50	27 Tires, 7 compound buckets, 4 car batter
	Stevens Pond	6/18/2013						25 Tires illegally dumped
4			11	118	91 (Counted Only Once)	300	$6,848.56	
	2014							
#	Location	Date	Hours	# Bags Trash Collected	# Volunteers in Attendance	# Volunteer Hours	Value of Volunteer Time ($22.95/hr)	Other Items Retrieved
93	Black Brook	4/26/2014	2	13	6	12	$275.76	Wood debris, plastic chair
94	Stevens Pond	5/3/2014	2	22	7	14	$321.72	1 tire, wood debris, Tivek tarp, tent, 35 alcohe
95	Crystal Lake (CL) PA)	5/3/2014	2	10	20	40	$919.20	Shower surround, broken TV, rocking chair
96	Nutts Pond	5/10/2014	2	25	22	43	$988.14	6 tires, 2 shopping carts, wood debris
97	McQuesten Pond (NHFIC)	6/13/2014	4	38	32	128	$2,941.44	13 tires, 3 shopping carts, wood debris, prop
5			10	108	55 (Counted Only Once)	197	$4,527.06	
	2015							
#	Location	Date	Hours	# Bags Trash Collected	# Volunteers in Attendance	# Volunteer Hours	Value of Volunteer Time ($22.95/hr)	Other Items Retrieved
98	Black Brook	4/25/2015	2	13	7	13.5		50 gallon drum, 32 gallon plastic garbage c
99	Stevens Pond	5/2/2015	2	16	12	11		4 tires, 1 TV, 1 TV stand, wood debris
100	Nutts Pond	5/9/2015	2	23	22	42.25		3 tires, 2 shopping carts, 1 bike frame, cat ca
101	McQuesten Pond (NHFIC)	6/1/2015	4	44	40	160		playground, garden fencing, 5 sheets of pla
	Stevens Pond	6/16/2015	1	1	1	1		10 wooden deck planks, oak headboard
4			10	98	69 (Counted Only Once)	226.75	$0.00	
101				2095	800	2928.50	$54,254.80	
Events				Bags Trash	Volunteers	Hours	Volunteer Time	





B. Follow Up With an E-mail or Thank-You Note: It is always nice to follow up with your new (and / or returning) volunteers by sending them a formal personalized thank-you via e-mail or US Postal Service. Besides, who doesn't like receiving a letter in the letter box, especially in this electronic day-in-age?

The UPRP, has, on occasion, sent personalized thank-you cards in the mail. Typically, however, we send a group thank-you via e-mail and attach photographs taken at the event(s), as well as re-cap tallies from the clean-up event(s).

C. Consider Writing an Article for Your Newsletter or the Newspaper: Consider writing an article for your newsletter, if you have one, or a local newsletter or newspaper, summarizing the event with photographs and tallies from the event. Volunteers who helped out at your clean-up event will feel proud of their accomplishment and the results. This is a good way to garner publicity about your group and its event as well as garner additional volunteers in the future.

The UPRP has often written newspaper articles and / or shared summary information about the clean-up events (at the end of the season) listing sponsors / project partners and volunteers, and including photographs of volunteers at the event, via an electronic newsletter.

From 2000 - 2005 **The Manchester Urban Ponds Restoration Program** (UPRP) was part of the Supplemental Environmental Projects Plan (SEPP) which was part of an agreement between the City of Manchester, NH Department of Environmental Services, and the US Environmental Protection Agency to address combined sewers in the City. Seven (7) waterbodies in Manchester have been evaluated and monitored for restoration potential. Specific restoration projects to meet the program's goals have also been identified, funded, and completed through this project. Since 2000, the Manchester Urban Ponds Restoration Program has organized 101 clean-up events. Over the past 15 years, 800 volunteers have spent 2,298.50 hours collecting 2,093 bags of trash! This does not include the items illegally "dumped" such as shopping carts (91), tires (388), car batteries, other car parts, construction debris, and other items. In addition, the value of volunteer time spent at these clean-ups has amounted to over $54,000 over the past 15 years! The Manchester Urban Ponds Restoration Program was awarded an EPA "Environmental Merit Award" in 2011. More information on the Manchester Urban Ponds Restoration Program can be found by visiting www.manchesternh.gov/urbanponds.

Jen Drociak lives in Manchester, NH and holds a Bachelor of Science degree in Environmental Conservation from the University of New Hampshire. She is employed with the New Hampshire Department of Environmental Services where she has worked as a program specialist for the Pollution Prevention Program, a restoration specialist for the NH Coastal Program where she established a monitoring program for pre- and post-restoration projects in NH's salt marshes, and as the Volunteer River Assessment Program Coordinator where she provided technical assistance to approximately 200 volunteers who collected water quality samples for surface water quality assessments on NH's rivers and streams. Jen has also worked for the Wastewater Engineering Bureau as a grants management specialist and is currently working for the Land Resources Management Bureau as a compliance specialist. Since 2000, Jen has also been involved with the Manchester Urban Ponds Restoration Program, and has served as acting coordinator since 2006 where she largely coordinates annual clean-up events and water quality monitoring.

Appendix G

Sanitary Sewer Overflow Inventory

SSO Inventory maintained by DPW. To be summarized and inserted here.

Appendix H

Good Housekeeping Program

City of Quincy, MA

Department of Public Works

NPDES Phase II Permit MAR041081

Standard Operating Procedures (SOP)

for the Quincy Drainage System Area (QDSA)

Effective Dates:

July 1, 2019 through September 30, 2023

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Inlets and Catch Basins

RESOURCE NEEDS

DEFINITIONS:

Catch basins are subsurface concrete structures that receive water through a grate, curb opening, or inlet pipe. These structures can contain flow control and/or water quality devices. The catch basin's function is to collect and convey flow and in low flow conditions, collect debris and sediment to prevent these items from transferring into and obstructing the downstream piped collection system.

PERMIT REFERENCES:

Street Maintenance performs annual inspection and cleaning of catch basins and inlet control measures to meet permit requirements (2.3.5 & 2.3.7.a.iii).

ACTIVITY DESCRIPTION:

A detailed inspection is completed for each inlet/catch basin and minor cleaning, such as litter pick-up, is completed as part of the inspection routine. The mapping, inspection and maintenance of stormwater inlets/catch basins require accurate and specific record keeping. This task is completed by using Quincy's computerized Geographic Information System (GIS) to inventory all drainage structure locations, track maintenance costs, maintenance histories, and condition assessments. The computerized GIS stores and manages this data providing annual reports as well as formulates work order set-up and preventative maintenance (PM) schedules. During the summer season Street Maintenance prepares grid maps identifying all the catch basin/inlet structures within the grids and assigns necessary personnel to inspect the subject structures within the grids. Each structure is visually inspected for sediment accumulation and signs of cracks, breaks, displacement, infiltration, or deterioration. The data collected during the inspection effort is then uploaded into the computerized GIS and a work order is created listing the inlet/catch basins that require maintenance. Crews are assigned and begin by inspecting and preparing the vehicle fleet and equipment, including vactor trucks, to perform maintenance duties. If sediment accumulation reaches a certain level (see maintenance criteria below), vactor trucks remove the sediment and clean the catch basins. If repairs are required, the location and condition is recorded. The Supervisor collects reports describing the outcome of the assigned maintenance activities and enters this data into the computerized GIS. Structures requiring repairs or rebuilding are inventoried and prioritized over the winter season and assigned for repair or additional work when weather permits. If damage to private property, the right-of-way, or roadway is evident and a hazard, emergency repairs are assigned to the daily field crew.

INSPECTION CRITERIA:

1. Provide appropriate traffic control where necessary and all other required safety equipment. Insure personnel are properly trained on the use of equipment and safety procedures.

2. If sediment depth is within 1" of the lowest pipe invert elevation then maintenance is required.

3. The structure is inspected from the surface to the fullest extent possible (catch basins are not designed for entry, **ENTRY IS NOT PERMITTED**) for structural integrity and/or damage for the following items:

- Inlet condition is flowing and free from any blockages
- Evidence of infiltration including drips or water flowing into structure at joints and/or grouting and evidence of discoloration above the sump indicating former water intrusion.

MAINTENANCE CRITERIA:

1. Provide appropriate traffic control where necessary and all other required safety equipment. Insure personnel are properly trained on the use of equipment and safety procedures.

2. Catch basins are confined spaces containing potentially hazardous atmospheres. All maintenance personnel will be trained and properly equipped to work in hazardous confined spaces before entering any type of catch basin structure.

3. Remove sediment using vactor truck. Dispose of sediment from the vactor truck at the sedimentation basin at the Quincy Highway Garage. If repairs and/or maintenance are required, record the condition and transfer to the Street Maintenance computerized asset management system for prioritization and scheduling.

□ Evidence of cracks and deterioration of the structure or grouting including rotting of concrete structure, exposure of rebar or structural matting, discontinuous sections in the grout.	4. If repairs and/or maintenance are required or suspected, record the condition and transfer to the Street Maintenance computerized asset

Inlets and Catch Basins

□ Structural integrity including barrel sections is in good alignment, grade rings show no evidence of cracking, lifting, or movement. □ Evidence of abrasion and/or corrosion and deterioration of pipes. □ Evidence of any other unusual condition that may impede or impair the function of the structure. 4. If the structure cannot be inspected the inspection record will indicate one or more of the following; • Could not locate. • Defective or non-compliant construction. • Obstructed access. • Grate or cover could not be removed. • Unsafe conditions. • Structure has been declared a hazard to life and limb and may not be disturbed for any reason. • Unit not properly raised to grade preventing maintenance access	management system for prioritization and scheduling. i. Remove inlet blockage ii. Record and/or photograph infiltration condition for Street Maintenance asset management system. iii. Record and/or photograph cracks and deterioration for Street Maintenance asset management system. iv. Record and/or photograph structural integrity for Street Maintenance asset management system. v. Record and/or photograph corrosion or abrasion for Street Maintenance asset management system. vi. Record and/or photograph any other condition that may impede or impair the function of the structure for Street Maintenance asset management system.
INSPECTION SCHEDULE: Routine inspection is completed on an annual basis for each catch basin and inlet.	**MAINTENANCE SCHEDULE:** Maintenance will be scheduled and performed based on the outcome of the annual inspection effort... Maintenance requirements are logged after inspection, noted, and prioritized in the Street Maintenance computerized asset management database. Maintenance activities are completed as warranted by the priority assigned.

POLLUTION PREVENTION/GOOD HOUSEKEEPING PROCEDURES

Train field crews annually and provide frequent verbal reminders on how to operate the equipment and what to look for during routine inspections prior to the field season.
Keep training records that include attendees, date, and description of training.
Check all vehicles, including vactor trucks, used for stormwater infrastructure inspection and maintenance for operational condition, leaks, and deficiencies prior to leaving the Quincy Highway Garage. For equipment inspection and maintenance:

□ Place drip pans under equipment parts that may leak. Empty drip pans when they are more than ½ full.
□ Clean up all drips and leaks immediately
□ Empty fuel and oil filters where drips cannot reach stormwater

- Do not wash equipment or pavement surrounding equipment where wash water can enter storm drains

Inlets and Catch Basins

Check fittings associated with the vactor truck prior to starting operation of the vactor truck to remove accumulated sediment material.

Remove all litter and debris found during the inspection procedure. Dispose of litter/debris from the site in solid waste containers located at the Quincy Highway Garage.

Transfer sediment and debris collected in the vactor truck to the vactor wash-out/sediment basin located at the Quincy Highway Garage. If sediment is spilled or released during collection or disposal clean the area thoroughly and immediately.

Manhole Inspection of Pipes and Weirs

RESOURCE NEEDS

DEFINITIONS:

Manholes allow surface access to underground storm water piping conveyances for inspection and maintenance operations. Pipes within the storm water system convey storm water flow to receiving bodies of water. Weirs installed within manholes provide flow control.

PERMIT REFERENCES:

This SOP was prepared according to the permit requirements (2.3.5 and 2.3.7.a.iii).

ACTIVITY DESCRIPTION:

The inspection and maintenance of manholes, weirs, and pipes require accurate and specific record keeping. This task is completed by using QUINCY's GIS enhanced computerized GIS to inventory all drainage structure locations, track maintenance costs, maintenance histories, and condition assessments. The computerized GIS stores and manages this data providing annual reports as well as formulates work order set-up and preventative maintenance (PM) schedules. During the summer season Street Maintenance prepares grid maps identifying all the manholes, weirs, and pipes within the grids and assigns necessary personnel to inspect the subject structures within the grids. Each structure is visually inspected for sediment accumulation and signs of cracks, breaks, displacement, infiltration, or deterioration. Inspections include weirs and/or adjacent pipe within the manhole. The data collected during the inspection effort is then uploaded into the computerized GIS and a work order is created listing the manholes, weirs, and pipes that require maintenance. Crews are assigned and begin by inspecting and preparing the vehicle fleet and equipment, including vactor trucks, to perform maintenance duties. If sediment accumulation reaches a certain level (see maintenance criteria below), vactor trucks remove the sediment and clean the manholes, weirs, and pipes. If repairs are required, the location and condition is recorded. The Supervisor collects the reports describing the outcome of the assigned maintenance activities and enters this data into the computerized GIS. Manholes, weirs, and pipes requiring repairs or rebuilding are inventoried and prioritized over the winter season and assigned for repair or additional work when weather permits. If damage to private property, the right-of-way, or roadway is evident and a hazard, emergency repairs are assigned to the day crew

INSPECTION CRITERIA:

1. Provide appropriate traffic control where necessary and all other required safety equipment. Insure personnel are properly trained on the use of equipment and safety procedures.

2. Storm drain manholes, weirs, and pipes are confined spaces containing potentially hazardous atmospheres. All inspection and maintenance personnel will be trained and properly equipped to work in hazardous confined spaces before entering manhole structures.

3. If the depth of sediment accumulation in the manhole catchment is within 6" of the lowest invert then maintenance is required.

4. The structure is checked for structural integrity and/or damage for the following items:

- Evidence of infiltration including drips or water flowing into structure at joints and/or grouting, and evidence of discoloration above the sump indicating former water intrusion.

MAINTENANCE CRITERIA:

1. Provide appropriate traffic control where necessary and all other required safety equipment. Insure personnel are properly trained on the use of equipment and safety procedures

2. Storm drain manholes, weirs, and pipes are confined spaces containing potentially hazardous atmospheres. All inspection and maintenance personnel will be trained and properly equipped to work in hazardous confined spaces before entering manhole structures.

3. Remove sediment using vactor truck. Dispose of sediment from the vactor truck at the sedimentation basin at the Quincy Highway Garage.

4. If repairs and/or maintenance are required, record the condition and transfer to the Street Maintenance computerized asset management system for prioritization and scheduling.

i. Record and/or photograph infiltration condition for Street Maintenance asset management system

□ Cracks and deterioration of the structure or grouting including rotting of concrete structure, exposure of rebar or structural	ii. Record and/or photograph cracks and deterioration for Street Maintenance asset management system.

Manhole Inspection of Pipes and Weirs

matting, discontinuous sections in the grout. □ Structural integrity including barrel sections is in good alignment, grade rings show no evidence of cracking, lifting, or movement. □ Signs of abrasion and/or corrosion and deterioration of pipes □ Evidence of any other unusual condition that may impede or impair the function of the structure(s). 5. Measure the depth of sediment accumulation in the upstream and downstream pipes. If the sediment level in pipes is more than 25% of the pipe diameter, schedule the pipes to be jetted and cleaned. Please see Pipe Jetting/Cleaning SOP for detail. 6. If the structure cannot be inspected the inspection record will indicate one or more of the following; • Could not locate. • Defective or non-compliant construction. • Obstructed access. • Grate or cover could not be removed. • Unsafe conditions. • Structure has been declared a hazard to life and limb and may not be disturbed or entered for any reason.	iii. Record and/or photograph structural integrity for Street Maintenance asset management system. iv. Record and/or photograph corrosion or abrasion for Street Maintenance asset management system. v. asset management system vi. Record and/or photograph any other condition that may impede or impair the function of the structure for Street Maintenance asset management system.
INSPECTION SCHEDULE: Manholes and associated weirs and pipes are inspected on a three year rotation.	**MAINTENANCE SCHEDULE:** Maintenance is performed as identified during inspections or as predicated by the preventative maintenance schedule in the asset management system. .

POLLUTION PREVENTION/GOOD HOUSEKEEPING PROCEDURES

Train field crews annually and provide frequent verbal reminders on how to operate the equipment and what to look for during routine inspections prior to the field season.
Keep training records that include attendees, date, and description of training.
Check all vehicles, including vactor trucks, used for stormwater infrastructure inspection and maintenance for operational condition, leaks, and deficiencies prior to leaving the Quincy Highway Garage. For equipment inspection and maintenance:

- □ Place drip pans under equipment parts that may leak. Empty drip pans when they are more than ½ full.
- □ Clean up all drips and leaks immediately
- □ Empty fuel and oil filters where drips cannot reach stormwater
- □ Do not wash equipment or pavement surrounding equipment where wash water can enter storm drains

Check fittings associated with the vactor truck prior to starting operation of the vactor truck to remove accumulated sediment material.
Remove all litter and debris found during the inspection procedure. Dispose of litter/debris from the site in solid waste containers located at the Quincy Highway Garage. Transfer sediment and debris collected in the vactor truck to the vactor wash-out/sediment basin located at the Quincy Highway Garage. If sediment is spilled or released during collection or disposal clean the area thoroughly and immediately.

Pipe Jetting and Cleaning

RESOURCE NEEDS

DEFINITIONS:
Pipe jetting and cleaning is the process of threading a high pressure water nozzle through a pipe to break up and remove debris and sediment from the pipe. Sediment and debris are collected and removed through an access point using a vactor truck.

PERMIT REFERENCES:
This SOP was prepared according to the permit requirements (2.3.5 and 2.3.7.a.iii).

ACTIVITY DESCRIPTION:
Stormwater pipes are inspected during routine manhole inspections in compliance with the SOP for Manholes/Pipe Inspection/Weirs. If a significant blockage is observed or if sediment and debris levels exceed those established in the SOP for Manholes/Pipe Inspection/Weirs, the condition is recorded in the Street Maintenance computerized asset management system and a work order is created. When work orders for pipe jetting and cleaning are assigned, crews inspect and prepare the equipment fleet, including vactor trucks and water pumps as needed. At the site the pipes are cleaned or blockages removed by use of a properly sized jetting nozzle attached to a high pressure water pump. The high pressure nozzle transfers energy from the pressure of the nozzle to velocity, pulling the hose behind it. A hydraulic reel controls the pressure and distance the nozzle travels through the pipe, cleaning and removing debris. A downstream bladder collects water, sediment, and debris to ensure that sediment plumes are not released into the receiving waters. . The Supervisor collects the reports describing the outcome of the assigned maintenance activities and enters this data into the computerized GIS. . If the field notes indicate repairs need immediate attention, the Street Maintenance Supervisor assigns this repair via work order to daily field crews.

Pipe Jetting and Cleaning

INSPECTION CRITERIA:

1. Provide appropriate traffic control where necessary and all other required safety equipment. Insure personnel are properly trained on the use of equipment and safety procedures.

2. Storm drain manholes and pipes are confined spaces containing potentially hazardous atmospheres. All inspection personnel will be trained and properly equipped to work in hazardous confined spaces before entering manhole or catch basin structures.

3. The depth of sediment accumulation is noted in the field notes. If sediment depths are greater than 25% of the pipe diameter the pipe is cleaned by jetting.

4. The structure is checked for structural integrity and/or damage for the following items:

- Evidence of infiltration including drips or water flowing into structure at joints.
- Cracks and deterioration of the structure.
- Structural integrity is in good alignment, with no evidence of shifting, shearing, cracking, lifting, or movement.
- Signs of abrasion and/or corrosion.
- Evidence of any other unusual condition that may impede or impair the function of the structure(s).

5. If the structure(s) cannot be inspected the maintenance record will indicate one or more of the following;

- Could not locate.
- Defective or non-compliant construction.
- Obstructed access.
- Grate or cover could not be removed.
- Unsafe conditions.
- Structure has been declared a hazard to life and limb and may not be disturbed or entered for any reason.

MAINTENANCE CRITERIA:

1. Provide appropriate traffic control where necessary and all other required safety equipment. Insure personnel are properly trained on the use of equipment and safety procedures

2. Storm drain manholes and pipes are confined spaces containing potentially hazardous atmospheres. All maintenance personnel will be trained and properly equipped to work in hazardous confined spaces before entering manhole or catch basin structures.

3. Remove sediment using vactor truck. Place a downstream bladder to collect water and sediment to ensure sediment plumes are not released into receiving water. Dispose of sediment from the vactor truck at the sedimentation basin at the Quincy Highway Garage.

4. If repairs and/or maintenance are required, record the condition and transfer to the Street Maintenance asset management system for prioritization and scheduling.

i. Record and/or photograph infiltration condition for Street Maintenance asset management system
ii. Record and/or photograph cracks and deterioration for Street Maintenance asset management system.
iii. Record and/or photograph structural integrity for Street Maintenance asset management system.
iv. Record and/or photograph corrosion or abrasion for Street Maintenance asset management system.
v. Record and/or photograph any other condition that may impede or impair the function of the structure for Street Maintenance asset management system.

INSPECTION SCHEDULE:
Pipes are inspected during routine manhole inspections (see SOP for Manholes/Pipe Inspection/Weirs).

MAINTENANCE SCHEDULE:
Maintenance is performed as identified during inspections

POLLUTION PREVENTION/GOOD HOUSEKEEPING PROCEDURES

Train field crews annually and provide frequent verbal reminders on how to operate the equipment and what to look for during routine inspections prior to the field season.

Pipe Jetting and Cleaning

Keep training records that include attendees, date, and description of training.
Check all vehicles, including vactor trucks, used for stormwater infrastructure inspection and maintenance for operational condition, leaks, and deficiencies prior to leaving the Quincy Highway Garage. For equipment inspection and maintenance:

- Place drip pans under equipment parts that may leak. Empty drip pans when they are more than ½ full.
- Clean up all drips and leaks immediately
- Empty fuel and oil filters where drips cannot reach stormwater
- Do not wash equipment or pavement surrounding equipment where wash water can enter storm drains

Check fittings associated with the vactor truck prior to starting operation of the vactor truck to remove accumulated sediment material.
Remove all litter and debris found during the inspection procedure. Dispose of litter/debris from the site in solid waste containers located at the Quincy Highway Garage.

Transfer sediment and debris collected in the vactor truck to the vactor wash-out/sediment basin located at the Quincy Highway Garage. If sediment is spilled or released during collection or disposal clean the area thoroughly and immediately.

Check Dams

RESOURCE NEEDS

DEFINITIONS:
Check dams are used to slow the velocity of concentrated stormwater to prevent erosion. In an unlined channel or vegetative swale. Check dams catch sediment from the channel and are typically constructed of rock but can also be constructed from gravel, sandbags, logs, or treated lumber.

PERMIT REFERENCES:
This SOP was prepared according to the permit requirements (2.3.5 and 2.3.7.a.iii).

ACTIVITY DESCRIPTION:
A detailed inspection is completed of each check dam and minor cleaning, such as litter pick-up, is completed as part of the inspection routine. Check dams are visually inspected for sediment accumulation and signs of deterioration, or evidence of previous overtopping or flooding. The check dam condition is recorded in the Street Maintenance computerized asset management system and a work order is created where necessary. When work orders are assigned, crews inspect and prepare the equipment as needed. The Supervisor collects the reports describing the outcome of the assigned maintenance activities and enters this data into the computerized GIS. If the field inspection reveals that immediate repairs are necessary, the Street Maintenance Supervisor assigns this repair via work order to daily field crews.

INSPECTION CRITERIA:

1. Provide appropriate traffic control where necessary and all other required safety equipment. Insure personnel are properly trained on the use of equipment and safety procedures.

2. The depth of sediment accumulation at the check dam is noted in the field notes. If sediment depths are greater than 1/3 the height of the check dam maintenance is needed. The accumulation of sediment and evidence of previous flooding or channel overtopping is checked to ensure functionality of the check dam.

3. The condition of the check dam structure is inspected for the following:
- Check for signs of structural deterioration including loss of rock structure, and/or crumbling.
- Check for signs of scour on the downstream side of the check dam.
- Evidence of any other unusual condition that may impede or impair the function of the check dam.

MAINTENANCE CRITERIA:

1. Provide appropriate traffic control where necessary and all other required safety equipment. Insure personnel are properly trained on the use of equipment and safety procedures.

2. If the sediment and debris level behind the check dam is greater than 1/3 the height of the dam, remove sediment to restore capacity. Dispose of sediment at the sedimentation basin at the Quincy Highway Garage. To keep it functioning properly, the sediment and/or debris is removed to restore functionality.

3. If repairs and/or maintenance are required, record the condition and transfer to the Street Maintenance asset management system for prioritization and scheduling.
   i. Record and/or photograph structural condition for Street Maintenance asset management system.
   ii. Record and/or photograph scour condition for Street Maintenance asset management system.
   iii. Record and/or photograph any other condition that may impede or impair the function of the check dam for Street Maintenance asset management system

Check Dams

INSPECTION SCHEDULE:	**MAINTENANCE SCHEDULE:**
Check dams are inspected during other routine work, as needed, or as evidence of improper functioning is noticed or reported.	Maintenance is performed as identified during inspections.

POLLUTION PREVENTION/GOOD HOUSEKEEPING PROCEDURES

Train field crews annually and provide frequent verbal reminders on how to operate the equipment and what to look for during routine inspections prior to the field season.
Keep training records that include attendees, date, and description of training.
Check all vehicles, including vactor trucks, used for stormwater infrastructure inspection and maintenance for operational condition, leaks, and deficiencies prior to leaving the Quincy Highway Garage. For equipment inspection and maintenance:

- Place drip pans under equipment parts that may leak. Empty drip pans when they are more than ½ full.
- Clean up all drips and leaks immediately
- Empty fuel and oil filters where drips cannot reach stormwater
- Do not wash equipment or pavement surrounding equipment where wash water can enter storm drains

Remove all litter and debris found during the inspection procedure. Dispose of litter/debris from the site in solid waste containers located at the Quincy Highway Garage.

Transfer sediment and debris collected in the vactor truck to the vactor wash-out/sediment basin located at the Quincy Highway Garage. If sediment is spilled or released during collection or disposal clean the area thoroughly and immediately.

If any work associated with this SOP results in ground disturbance (digging, grading, asphalt removal, etc.), including follow-up repairs that are needed at the structure, the following are implemented:

- Prevent disturbance of or introduction of polluted runoff to receiving waterbodies. Precautions include flow diversion and installation of temporary sediment and erosion control best management practices (such as waddles, matting, or silt fence) as specified in the municipal Storm Water Treatment Plan Review Guidance Manual (SWTPRGM).

- If more than 500 square feet are disturbed, the project may require a Stormwater Pollution Prevention Plan (SWPPP). Follow the requirements set forth in the SWTPRGM.

- Stabilize exposed ground, soil, or dirt. Roadways may be stabilized by asphalt or chip seal. Other surfaces, including ditch side slopes, are reseeded to reestablish vegetation or covered with aggregate (rock or gravel) with no fines.

Oil and Grit Separators

RESOURCE NEEDS
DEFINITIONS: Oil and grit separators (OGS) are structural Best Management Practice designed to remove hydrocarbons and sediment from runoff. Runoff passes through these compartments to separate grit, oil and sediment before continuing in the downstream conveyance system. **PERMIT REFERENCES:** This SOP was prepared according to the permit requirements (2.3.5 and 2.3.7.a.iii). **ACTIVITY DESCRIPTION:** A detailed inspection and maintenance regiment is simultaneously completed on each OGS structure. Sediment and debris removal, litter pick-up, and evacuating the collection chamber(s) is completed as part of this regiment. The inspection and maintenance of OGSs require accurate record keeping. This task is completed by using QUINCY's GIS enhanced computerized GIS to inventory all drainage structure locations, track maintenance costs, maintenance histories, and condition assessments. During the summer season Street Maintenance prepares grid maps identifying all the OGS structures within the grids and assigns necessary personnel and equipment to inspect and provide maintenance on the subject structures within the grids. Crews begin by inspecting and preparing the vehicle fleet and equipment, including vactor trucks, to perform maintenance duties. Prior to performing maintenance the OGS is inspected for signs of cracks, breaks, displacement, infiltration, or deterioration. If repairs are required, the location and condition is recorded for upload into the computerized asset management system to schedule repairs. Vactor trucks are used to remove the sediment and clean the OGSs. The Supervisor collects reports describing the outcome of the assigned maintenance activities and enters this data into the computerized GIS. Structures requiring repairs or rebuilding are inventoried and prioritized over the winter season and assigned for repair or additional work when weather permits. If damage to private property, the right-of-way, or roadway is evident and a hazard, emergency repairs are assigned to the daily field crew.

Oil and Grit Separators

INSPECTION CRITERIA:	**MAINTENANCE CRITERIA:**
1. Provide appropriate traffic control where necessary and all other required safety equipment. Insure personnel are properly trained on the use of equipment and safety procedures. 2. OGS structures are confined spaces containing potentially hazardous atmospheres. All personnel will be trained and properly equipped to work in hazardous confined spaces. 3. The depth of sediment accumulation is noted in the field notes. 4. The structural components of the OGSs are checked to ensure proper flow conveyance. • Evidence of infiltration including drips or water flowing into structure at joints and/or grouting, and evidence of discoloration above the sump indicating former water intrusion. • Cracks and deterioration of the structure or grouting including rotting of concrete structure, exposure of rebar or structural matting, discontinuous sections in the grout. • Structural integrity including barrel sections is in good alignment, grade rings show no evidence of cracking, lifting, or movement. • Signs of abrasion and/or corrosion are inspected • Accessibility issues 5. If the OGS cannot be inspected or maintained the record will indicate one or more of the following; • Could not locate. • Defective or non-compliant construction. • Obstructed access to structure. • Grate or cover could not be removed. • Unsafe conditions. • Structure has been declared a hazard to life and limb and may not be disturbed or entered for any reason. • Unit not properly raised to grade preventing maintenance access. • Maintenance access points not properly aligned on the OGS.	1. Provide appropriate traffic control where necessary and all other required safety equipment. Insure personnel are properly trained on the use of equipment and safety procedures. 2. OGS structures are confined spaces containing potentially hazardous atmospheres. All personnel will be trained and properly equipped to work in hazardous confined. 3. All Sediment and debris in the OGS are removed via vactor truck. 4. If repairs and/or maintenance are required, record the condition and transfer to the Street Maintenance asset management system for prioritization and scheduling. i. Record and/or photograph infiltration condition for Street Maintenance asset management system ii. Record and/or photograph cracks and deterioration for Street Maintenance asset management system. iii. Record and/or photograph structural integrity for Street Maintenance asset management system. iv. Record and/or photograph corrosion or abrasion for Street Maintenance asset management system. v. Record and/or photograph accessibility issues for the Street Maintenance asset management system vi. Record and/or photograph any other condition that may impede or impair the function of the OGS for Street Maintenance asset management system
INSPECTION SCHEDULE: Each OGS is inspected annually.	**MAINTENANCE SCHEDULE:** Sediment and debris are removed on an annual basis.

	Other maintenance needs are performed as identified during inspection.

Oil and Grit Separators

POLLUTION PREVENTION/GOOD HOUSEKEEPING PROCEDURES
Train field crews annually and provide frequent verbal reminders on how to operate the equipment and what to look for during routine inspections prior to the field season. Keep training records that include attendees, date, and description of training. Check all vehicles, including vactor trucks, used for stormwater infrastructure inspection and maintenance for operational condition, leaks, and deficiencies prior to leaving the Quincy Highway Garage. For equipment inspection and maintenance: • Place drip pans under equipment parts that may leak. Empty drip pans when they are more than ½ full. • Clean up all drips and leaks immediately • Empty fuel and oil filters where drips cannot reach stormwater • Do not wash equipment or pavement surrounding equipment where wash water can enter storm drains Check fittings associated with the vactor truck prior to starting operation of the vactor truck to remove accumulated sediment material. Remove all litter and debris found during the inspection procedure. Dispose of litter/debris from the site in solid waste containers located at the Quincy Highway Garage. Collect liquid and floatable contaminants in the vactor truck and decant to the sanitary sewer system at Quincy Water and Wastewater Utility (AWWU) receiving stations. AWWU has permitted this discharge to the sanitary sewer system. Solids that remain are delivered to the Quincy Highway Garage. Permitting discussions are on-going to potentially use a field filtration unit and field decanting to the sanitary sewer.

Outfalls

RESOURCE NEEDS
DEFINITIONS: Outfalls are the discharge points where storm water enters the receiving body of water at the end of a storm water conveyance system. **PERMIT REFERENCES:** Street Maintenance performs inspection and cleaning of outfalls to meet permits requirements (2.3.5 and 2.3.7.a.iii) **ACTIVITY DESCRIPTION:** A detailed inspection is completed of each outfall and minor cleaning, such as litter pick-up, is completed as part of the inspection routine. Outfall inspection is performed between June 1st and August 30th as part of the dry weather screening program. The inspection and maintenance of outfalls requires accurate record keeping. This task is completed by using Quincy's GIS enhanced computerized GIS to inventory all drainage structure locations, track maintenance costs, maintenance histories, and condition assessments. During the summer season Street Maintenance prepares grid maps identifying all the outfall structures within the grids and assigns maintenance crews to inspect the structures within the grids. . Crews inspect and prepare the equipment fleet needed to perform the inspection of the assigned structures. Each outfall is visually inspected for functionality, erosion or deterioration at the discharge location, and illicit discharges. The site is also photographed to document conditions during the inspection. The Supervisor collects reports describing the outcome of the assigned maintenance activities and enters this data into the computerized GIS. Outfalls requiring repairs or rebuilding are inventoried and prioritized over the winter season and assigned for repair or additional work when weather permits. If damage to private property, the right-of-way, or roadway is evident and a hazard, emergency repairs are assigned to the daily field crew.

Outfalls

INSPECTION CRITERIA:	**MAINTENANCE CRITERIA:**
1. Provide appropriate traffic control where necessary and all other required safety equipment. Insure personnel are properly trained on the use of equipment and safety procedures. 2. Check for litter, rubbish, and debris around the outfall area. 3. The structural components of the outfalls are inspected to ensure flow conveyance and functionality. The outfall site is inspected for signs of: - Sediment accumulation and localized erosion. - Exposed soil material with no vegetative cover. 4. Evidence of illicit discharges should be checked during dry weather conditions and may include the following items: - Odor - Color - Clarity - Floatables - Deposits/stains - Vegetation condition - Structural condition - Biology 5. If the Outfall cannot be inspected or maintained the record will indicate one or more of the following; - Could not locate. - Defective or non-compliant construction. - Obstructed or no access to outfall. - Unsafe conditions.	1. Provide appropriate traffic control where necessary and all other required safety equipment. Insure personnel are properly trained on the use of equipment and safety procedures. 2. Remove liter, rubbish, accumulated sediment, and debris in and around the outfall. 3. If repairs and/or maintenance are required, record the condition and transfer to the Street Maintenance asset management system for prioritization and scheduling. 4. Repair rock or rip rap used for energy dissipation at outfall. Vegetate to re-establish cover.
INSPECTION SCHEDULE: Each outfall is inspected annually.	**MAINTENANCE SCHEDULE:** Maintenance is performed as identified during inspections.

POLLUTION PREVENTION/GOOD HOUSEKEEPING PROCEDURES

Check all vehicles used for stormwater infrastructure inspection and maintenance for operational condition, leaks, and deficiencies prior to leaving the Quincy Highway Garage. For equipment inspection and maintenance:

- Place drip pans under equipment parts that may leak. Empty drip pans when they are more than ½ full.
- Clean up all drips and leaks immediately
- Empty fuel and oil filters where drips cannot reach stormwater

- Do not wash equipment or pavement surrounding equipment where wash water can enter storm drains

Remove all litter and debris found during the inspection procedure. Dispose of litter/debris from the site in solid waste containers located at the Quincy Highway Garage.

Outfalls

Obtain appropriate local, state and federal permits, as applicable or necessary for the associated receiving water.
If any work associated with this SOP results in ground disturbance (digging, grading, asphalt removal, etc.), including follow-up repairs that are needed at the structure, the following are implemented:

- Prevent disturbance of or introduction of polluted runoff to receiving waterbodies. Precautions include flow diversion and installation of temporary sediment and erosion control best management practices (such as waddles, matting, or silt fence) as specified in the municipal SWTPRGM.

- If more than 500 square feet are disturbed, the project may require a SWPPP. Follow the requirements set forth in the SWTPRGM.

- Stabilize exposed ground, soil, or dirt. Roadways may be stabilized by asphalt or chip seal. Other surfaces, including ditch sideslopes, are reseeded to reestablish vegetation or covered with aggregate (rock or gravel) with no fines.

Drywells

RESOURCE NEEDS
DEFINITIONS: Drywells are facilities that collect and infiltrate storm water runoff into the ground. **PERMIT REFERENCES:** This SOP was prepared according to the permit requirements (2.3.5 and 2.3.7.a.iii). **ACTIVITY DESCRIPTION:** A detailed inspection is completed for each inlet/catch basin and minor cleaning, such as litter pick-up, is completed as part of the inspection routine. The mapping, inspection and maintenance of stormwater drywells requires accurate and specific record keeping. This task is completed by using Quincy's GIS enhanced computerized GIS to inventory all drainage structure locations, track maintenance costs, maintenance histories, and condition assessments. The computerized GIS stores and manages this data providing annual reports as well as formulates work order set-up and preventative maintenance (PM) schedules. During the summer season Street Maintenance prepares grid maps identifying all the drywell structures within the grids and assigns necessary personnel to inspect the subject structures within the grids. Each structure is visually inspected for sediment accumulation and signs of cracks, breaks, displacement, infiltration, or deterioration. The data collected during the inspection effort is then uploaded into the computerized GIS and a work order is created listing the drywells that require maintenance. Crews are assigned and begin by inspecting and preparing the vehicle fleet and equipment, including vactor trucks, to perform maintenance duties. If sediment accumulation reaches a certain level (see maintenance criteria below), vactor trucks remove the sediment and clean the drywells. If repairs are required, the location and condition is recorded. The Supervisor collects reports describing the outcome of the assigned maintenance activities and enters this data into the computerized GIS. Structures requiring repairs or rebuilding are inventoried and prioritized over the winter season and assigned for repair or additional work when weather permits. If damage to private property, the right-of-way, or roadway is evident and a hazard, emergency repairs are assigned to the daily field crew.

Drywells

INSPECTION CRITERIA:	MAINTENANCE CRITERIA:
1. Provide appropriate traffic control where necessary and all other required safety equipment. Insure personnel are properly trained on the use of equipment and safety procedures. 2. Drywells are confined spaces containing potentially hazardous atmospheres. All personnel will be trained and properly equipped to work in hazardous confined spaces. 5. If sediment depths are greater than 2" or if evidence of failed infiltration capacity is observed then maintenance is required. 6. The structure is inspected from the surface to the fullest extent possible for structural integrity and/or damage for the following items: • Inlet condition is flowing and free from any blockages • Evidence of infiltration including drips or water flowing into structure at joints and/or grouting and evidence of discoloration above the sump indicating former water intrusion. • Evidence of cracks and deterioration of the structure or grouting including rotting of concrete structure, exposure of rebar or structural matting, discontinuous sections in the grout. • Structural integrity including barrel sections is in good alignment, grade rings show no evidence of cracking, lifting, or movement. • Evidence of abrasion and/or corrosion and deterioration of pipes. • Evidence of overflowing occurring, including erosion or formation of a channel. • Ponding or other evidence of failed infiltration. • Evidence of any other unusual condition that may impede or impair the function of the structure. 7. :If the structure cannot be inspected the inspection record will indicate one or more of the following; • Could not locate. • Defective or non-compliant construction. • Obstructed access. • Grate or cover could not be removed. • Unsafe conditions.	1. Provide appropriate traffic control where necessary and all other required safety equipment. Insure personnel are properly trained on the use of equipment and safety procedures. 2. Drywells are confined spaces containing potentially hazardous atmospheres. All personnel will be trained and properly equipped to work in hazardous confined spaces. 3. Remove sediment using vactor truck. Dispose of sediment from the vactor truck at the sedimentation basin at the Quincy Highway Garage. 4. If repairs and/or maintenance are required, record the condition and transfer to the Street Maintenance asset management system for prioritization and scheduling. i. Record and/or photograph erosion condition for Street Maintenance asset management system ii. Record and/or photograph ponding for Street Maintenance asset management system. iii. Record and/or photograph structural integrity for Street Maintenance asset management system.

□ Structure has been declared a hazard to life and limb and may not be disturbed for any reason. □ Unit not properly raised to grade preventing maintenance access	

Drywells

INSPECTION SCHEDULE:	**MAINTENANCE SCHEDULE:**
Drywell inspection is performed on an annual basis.	Drywell maintenance is performed as identified through inspections.

POLLUTION PREVENTION/GOOD HOUSEKEEPING PROCEDURES

Train field crews annually and provide frequent verbal reminders on how to operate the equipment and what to look for during routine inspections prior to the field season.

Keep training records that include attendees, date, and description of training.

Check all vehicles, including vactor trucks, used for stormwater infrastructure inspection and maintenance for operational condition, leaks, and deficiencies prior to leaving the Quincy Highway Garage. For equipment inspection and maintenance:

- □ Place drip pans under equipment parts that may leak. Empty drip pans when they are more than ½ full.
- □ Clean up all drips and leaks immediately
- □ Empty fuel and oil filters where drips cannot reach stormwater
- □ Do not wash equipment or pavement surrounding equipment where wash water can enter storm drains

Check fittings associated with the vactor truck prior to starting operation of the vactor truck to remove accumulated sediment material.
Remove all litter and debris found during the inspection procedure. Dispose of litter/debris from the site in solid waste containers located at the Quincy Highway Garage.

Transfer sediment and debris collected in the vactor truck to the vactor wash-out/sediment basin located at the Quincy Highway Garage. If sediment is spilled or released during collection or disposal clean the area thoroughly and immediately.

Vegetated Swales

RESOURCE NEEDS	
DEFINITIONS: Vegetated swales are gently sloping depressions planted with vegetation that allow stormwater runoff to be treated before entering the flow conveyance system. The vegetation slows the runoff flow, allowing the water to be filtered and, in some cases, infiltrated into the ground. **PERMIT REFERENCES:** This SOP was prepared according to the permit requirements (2.3.5 and 2.3.7.a.iii). **ACTIVITY DESCRIPTION:** Vegetated swales are periodically inspected, and maintained, when improper functioning becomes evident. Crews inspect and prepare the equipment fleet needed to perform the inspection. The swale is visually inspected for sediment accumulation, vegetation that inhibits drainage conveyance, signs of erosion, channeling, or signs of flooding. . If repairs are required, the location and condition is recorded. The Supervisor collects reports describing the outcome of the assigned maintenance activities and enters this data into the computerized GIS. Structures requiring repairs or rebuilding are inventoried and prioritized over the winter season and assigned for repair or additional work when weather permits. If damage to private property, the right-of-way, or roadway is evident and a hazard, emergency repairs are assigned to the daily field crew.	
INSPECTION CRITERIA: 1. Look for trash, debris, or large objects that could obstruct water flow. 2. Look for vegetation impeding drainage, laying over, or matted down, 3. Inspect for signs of channeling, erosion, and previous flooding to assess the functionality of the swale. 4. If damage to private property is evident, schedule emergency repairs.	**MAINTENANCE CRITERIA:** 1. Provide appropriate traffic control where necessary and all other required safety equipment. Insure personnel are properly trained on the use of equipment and safety procedures. 2. Remove trash or debris from swale. Dispose of at the Quincy Highway Garage. 3. Remove sediment and debris in and around the swale if drainage is blocked. 4. Conduct mulch-mowing (see Mowing SOP). Set mulching blade to 3 to 6-inches for mowing operations. 5. If signs of channeling, erosion, or flooding are present indicating sediment transfer through the swale, record and transfer to the Street Maintenance asset management system for prioritization and scheduling for repairs. i. Record and/or photograph condition for Street Maintenance asset management system ii. Consider adding energy dissipation rock, check dams, or stabilizing vegetation to minimize sediment transfer and slow water velocity within the swale
INSPECTION SCHEDULE:	**MAINTENANCE SCHEDULE:** Maintenance is performed based on inspection results.

Vegetative swales are inspected during other routine work, as needed, or if improper functioning is noticed or reported.	

Vegetated Swales

POLLUTION PREVENTION/GOOD HOUSEKEEPING PROCEDURES
Train field crews annually and provide frequent verbal reminders on how to operate the equipment and what to look for during routine inspections prior to the field season. Keep training records that include attendees, date, and description of training. Check all vehicles used for stormwater infrastructure inspection and maintenance for operational condition, leaks, and deficiencies prior to leaving the Quincy Highway Garage. For equipment inspection and maintenance: • Place drip pans under equipment parts that may leak. Empty drip pans when they are more than ½ full. • Clean up all drips and leaks immediately • Empty fuel and oil filters where drips cannot reach stormwater • Do not wash equipment or pavement surrounding equipment where wash water can enter storm drains Remove all litter and debris found during the inspection procedure. Dispose of litter/debris from the site in solid waste containers located at the Quincy Highway Garage. Pick up and dispose of clippings, leaves, sticks, branches, mulching, or other collected vegetation from all impermeable surfaces (driveways, sidewalks, trails, roadsides, etc.) that could runoff into storm drain collection systems. Do not dispose of vegetation into waterways or storm drainage systems. If any work associated with this SOP results in ground disturbance (digging, grading, asphalt removal, etc.), including follow-up repairs that are needed at the structure, the following are implemented: • Prevent disturbance of or introduction of polluted runoff to receiving waterbodies. Precautions include flow diversion and installation of temporary sediment and erosion control best management practices (such as waddles, matting, or silt fence) as specified in the municipal SWTPRGM. • If more than 500 square feet are disturbed, the project may require a SWPPP. Follow the requirements set forth in the SWTPRGM. • Stabilize exposed ground, soil, or dirt. Roadways may be stabilized by asphalt or chip seal. Other surfaces, including ditch sideslopes, are reseeded to reestablish vegetation or covered with aggregate (rock or gravel) with no fines.

Infiltration Devices and Constructed Wetlands

RESOURCE NEEDS

DEFINITIONS:
Infiltration devices and constructed wetlands are areas designed to treat stormwater runoff and reduce the amount of water entering a receiving water body.

PERMIT REFERENCES:
This SOP was prepared according to the permit requirements (2.3.5 and 2.3.7.a.iii).

ACTIVITY DESCRIPTION:
Infiltration devices and constructed wetlands are periodically inspected and maintained as needed basis, when improper functioning is observed. Crews inspect and prepare the equipment fleet needed to perform the inspection. Upon arriving at the site crews visually inspect for sediment accumulation, vegetation overgrowth that inhibits drainage, conveyance, and signs of erosion. . If repairs are required, the location and condition is recorded. The Supervisor collects reports describing the outcome of the assigned inspection activities and enters this data into the computerized GIS. Structures requiring repairs or rebuilding are inventoried and prioritized and a work order is created and repair crews are assigned. If damage to private property, the right-of-way, or roadway is evident and a hazard, emergency repairs are assigned to the daily field crew.

INSPECTION CRITERIA:

1. Look for sediment accumulation, trash, debris, or large objects that could obstruct water flow.

2. Look for vegetation impeding drainage, laying over, or matted down,

3. Inspect for signs of channeling, erosion, and previous flooding to assess the functionality of the wetland.

4. If damage to private property is evident, schedule emergency repairs.

MAINTENANCE CRITERIA:

1. Provide appropriate traffic control where necessary and all other required safety equipment. Insure personnel are properly trained on the use of equipment and safety procedures.

2. Remove sediment and debris if drainage is blocked. Remove trash or litter and dispose of at the Quincy Highway Garage.

3. Remove vegetative overgrowth by hand (when practical) to reduce damage to wetland feature.

4. If signs of channeling, erosion, or flooding are present indicating sediment transfer through the wetland, record and transfer to the Street Maintenance asset management system for prioritization and scheduling for repairs.
   i. Record and/or photograph condition for Street Maintenance asset management system

INSPECTION SCHEDULE:
Inspection is performed on an as needed basis, as evidence of improper functioning is noticed or reported.

MAINTENANCE SCHEDULE:
Maintenance is performed based on inspection results.

POLLUTION PREVENTION/GOOD HOUSEKEEPING PROCEDURES

Train field crews annually and provide frequent verbal reminders on how to operate the equipment and what to look for during routine inspections prior to the field season.

Keep training records that include attendees, date, and description of training.

Check all vehicles used for stormwater infrastructure inspection and maintenance for operational condition, leaks, and deficiencies prior to leaving the Quincy Highway Garage. For equipment inspection and maintenance:

- Place drip pans under equipment parts that may leak. Empty drip pans when they are more than ½ full.
- Clean up all drips and leaks immediately
- Empty fuel and oil filters where drips cannot reach stormwater
- Do not wash equipment or pavement surrounding equipment where wash water can enter storm drains

Remove all litter and debris found during the inspection procedure. Dispose of litter/debris from the site in solid waste containers located at the Quincy Highway Garage.

Do not dispose of vegetation into waterways or storm drainage systems.

If any work associated with this SOP results in ground disturbance (digging, grading, asphalt removal, etc.), including follow-up repairs that are needed at the structure, the following are implemented:

- Prevent disturbance of or introduction of polluted runoff to receiving waterbodies. Precautions include flow diversion and installation of temporary sediment and erosion control best management practices (such as waddles, matting, or silt fence) as specified in the municipal SWTPRGM.

- If more than 500 square feet are disturbed, the project may require a SWPPP. Follow the requirements set forth in the SWTPRGM.

- Stabilize exposed ground, soil, or dirt. Roadways may be stabilized by asphalt or chip seal. Other surfaces, including ditch sideslopes, are reseeded to reestablish vegetation or covered with aggregate (rock or gravel) with no fines.

Infiltration Devices and Constructed Wetlands

Contaminated Materials

RESOURCE NEEDS
PERMIT REFERENCE: Street Maintenance has written this standard operating procedure to meet the permit requirement of section (2.3.5 and 2.3.7.a.iii). **ACTIVITY DESCRIPTION:** Release of contaminated materials or spills within QDSA are responded to by the Quincy Fire Department. Any contaminated materials found in the Quincy Highway Garage are reported immediately to the Street Maintenance Supervisor. Response will be handled in accordance with the agency's hazardous materials operating policy.

INSPECTION CRITERIA: Inspection of contaminated material is performed by appropriate personnel with proper training.	**MAINTENANCE CRITERIA:** Maintenance is performed in accordance with the agency's hazardous materials operating policy.
INSPECTION SCHEDULE: Inspection is performed on an as needed or reported basis.	**MAINTENANCE SCHEDULE:** Maintenance is performed as needed.

POLLUTION PREVENTION/GOOD HOUSEKEEPING PROCEDURES
Prepare spill plans for all areas where chemicals are stored (including fuels). Keep chemicals stored in doors within secondary containment. Clean up small spills or drips immediately. Provide and post notification procedures with contact information and phone numbers. Train all personnel on response procedures. Keep training record

Sedimentation Basin Maintenance

RESOURCE NEEDS
DEFINITIONS: A settling basin is a device used to treat for settleable solids. Water from the storm drain system enters the basin. The basin design slows the water velocity, allowing particles in the water to settle from solution by gravity. **PERMIT REFERENCE:** Street Maintenance has prepared this standard operating procedure to meet the permit requirement of section (2.3.5 and 2.3.7.a.iii). **ACTIVITY DESCRIPTION:** The sedimentation basin is inspected and cleaned to remove accumulation of debris and sediment so that design flows can be maintained and capacity is sufficient for treatment. The sedimentation basin is located at the Quincy Highway Garage facilities. Street Maintenance staff inspect the basin, remove trash collected on the trash screen, dredge settled material to maintain capacity, and remove any floatable hydrocarbons with booms.

INSPECTION CRITERIA:	**MAINTENANCE CRITERIA:**
1. Basins are inspected for debris accumulation. 2. Sediment accumulation levels are checked to maintain treatment capacity and flow conveyance. 3. Surface water is inspected for any evidence of sheen or floating hydrocarbons.	1. Trash is removed, transferred, and disposed of at the landfill. 2. Sediment is dredged daily using a front-end loader. Sediment is transferred and recycled as grading material or disposed of at the landfill. 3. Floating, sheen, and oils are removed from the basin by a boom and disposed of at the landfill.
INSPECTION SCHEDULE: Sedimentation basins are inspected on daily basis when runoff events cause flow through them.	**MAINTENANCE SCHEDULE:** Maintenance is performed as needed.

POLLUTION PREVENTION/GOOD HOUSEKEEPING PROCEDURES
Keep training records that include attendees, date, and description of training. Check all vehicles used for thawing are checked for operational condition, leaks, and deficiencies prior to leaving the Quincy Highway Garage. For equipment inspection and maintenance: - Place drip pans under equipment parts that may leak. Empty drip pans when they are more than ½ full. - Clean up all drips and leaks immediately - Empty fuel and oil filters where drips cannot reach stormwater - Do not wash equipment or pavement surrounding equipment where wash water can enter storm drains

- Pick up litter found during inspection and dispose of collected litter in solid waste containers.

Litter Control

RESOURCE NEEDS
PERMIT REFERENCE: Street Maintenance has written this standard operating procedure to meet the permit requirement of section (2.3.5 and 2.3.7.a.iii). **ACTIVITY DESCRIPTION:** Litter is collected as part of good housekeeping procedures set forth for the inspection and maintenance activities performed by street maintenance personnel. Litter along the road system is also collected by volunteer groups and agencies. Litter is collected in trash bags and then set in the right-of-way. Bags are situated in the right-of-way away from drainage structures and flow paths. Appropriate personnel collect the trash bags and dispose of the bags in solid waste containers.

INSPECTION CRITERIA:	MAINTENANCE CRITERIA:
1. Litter is monitored by Street Maintenance personnel who determine when maintenance activities are performed. 2. Volunteer groups choose areas within the service area to collect litter.	1. Where litter is found during routine inspections, personnel collect and dispose of it in trash bags. Trash bags are disposed of at the Quincy Highway Garage. 2. Volunteer groups collect litter along roadsides in trash bags. Bags of litter are set in the right-of-way, away from areas of drainage conveyance. The bags of litter are picked up and disposed of properly in solid waste containers.
INSPECTION SCHEDULE: Litter control is part of the good housekeeping procedures set forth in the inspection and maintenance activities performed by Street Maintenance personnel. Volunteer groups pick-up litter within the designated service area three times during the year.	**MAINTENANCE SCHEDULE:** Litter is collected when encountered during routine inspections and other street maintenance work activities. Volunteer groups schedule litter pick-up throughout the spring and summer season.

POLLUTION PREVENTION/GOOD HOUSEKEEPING PROCEDURES
Pick up litter collected in trash bags in a timely manner. Do not place trash bags within 10 feet of streams or stormwater inlets.

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Executive Office of Energy & Environmental Affairs
Department of Environmental Protection
One Winter Street Boston, MA 02108 • 617-292-5500

Management of Catch Basin Cleanings

Catch basin cleanings - solid materials such as leaves, sand and twigs removed from storm water collection systems during cleaning operations - are typically classified as a solid waste by the Department of Environmental Protection (MassDEP). Catch basin cleanings must be handled and disposed in accordance with the agency's applicable regulations, policies and guidance.

Handling & Disposal

Except as explained below, catch basin cleanings from storm water-only drainage systems may be disposed at any landfill that is permitted by MassDEP to accept solid waste.

MassDEP does not routinely require storm water only catch basin cleanings to be tested before disposal, unless there is evidence that they have been contaminated by a spill or some other means. Contaminated catch basin cleanings must be evaluated in accordance with 310 CR 30.000: Hazardous Waste Regulations and handled as hazardous waste if appropriate.

Systems that collect storm water run-off into sanitary sewers are called "combined sewers." MassDEP may require cleanings from combined sewer catch basins to be tested before disposal.

Landfill Restrictions

The MassDEP 310 CMR 19.000: Solid Waste Management Facility Regulations (specifically see Section 19.130(7)) prohibit Massachusetts landfills from accepting materials that contain free draining liquids. When there is no free water in a truck used to transport catch basin cleanings, the agency will generally be satisfied that the material is sufficiently dry. Otherwise, the material will need to undergo a Paint Filter Liquids Test.

One way to remove liquids is to use a hydraulic lift truck during catch basin cleaning operations so that the material can be decanted at the site. After material from several catch basins along the same system is loaded, the truck may be elevated so that any free draining liquid is allowed to flow back into the drainage structure.

MassDEP may approve catch basin cleanings for use as grading and shaping material at landfills undergoing closure (see the agency's Revised Guidelines for Determining Closure Activities at Inactive Unlined Landfill Sites for additional information). Catch basin cleanings may be used as daily cover or grading material at active landfills only with specific MassDEP approval of the proposed use.

Consult with the Solid Waste Section Chief in the appropriate MassDEP Regional Office for information about applying for an approval and/or a Beneficial Use Determination (see Section 19.060 for other uses, including non-landfill uses).

Commonwealth of Massachusetts
Executive Office of Energy & Environmental Affairs

Department of Environmental Protection
One Winter Street Boston, MA 02108 • 617-292-5500

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Karyn E. Polito
Lieutenant Governor

Matthew A. Beaton
Secretary

Martin Suuberg
Commissioner

REUSE AND DISPOSAL OF STREET SWEEPINGS

DEPARTMENT OF ENVIRONMENTAL PROTECTION

POLICY # BAW-18-001

(SUPERSEDES POLICY # BWP-94-092)

This Policy provides guidance to the regulated community about the Department of Environmental Protection's requirements, standards, and approvals for handling reuse or disposal of street sweepings. This Policy supersedes Department Policy BWP-94-092.

5/14/18
Date

Christine Kirby
Assistant Commissioner

POLICY #BAW-18-001
TABLE OF CONTENTS

1. Policy Statement and Scope

This Policy explains MassDEP requirements for managing Street Sweepings. Street Sweepings are "solid waste" subject to the Massachusetts solid waste regulations. The options for managing Street Sweepings are as follows.

- Use the Street Sweepings in accordance with the preapproved uses described in Section 4 of this policy.
- Use the Street Sweepings for a beneficial use not included in the list of preapproved uses after obtaining a permit from MassDEP under the provisions of the solid waste regulations, 310 CMR 19.060, Beneficial Use of Solid Wastes.
- Dispose of Street Sweepings at a permitted solid waste landfill.

2. Applicability

This policy applies to the reuse or disposal of Street Sweepings that are generated in the ordinary and customary cleaning of roadways and parking lots. This policy does not apply to catch basin cleanings or Street Sweepings mixed with catch basin cleanings or any other type of wastes. The disposal and reuse of catch basin cleanings is discussed in the "Management of Catch Basin Cleanings" Fact Sheet issued by the MassDEP (https://www.mass.gov/lists/massdep-solid-waste-policies-guidance-fact-sheets).

This policy does not apply to the material generated as the result of the clean-up of an oil or hazardous material spill. However, Street Sweepings that are generated in the ordinary and customary maintenance of roadways and parking lots are not exempt from the Hazardous Waste Regulations, 310 CMR 30.000, and must be handled as hazardous waste when they exhibit any of the characteristics of a hazardous waste. If there is no evidence of unusual contamination, MassDEP does not require Street Sweepings to be routinely tested, but, as is the case with any waste, the generator has the ultimate responsibility for determining whether the waste is a hazardous waste.

Although Street Sweepings are not considered soil, they may be managed under Policy #COMM-97-001, "Reuse and Disposal of Contaminated Soil at Massachusetts Landfills", in accordance with Section 5.5 of this policy.

3. Definitions

This section contains definitions of the important terms used in this Policy.

Department or *MassDEP* means the Massachusetts Department of Environmental Protection.

Parking lots mean publicly or privately owned paved areas that provide access for the general public to park their car while patronizing retail or service businesses. Parking lots also include the paved areas used by the employees at office parks and businesses.

Private way means the strip of land over and under a privately owned, paved road or highway.

Public way means the strip of land over and under a publicly owned, paved road or highway and includes the publicly owned land adjacent to the road or highway.

Street Sweepings means materials consisting primarily of sand and soil generated during the routine cleaning of roadways or parking lots but may also contain some leaves and other miscellaneous solid wastes collected during street sweeping. Street Sweepings do not include the material generated during the clean-up of a spill or material from other structures associated with a roadway such as catch basins.

Urban center roads mean local roads in central commercial and retail business districts and industrial and manufacturing areas.

4. Handling

4.1 Collection of Street Sweepings

Although MassDEP does not regulate the collection of Street Sweepings, collection practices should be compatible with intended uses. Keeping sweepings from Urban Center Roads separate from sweepings from other areas will provide the generator of the Street Sweepings with the most options under this policy.

This policy does not cover sweepings known to be contaminated by spills, and such sweepings should be collected separately and kept segregated. Depending on the contamination and circumstances, the handling of contaminated sweepings may be governed by the Massachusetts Contingency Plan, 310 CMR 40.0000, the Massachusetts Hazardous Waste Regulations, 310 CMR 30.000, the Massachusetts Site Assignment Regulations for Solid Waste Facilities, 310 CMR 16.00 or the Massachusetts Solid Waste Management Facility Regulations, 310 CMR 19.000.

4.2 Storage

Street Sweepings shall be temporarily stored prior to use, only when the following conditions are satisfied:

- Storage must be:
    - at the site where the sweepings are generated (e.g. at a parking area that was swept);
    - at a location, such as a Department of Public Works (DPW) yard, that is under the control of the governmental entity doing the sweeping or has contracted for the sweeping; or,

  - at other locations with prior written approval from the appropriate MassDEP Regional Office.
- The Street Sweepings shall be protected from wind and rain to the extent necessary to prevent dust, erosion, and off-site migration;
- The Street Sweepings shall not be stored within the 100 foot buffer zone of a wetland or within wetland resource areas including bordering vegetative wetlands and riverfront areas;
- The Street Sweepings shall not be stored within 500 feet of a ground or surface drinking water supply;
- Storage of the Street Sweepings shall incorporate good management practice and result in no public nuisance; and
- Storage of the Street Sweepings must be temporary. Street Sweepings shall be used within one year of collection unless the MassDEP Regional Office where the Street Sweepings are stored grants a written extension. An extension may be granted when it is demonstrated that all storage conditions will continue to be satisfied and the stored Street Sweepings will be put to a specific identified use prior to the expiration of the extension period.

4.3 Preparation Prior to Use

Solid waste, such as paper, auto parts and other trash, shall be removed from all Street Sweepings prior to use. Solid waste screened from the Street Sweepings shall be disposed of at a permitted solid waste facility. Leaves, twigs and other organic matter should also be removed when good engineering practice indicates this is necessary to produce a material that is suitable for the intended use.

5. Approved Uses, Restrictions & Conditions-No Prior Approval Needed from MassDEP

This policy allows Street Sweepings to be used in several applications. An approval from MassDEP is not required when the restrictions and conditions are adhered to as identified in this policy. However, Street Sweepings shall not be used unless prior approval is obtained from the owner of the location where the sweepings are to be used.

5.1 Use at Landfills

Street Sweepings may be used for daily cover at permitted lined solid waste landfills and need no prior MassDEP approval if the Street Sweepings satisfy the requirements for daily cover material specified at 310 CMR 19.130(15). A list of active permitted solid waste landfills can be found on the MassDEP website.

5.2 Use as Fill in Public or Private Ways and Parking Lots

Street Sweepings may be used for fill in public and private ways and parking lots without prior approval from MassDEP only when the following additional restrictions and conditions are observed:

- The Street Sweepings have not been collected from Urban Center Roads (see definition);
- Any collection, storage, or preparation for use of the Street Sweepings shall be in accordance with Sections 4.1 and 4.2 of this policy.
- The Street sweepings have been screened to remove all debris and solid waste and all debris/solid waste screened from the sweepings shall be disposed at a permitted solid waste facility (see Section 8);
- The Street Sweepings are kept above the level of the groundwater;
- The Street Sweepings are not used in designated "No Salt Areas";

- The Street Sweepings are not used within the 100 foot buffer zone of a wetland or within wetland resource areas including bordering vegetative wetlands and riverfront areas;
- The Street Sweepings are not used within 500 feet of a ground or surface drinking water supply;
- In public ways the Street Sweepings are used under the paved road surface or, except in residential areas, as fill along the side of the road within the public way;
- In private roadways or in residential areas the Street Sweepings are used only under the paved road surface; and
- In parking lots the Street Sweepings are used only under the paved parking surface.

5.3 Use As an Additive to Restricted Use Compost

Street Sweepings may be used as an additive to compost without prior written approval from MassDEP only when the following additional restrictions and conditions are observed:

- The Street Sweepings have not been collected from Urban Center Roads (see definition);
- Any collection, storage, or preparation for use of the Street Sweepings shall be in accordance with Sections 4.1 and 4.2 of this policy.
- The Street Sweepings have been screened to remove all debris and solid waste and all debris and solid waste screened from the sweepings is disposed at a permitted solid waste facility (see Section 8);
- The compost is used only along public ways and parking lot areas;
- The compost is not used in residential areas;
- The compost is kept above the level of the groundwater;
- The compost is not used in designated "No Salt Areas";
- The compost is not used within the 100 foot buffer zone of a wetland or within wetland resource areas including bordering vegetative wetlands and riverfront areas; and
- The compost is not used within 500 feet of a ground or surface drinking water supply.

5.4 Reuse as Anti-Skid Material

Street Sweepings may be used as a component to anti-skid material (e.g. street sanding material) without prior written approval from MassDEP only when the following additional restrictions and conditions are observed:

- The Street Sweepings have not been collected from Urban Center Roads (see definition);
- Any collection, storage, or preparation for use of the Street Sweepings shall be in accordance with Sections 4.1 and 4.2 of this policy;
- The Street Sweepings have been screened to remove all debris and solid waste and all debris and solid waste screened from the Street Sweepings is disposed at a permitted solid waste facility (see Sections 8);
- The anti-skid material/Street Sweepings are not used in designated "No Salt Areas";
- The anti-skid material/Street Sweepings are not used within the 100 foot buffer zone of a wetland or within wetland resource areas including bordering vegetative wetlands and riverfront areas; and
- The anti-skid material/Street Sweepings are not used within 500 feet of a ground or surface drinking water supply.

The use of Street Sweepings as anti-skid material in accordance with this policy is not a determination of the efficacy of the material for this purpose. Proper engineering review should be done to ensure the material works as intended.

5.5 Reuse at Landfills Regulated Under MassDEP Policy #COMM-97-001

Street Sweepings may be reused at a permitted Massachusetts landfill and need no prior written MassDEP approval if the sweepings have been adequately characterized pursuant to the MassDEP Policy #COMM-97-001 and the Street Sweepings have been screened to remove debris and solid waste.

All screened debris and solid waste removed from Street Sweepings shall be disposed of at a permitted solid waste facility. Street Sweepings for use at the landfill may contain only incidental, randomly dispersed, de minimis quantities of ash and/or Solid Waste as defined in 310 CMR 16.000 and 310 CMR 19.000, which collectively shall comprise less than 1% by volume of the Street Sweeping materials, as determined by visual inspections. Any Street Sweeping materials approved and brought onto the landfill property for use at the landfill shall contain no more than 5% (by volume) of Asphalt Pavement, Brick, and Concrete ("ABC") material (as defined in 310 CMR 19.000), as determined by visual inspection. Any such material must measure less than 6 inches in any dimension.

Persons who wish to send Street Sweepings to a landfill must comply with MassDEP Policy #COMM-97-001 which requires sampling of the Street Sweepings to demonstrate that the Street Sweepings meet the standards listed in the Policy.

5.6 Use at Reclamation Soil Facilities Regulated Under MassDEP Policy # COMM-15-01

Street Sweepings may be used for fill at a permitted Reclamation Soil Facility (the Facility) and need no prior written MassDEP approval if the Street Sweepings have been adequately characterized pursuant to the Facility-specific Soil/Fill Management Plan and the Street Sweepings have been screened to remove debris and solid waste.

All screened debris and solid waste removed from Street Sweepings shall be disposed of at a permitted solid waste facility. Street Sweepings for use at the Facility may contain only incidental, randomly dispersed, de minimis quantities of ash and/or Solid Waste as defined in 310 CMR 16.000 and 310 CMR 19.000, which collectively shall comprise less than 1% by volume of the Street Sweeping materials, as determined by visual inspections. Any Street Sweeping materials approved and brought onto the property for use at the Facility shall contain no more than 5% (by volume) of ABC material, as determined by visual inspection. Any such material must measure less than 6 inches in any dimension.

Pursuant to Policy # COMM-15-01, persons who wish to send Street Sweepings to a Facility must sample and analyze the Street Sweepings as required by the Facility's Soil/Fill Management Plan and demonstrate that the Street Sweepings meets the Facility's acceptance criteria. Unless specifically addressed in a Facility's Soil/Fill Management Plan, a minimum sampling frequency of 1 sample per 100 cubic yards is required for characterization of Street Sweepings originating from Urban Center Roads. Street Sweepings originating from non-Urban Center Roads may be sampled at a minimum of 1 sample per 500 cubic yards. Regardless of its point of origin, if the total quantity of Street Sweepings is less than 100 cubic yards, a minimum of one composite sample is required for characterization of the material. A list of active permitted Reclamation Soil facilities may be found at https://www.mass.gov/soil-transport-re-use-and-disposal.

6. Approved Use, Restrictions & Conditions- Prior Approval Needed from MassDEP

This policy allows Street Sweepings to be used in several applications. Prior written approval from MassDEP is required when using the Street Sweepings as identified in this section of the policy. In addition, Street Sweepings shall not be used at a location until prior written approval is obtained from the owner of the location where the Street Sweepings are to be used.

6.1 Use as a Bulking Agent for Wastewater Sludge or Septage Disposal

Street Sweepings may be used as a bulking material for wastewater treatment plant sludge or septage when the mixed material will be disposed in a permitted lined or unlined sludge or septage landfill in compliance with MGL Chapter 21, Sections 26-53 and MGL Chapter 83 Sections 6 & 7 provided that the appropriate MassDEP Regional Office's Bureau of Water Resources has granted prior written approval.

7. Other Uses

Any use not approved in this policy requires a MassDEP permit under the Beneficial Use provisions of the Solid Waste Management Facility Regulations at 310 CMR 19.060. A "Beneficial Use Determination" (BUD) can be issued only after the submission of an application characterizing the waste and describing the proposed beneficial use.

8. Disposal

While the beneficial use of Street Sweepings is strongly encouraged, MassDEP does not prohibit the disposal of Street Sweepings. Street Sweepings may be disposed in permitted solid waste landfills without prior approval from the Department.

9. Record Keeping

Any entity using Street Sweeping for any use listed under sections 5.3 or 5.4 shall keep records for a period of three years of the source of the sweepings, the location of use and the amount of sweepings used.

10. Additional Information

For additional copies of this policy, permit application forms or other MassDEP documents, call any MassDEP Regional Office and ask for the Service Center or visit http://www.mass.gov/dep. The permit application numbers for Beneficial Use Determinations are BWP SW 39, 40, 41 and 42.

Copies of all Massachusetts regulations, including the solid waste regulations, are available at the MassDEP website and may also be purchased from the State House Bookstore at 617-727-2834. The solid waste regulations are:

- 310 CMR 16.000, Site Assignment Regulations for Solid Waste Facilities: and,
- 310 CMR 19.000, Solid Waste Management Facility Regulations.

If you have technical questions about the policy, please call any MassDEP Regional Office and ask to speak with a staff member in the solid waste program

Appendix I

Annual Reports & Record Keeping

Municipality/Organization: **City of Quincy, MA**

EPA NPDES Permit Number: **MAR041081**

MaDEP Transmittal Number: **W-041020**

Annual Report Number & Reporting Period: **Year 15: April 1, 2017 – March 31, 2018**

NPDES PII Small MS4 General Permit Annual Report

Part I. General Information

Contact Person: **Paul G. Costello, P.E.** Title: **City Engineer**

Telephone #: **(617) 376-1937** Email: **pcostello@quincyma.gov**

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, 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.

Signature:

Printed Name: **Thomas P. Koch**

Title: **Mayor**

Date: 4/27/18

Part II. Self-Assessment

As required, the City of Quincy (City) evaluated compliance of the stormwater management program with the conditions of the *NPDES General Permit for Stormwater Discharges from Small MS4s*, effective May 1, 2003. From April 1, 2017 – March 31, 2018 (Permit Year 15), the City continued to make progress implementing best management practices (BMPs) to meet 2003 General Permit requirements. As required, the City also evaluated the appropriateness of all BMPs in efforts towards achieving the defined measurable goals. This year, BMPs and measurable goals continue to be appropriate with a few small modifications. See Part III for status of each BMP and proposed revisions. **Note that planned activities for the next permit term have not been designated unless a BMP under this permit term was not fully completed or is an ongoing effort.** Quincy's Stormwater Management Program will be re-assessed during development of the Notice of Intent (NOI) for the next reissued General Permit to more efficiently use the City's limited resources and staff time to leverage appropriate stormwater management.

Part III. Summary of Minimum Control Measures

1. Public Education and Outreach

BMP ID #	**BMP Description**	**Responsible Dept./Person Name**	**Measurable Goal(s)**	**Progress on Goal(s) – Permit Year 15** (Reliance on non-municipal partners indicated, if any)	**Planned Activities**
1-1	Classroom education on stormwater	Department of Public Works (DPW)	Outreach to Ecology Clubs in Schools	Classroom education has been completed in previous permit years, and the DPW continued to make water conservation pamphlets and "Dwayne the Storm Drain" coloring books available at the DPW, library, and other public events.	Measurable goals for 2003 General Permit have been met. Stormwater education in 4th and 5th grade classrooms is scheduled for 2018 through the curriculum developed by the Neponset River Watershed Association.
Revised			Materials for school-aged residents available in public locations and classroom education conducted		
1-2	Flyer & Brochure distribution	Department of Public Works	Develop & distribute materials for public education	The DPW continued to hand out "Water Wise Kids". "Dwayne the Storm Drain" and "Drink Local Tap" water conservation flyers provided by the MWRA. The City also mailed information about the stormwater management program as well as curbside waste & recycling, yard waste, street sweeping, and household hazardous waste disposal, to every resident via the 2017 Spring/Summer "InfoLetter." The Neponset Stormwater Partnership worked with the City Clerk to design, print, and distribute educational insert regarding pet waste with the mailing of dog license renewals.	Measurable goals for 2003 General Permit have been met.
Revised					

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 15 (Reliance on non-municipal partners indicated, if any)	Planned Activities
1-3	Using the Media and Internet	Department of Public Works	Issue One Local Cable Public Service Announcement (PSA)	Local public access (QATV) regularly airs segments on beach closings, recycling programs, trash pickup schedules, and the City's biannual Household Hazardous Waste Days, where residents can drop off items such as auto fluids, pesticides, batteries, and other eligible items. Announcements of DPW sponsored events such as National Public Works Week are also provided on QATV. The DPW filmed and broadcasted several Public Service Announcements on Quincy Access Television on topics including trash/recycling collection, FOG, street sweeping, and hazardous materials. The PSAs were broadcasted throughout the year.	Measurable goals for 2003 General Permit have been met.
Revised					
1-3	Using the Media and Internet	Department of Public Works	Annual Article by the Sewer/Water/Drain Superintendent	The DPW uses the City's website and the Public Works InfoLetter to meet this BMP. The InfoLetter is mailed to every resident and includes information on stormwater issues, pollution prevention, and other related City services. It is also available on the City of Quincy webpage. The City of Quincy DPW webpage https://www.quincyma.gov/govt/depts/pwd/default.htm contains a variety of postings with several related to stormwater and pollution prevention. The DPW prepares an Annual Report for each fiscal year that includes information on stormwater management such as catch basin cleaning, street sweeping, litter cleanup, and waste management. The FY2017 Annual Report is in development and will be posted to the City's website in Spring 2018.	Measurable goals for 2003 General Permit have been met.
Revised					

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 15 (Reliance on non-municipal partners indicated, if any)	Planned Activities
1-3	Using the Media and Internet	Department of Public Works	Publish one storm water press release each year	In addition to the Public Works InfoLetter (see previous BMP), the City developed and published the "Citizens Input Application for Quincy Flood Mitigation Planning" interactive map-based webpage to solicit information about recent flood damage to City infrastructure: http://tighebond.maps.arcgis.com/apps/webappviewer/index.html?id=8923af0a70704bfd98047cffecfb3e62 In Permit Year 15, multiple articles regarding the effects of storms on the City of Quincy were published in the **Patriot Ledger**.	Measurable goals for 2003 General Permit have been met.
Revised					
1-3	Using the Media and Internet	Department of Public Works	Expand City Website to include Stormwater Topics and links	BMP Completed in previous permit years. The DPW will continue to use the city website to promote stormwater topics.	Measurable goals for 2003 General Permit have been met. Once the Neponset Stormwater Partnership educational website is updated (ongoing), the City will add a link to the DPW website.
Revised					
1-4	Public Safety Fair	All City Departments	Annual Public Safety Fair	This BMP was formally added in Permit Year 4 and three annual fairs were held through Permit Year 5. Annual Public Safety Fair has been discontinued, however stormwater public information has been distributed at the 11th Annual Kids Fest at Wollaston Beach on June 11, 2017, a chamber of Commerce Holiday Pop Up Shop in December 2017, and other events.	Measurable goals for 2003 General Permit have been met.
Revised	Stormwater Information at City Events		Annually provide stormwater educational materials at public events		

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 15 (Reliance on non-municipal partners indicated, if any)	Planned Activities
1-5	Neighborhood Forums on Flooding	Department of Public Works	PY7 – Perform outreach to residents in response to recent flooding PY8 – Perform outreach in response to projects identified to alleviate flooding PY9-PY10 – No goals planned	BMP Completed in previous permit years. The BMP was added in Permit Year 7 and completed through Permit Year 10. Outreach on flooding is ongoing.	Measurable goals for the 2003 General Permit have been met.

2. Public Involvement and Participation

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 15 (Reliance on non-municipal partners indicated, if any)	Planned Activities
2-1	Interdepartmental Coordination and Assistance to Preservation Committees	Department of Public Works	Notify City departments of stormwater issues and assist Preservation Committees	In PY15, the Stormwater Advisory Committee (SWAC) continued to meet on a regular basis. The Committee is comprised of nine members of the community. There were two meetings held, October 26, 2017 and January 25, 2018. Agendas are posted online: https://www.quincyma.gov/govt/meeting_agendas/stormwater_management_committee/default.htm. The meetings focused primarily on educating the committee about DPW stormwater operations including the efforts suggested by the committee and employed by the department as well as various stormwater program requirements. The current charge of the Stormwater Advisory Committee is to assist the Department in meeting MCM 1 and 2. The Neponset Stormwater Partnership provided a representative to attend each meeting. The DPW convenes monthly water-sewer-drain staff meetings each month to review and discuss stormwater management issues and develop plans to address them in a timely manner. Also, there are several committees specific to receiving waters (e.g., Save the Harbor/Save the Bay, Wollaston Beach Committee, Friends of Sailor's Pond, and Friends of Butler's Pond) that address environmental and water quality issues. The DPW supports these groups.	Measurable goals for 2003 General Permit have been met. Continue to meet with Stormwater Advisory Committee. Next meeting scheduled for May 3, 2018.
Revised	Stormwater Advisory Committee an Interdepartmental Coordination		Establish the Committee and Meet Quarterly Notify City departments of stormwater issues and assist Preservation Committees		

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 15 (Reliance on non-municipal partners indicated, if any)	Planned Activities
2-2	Storm Cleanup and Management	Department of Public Works	Track clean-up activities per year Track number of clean-up participants Track number of miles cleaned by volunteers	The annual *Cleaner, Greener Quincy* day was held on Saturday May 6, 2017, from 9 a.m. to noon. Residents and City departments cleaned the City's parks, beaches, schools, marshes, and open space areas. Volunteers can sign up on the city's website and have supplies brought to them. Performed routine cleaning of the Town Brook By-Pass system behind Star Market on School Street. The by-pass system is a component of Town Brook flowing from the Braintree Dam to the Town River at Southern Artery. The By-Pass structure diverts peak (storm) flow into a Deep Rock Tunnel which flows under the City to Town River, thus mitigating flooding in the Downtown. The DPW also conducted it annual cleaning and inspection of Hayward Creek (.5 miles) as required by the 1976 ACOE Flood Control Project. The inspection includes a full CCTV of the creek to ensure that channel flow is not being obstructed and the structural condition of the creek remain intact. The DPW also regularly raked the ten (10) City beaches of debris, particularly during the *Cleaner, Greener Quincy* event. The Friends of Wollaston Beach hosted or promoted multiple beach cleanup events, including the DCR Park Serve Day on April 29, 2017. On the same day, over 150 volunteers joined the Neponset River Watershed Association / CDR Park Serve Day to clean up	The 29th Annual *Cleaner, Greener, Quincy* event is scheduled for May 5, 2018. Post-storm cleanup is an ongoing function of the DPW and Parks Departments. The Neponset River Spring Clean-up is scheduled for April 28, 2018 at multiple locations along Quincy's Riverwalk.
Revised					

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 15 (Reliance on non-municipal partners indicated, if any)	Planned Activities
				Neponset Riverwalk, Commander Shea Boulevard, and Boston Scientific property in Quincy as well as other areas in Dorchester and Milton. More info here: https://www.neponset.org/happenings/sat-april-29-neponset-river-clean-up-dcr-park-serve-day-9am-noon.	
2-3	Stencil Storm Drains	Department of Public Works	Stencil 50 storm drains per year starting in year two	The City continued its catch basin marking and stenciling program to educate residents that all catch basins drain to brooks, rivers, or the ocean. The program has completed catch basin markings in several Quincy neighborhoods, including Squantum, Howe's Neck and portions of Merrymount. Friends of Wollaston Beach have previously sponsored stenciling of "no-dumping" on catch basins around Wollaston Beach.	Measurable goals for 2003 General Permit have been met.
Revised			Continue to mark catch basins as budget allows		
2-4	Pet Waste Collection	Department of Public Works	Track number of Dog Parks Track number of Signs Posted Track number of Educational Materials Distributed Track number of "Pooper -Scooper Stations"	The City currently does not have dog parks, although several private developments have them, and encourages owners to clean up after their pets by advertising the City Ordinance when owners are required to annually license their pets and pick up dog tags. A copy of the ordinance is sent out with annual registration reminders. The Ordinance requires owners to clean up their pet's waste, control excessive barking, and ensure that their dog is properly vaccinated against rabies. Monetary penalties apply if the ordinance is not adhered to. Signs are posted throughout the City at the 38 fields/parks and 27 miles of beach referencing the City's Ordinance. These signs are	Measurable goals for 2003 General Permit have been met.
Revised					

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 15 (Reliance on non-municipal partners indicated, if any)	Planned Activities
				vandalized frequently and the Parks Department works to maintain and replace these signs. Information on pet waste disposal is maintained on the City website under "Tips to be a Good Neighbor" section as well as on the Animal Control Department's webpage.	
2-5	Flagship Beach Program	Department of Public Works and U.S. EPA	Coordinate with EPA as needed.	BMP Complete in previous permit years and additional work is ongoing. Wollaston Beach is an EPA "Flagship Beach," which receives frequent water quality monitoring and pollution source assessments. Water quality monitoring results are published on the Massachusetts Department of Public Health – Bureau of Environmental Health website http://www.mass.gov/eohhs/gov/departments/dph/programs/environmental-health/. The City coordinated with EPA and MassDEP to respond to an organic odor at Wollaston Beach in PY10. A study conducted in 2013 that included sampling determined that human fecal matter was not present. Results were summarized in *A Report on Chemical Analysis of Wollaston Beach, Quincy, Massachusetts May 2013 Beach Samples* (July 2013). The City has prioritized the Wollaston Beach drainage area for illicit discharge detection investigations as well as related sewer system investigations. See Section 3 for more information.	As needed, the City plans to support EPA efforts at Wollaston Beach.
Revised					

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 15 (Reliance on non-municipal partners indicated, if any)	Planned Activities
				The Friends of Wollaston Beach also works with the Stormwater Advisory Committee members on public participation and outreach, and the SWAC Chairperson distributed "Dwayne the Storm Drain" brochures at the Annual Meeting on February 10, 2018.	

3. Illicit Discharge Detection and Elimination

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 15 (Reliance on non-municipal partners indicated, if any)	Planned Activities
3-1	Drainage System Mapping	Department of Public Works	Locate all outfalls	2003 Stormwater Mapping Requirements are complete. The Department has developed a drainage system map that shows the locations of all located outfalls and drainage catchments in the City as well as the MassDEP segment numbers for the water bodies that receive discharges from the outfalls. The Department continues to refine and revise its outfall maps (e.g., location, ownership) based on field work and other work in the City.	Measurable goals for 2003 General Permit have been met.
Revised					
3-1	Drainage System Mapping	Department of Public Works Engineering	Complete drainage system mapping	The City estimates that drainage system mapping is approximately 90% complete. Map includes over 3,300 manholes and 9,100 catch basins, nearly 800,000 linear feet of drain pipe, ditch inlets, 52 tide gates, 337 discharge points and connectivity, where known. As infrastructure projects and drainage system inspections are completed, the map is updated. This process is on-going. The Department purchased 10 additional iPads for use in the field as part of their catch basin cleaning program to record/verify catch basin locations, cleaning efforts, to collect structural condition information and for opportunistic inspection results of illicit discharges. The City is tracking illegal dumping information as a result of this effort for targeted outreach mailings or stenciling activity consistent	Measurable goals for 2003 General Permit have been met. The City will continue to update the drainage system GIS.
Revised					

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 15 (Reliance on non-municipal partners indicated, if any)	Planned Activities
				with the IDDE Program Manual. Residents can report illegal dumping activities on the City website. The City has scanned and georeferenced all record drain plans into its GIS mapping system. The Department is currently in the process of relating all conditional structural assessment and sampling tables to the requisite asset ID in the GIS mapping system.	
3-2	Outfall Testing Program	Department of Public Works	Inspect all City discharges	The City has inspected and screened approximately 60% of outfalls in higher priority areas and performed IDDE Catchment Investigations in 2016-2017 including CCTB drain pipes, building inspections, and manhole inspections and water quality screening. During PY 15, the City and its consultants screened about 80 outfalls, mostly in dry weather with a few locations screened during wet weather. The DPW screened and sampled accessible coastal outfalls and outfalls along Town Brook in Permit Year 14, during dry weather. The DPW continues to regularly inspects outfalls in flood prone areas and removes debris from both catch basins and outfalls with the vactor or clam truck. As needed, drain lines are also cleaned to reduce obstructions.	The City will continue to implement its IDDE Program. The City will continue to clean drainage structures in flood prone areas and remove illicit connections. The City will also continue to clean and repair drainage and sanitary sewer infrastructure as part of the City's CIP.
Revised			Inspect all City discharges and perform water quality screening according to the IDDE Program		

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 15 (Reliance on non-municipal partners indicated, if any)	Planned Activities
				The IDDE Program Manual (revised 2016) includes provisions for more detailed outfall screening procedures consistent with EPA Region 1 guidance. The City maintains a complaint log of resident calls that voice drainage infrastructure operation and maintenance issues.	
3-2 Revised	Outfall Testing Program	Health Department and Department of Public Works	Sample discharges with flow present Monitor beach water quality and review results	BMP is ongoing, and the information is used to prioritize IDDE Program investigations. The City of Quincy Health Department collects beach water quality data every Wednesday from June 18 through September 1, at thirteen (13) beach locations. The results are analyzed for enterococcus counts by a private laboratory, and are made available to the public and media by Thursday or Friday of each week throughout the summer months. EPA may conduct additional testing during the Summer (refer to BMP 2-5). Results are posted on the Health Department's webpage: https://www.quincyma.gov/govt/depts/health/hdnews/beach_results.htm The Massachusetts Department of Conservation and Recreation (DCR) collects daily samples (when feasible) from May 22 through August 31 at four (4) DCR beaches at Wollaston. The Massachusetts Department of Public Health – Bureau of Environmental Health publishes beach	Continue beach sampling and contamination source assessment.

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 15 (Reliance on non-municipal partners indicated, if any)	Planned Activities
				water quality monitoring results on their website: http://www.mass.gov/eohhs/gov/departments/dph/programs/environmental-health/. EPA New England also published DCR beach data and referenced the Massachusetts Department of Public Health site on their own website under the New England Beach Monitoring and Notification Program webpage: http://www.epa.gov/region1/eco/beaches/.	
3-2	Outfall Testing Program	Department of Public Works	Follow-up testing on discharges showing contamination	As part of ongoing drainage improvements throughout the City, follow up dye testing has been conducted by the DPW to determine if discharges are contaminated. The DPW also conducts dye testing if there is a potential sewer/drain crossover as part of ongoing drainage maintenance activities. The Department continues to implement its SSO reporting program to enhance consistency in reporting, recording and communication and will work to ensure overlap with MS4 permit program. In Permit Year 15, the DPW conducted preliminary investigations within three (3) problem catchments across the City that discharge into waters of the United States. These investigations consist of rapid inspection of key junction manhole to obtain dry-weather stormwater samples and assessment for sanitary wastewater indicators. The investigation has resulted in	Continue drain system investigation efforts as part of drainage operations plan.

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 15 (Reliance on non-municipal partners indicated, if any)	Planned Activities
				three verified illicit discharges that have been resolved. DPW has developed and maintains an Emergency Services contract for emergency WSD repairs. This contracting mechanism allows the City to rapidly respond to sanitary sewer and drain emergency failures reducing the longevity of spills or leaks as a result of an emergency situation.	
3-3	Illegal Dumping Education	Department of Public Works	Stormwater committee to distribute flyers, posters & other educational material	The City has continued the catch basin marking and stenciling program to educate residents that all catch basins drain to brooks, rivers, or the ocean. The program has completed catch basin markings in several Quincy neighborhoods, including Squantum, Hough's Neck, Merrymount and Wollaston. See also BMP 2-3. Information on pet waste disposal is maintained on the City website under "Tips to be a Good Neighbor" section. The 2017Spring/Summer InfoLetter included a "Clean Water is Everybody's Business" section that explained the difference between the sewer and drain and what can and cannot enter the storm drain.	Measurable goals for 2003 General Permit have been met.
Revised					
3-3	Illegal Dumping Education	Department of Public Works	Document and investigate illegal dumps reported by citizens. Enforce penalties (as necessary).	DPW documents illegal dumping in daily complaint logs. As needed, the DPW responds to calls and enforces the City Ordinance (refer to BMP 3-4). Typical calls include plastic, pet waste, and chemicals dumped in catch basins. Additionally, and	Continue to implement BMP.

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 15 (Reliance on non-municipal partners indicated, if any)	Planned Activities
Revised				as a part of updated IDDE Program, the City will continue to track transitory illicit discharges (dumping) of televisions and toilets as a part of its catch basin cleaning programs to identify targeted areas for illegal dumping outreach. In previous years, the Department issued "No Dumping" education literature to the Hough's Neck, Adam's Shore and Wollaston neighborhoods in response to repeat dumping situations.	
3-4	Ordinance Review and Update	Department of Public Works	Review and revise ordinances	In 2005, the City enacted the Ordinance Governing Discharges to the Municipal Storm Drain System (#2005-094). IDDE ordinance was refined and approved by the Council in Permit Year 13. Improvements to the draft ordinance strengthens enforcement and requires drain system connection permit.	Measurable goals for 2003 General Permit have been met.
3-5	Flagship Beach Program	Department of Public Works & EPA		This BMP was added in PY4 to establish a partnership between the City and EPA to investigate Wollaston Beach water quality. The City has prioritized the investigation of the Wollaston Beach drainage area, which is the largest drainage area in the City. Work has been ongoing since 2009, and the City's consultant has performed sewer and drain investigations, including CCTV and water quality screening. More detailed information is available through the Engineering Department. Current IDDE investigations have been postponed until later in 2018 because of sewer improvements are underway.	Continue to implement BMP.

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 15 (Reliance on non-municipal partners indicated, if any)	Planned Activities
3-6	Sewer Manhole Replacement and Infiltration/Inflow (I/I) Removal Projects	Department of Public Works	PY7 – Perform sewer evaluation to prevent pollution of sensitive areas PY8 – Implement recommendations of sewer evaluation	Ongoing sanitary collection system investigations and improvement decrease Quincy's potential for illicit discharges and SSOs. I/I reports completed in Permit Year 15 include: • *Sanitary Sewer Risk Analysis Evaluation Summary Report* (June 2017) • *Sewer System Evaluation Study (SSES) Phase III Hydraulic Model Report* (May 2017) The City has also performed a City-wide sanitary risk analysis to identify areas for future investigation and potential construction projects, summarized in two Woodard & Curran reports: *Sanitary Sewer Risk Analysis Evaluation* (June 2017) and the *2016 SSES Phase III Hydraulic Model*. DPW has developed and maintains an Emergency Services contract for emergency WSD repairs. This contracting mechanism allows the City to rapidly respond to sanitary sewer and drain emergency failures reducing the longevity of spills or leaks as a result of an emergency situation.	Continue to implement BMP.
Revised					

4. Construction Site Stormwater Runoff Control

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 15 (Reliance on non-municipal partners indicated, if any)	Planned Activities
4-1	Ordinance Review and Updates	Department of Public Works	Review and Revise current erosion and sediment control ordinance	The Stormwater Management and Land Disturbance Ordinance was refined and approved by the Council in Permit Year 13. Improvements to the draft ordinance strengthens enforcement and requires a stormwater management permit for development disturbing over one acre, subdivision plans requiring a definitive plan and projects with common plan of development that exceed one acre. The Department enforced this ordinance on two (2) occasions in PY15 with the assistance of the Inspectional Services Department.	Measurable goals for 2003 General Permit have been met. Continue to implement and enforce ordinance.
Revised					
4-2	Construction Reviews	Department of Public Works	Develop and implement standard project review procedures	City's DPW Engineering Divisions continued to implement the construction review process to ensure that all stormwater runoff from construction sites has adequate erosion and sediment controls. In addition, the Conservation Commission inspects construction sites in their jurisdiction for proper implementation of erosion and sediment control BMPs. DPW staff attend meetings twice a month with the Quincy Planning Departments to discuss new development or redevelopment projects. This attendance ensures coordination and review by DPW Engineering on sites that require a stormwater management permit.	Measurable goals for 2003 General Permit have been met. Continue to implement BMP.
Revised					

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 15 (Reliance on non-municipal partners indicated, if any)	Planned Activities
4-2	Construction Reviews	Department of Public Works & Building Inspection Services	Develop and implement standard construction details	The new City Engineer is reviewing standard construction details and proposed construction site erosion controls and the SWPPP (if applicable) on a site-by-site basis.	Measurable goals for 2003 General Permit have been met. Continue to implement BMP.
Revised			Review proposed construction details for compliance with applicable Federal, State, and local regulations		
4-2	Construction Reviews	Engineering	Develop and implement standard inspection review procedures, document inadequate sites/plans reported and non-complaint permits	Engineering Division and Conservation Commission implements standard inspection review procedures. Engineering Division rejects inadequate plans. Permits are not issued until appropriate corrections are made to plans.	Measurable goals for 2003 General Permit have been met. Continue to implement BMP.
Revised					
4-3	Public Information	Department of Public Works	Continue "Hot Line"	DPW continues to make 24-hour hot line available, and responds to emergencies. The Neponset Stormwater Partnership finalized an educational handout on sedimentation and erosion control practices for the construction industry and made it available to communities in electronic form. The City will distribute this information in Permit Year 16.	Measurable goals for 2003 General Permit have been met. Continue use of hot line for public complaints.
Revised					

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 15 (Reliance on non-municipal partners indicated, if any)	Planned Activities
4-3	Public Information	Department of Public Works	Document & investigate complaints	DPW maintains daily log and enters all complaints received. Complaints are investigated.	Measurable goals for 2003 General Permit have been met. Continue to maintain log and investigate complaints.
Revised					

5. Post-Construction Stormwater Management in New Development and Redevelopment

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 15 (Reliance on non-municipal partners indicated, if any)	Planned Activities
5-1	Ordinance Review and Update	Department of Public Works	Review and Revise Current Stormwater Ordinances	The Stormwater Management Ordinance was amended and approved by the Council in Permit Year 13. Improvements to the draft ordinance strengthens enforcement and requires a stormwater management permit for development disturbing over one acre, subdivisions requiring a definitive plan or project with a common plan of development that exceed one acre.	Measurable goals for 2003 General Permit have been met. Continue implementation and enforcement of ordinance.
Revised					
5-1	Ordinance Review and Update	Engineering Dept.	Develop and implement standard construction details and policies	City's Engineering Division continues to implement standard construction details and policies and conducts detailed review.	Measurable goals for 2003 General Permit have been met. Continue to implement BMP.
Revised					
5-2	Project Reviews	Department of Public Works	Develop and implement standard Project Review Procedures	Engineering and the W/S/D Division continues to implement standard project review procedures. DPW staff attend meetings twice a month with the Quincy Planning Departments to discuss new development or redevelopment projects. This attendance ensures coordination and review by DPW Engineering on sites that require a stormwater management permit.	Measurable goals for 2003 General Permit have been met. Continue to implement BMP.
Revised					
5-2	Project Reviews	Department of Public Works & Building Inspection Services	Develop and implement standard construction details	As needed, existing files are updated with construction details. As-builts are provided to the City following construction and archived.	Measurable goals for 2003 General Permit have been met. Continue to implement BMP.
Revised					

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 15 (Reliance on non-municipal partners indicated, if any)	Planned Activities
5-2	Project Reviews	Engineering	Develop and implement Standard Inspection Review Procedures	Engineering, W/S/D, and Building Inspectors have standard project review and inspection procedures in place. In PY 13, the City continued its "Private Infrastructure Assessment Initiative" to ensure that large commercial, industrial and residential properties are adequately maintaining sewer, water and drain systems. This initiative includes title research, outreach to facility owner or operators, meetings with owners and operators and review of infrastructure and O&M protocols. Three (3) large private infrastructure inventories were added and georeferenced in the City's GIS mapping system.	Measurable goals for 2003 General Permit have been met. Continue to implement BMP.
Revised					
5-3	Project Reviews	Building Inspectors	Document inadequate site plans reported by inspectors	Ordinance enforced jointly by DPW & Inspectional Services. In PY 13, a private facility was identified with inadequate maintenance of their stormwater management facility. Inspections by the City and voluntary cooperation by the private facility has resolved lack of maintenance of the stormwater management facility and resulted in a long-term operations and maintenance plan. In PY15, the Building Inspector intervened on two occasions for inadequate stormwater controls.	Measurable goals for 2003 General Permit have been met. Continue to implement BMP.
5-4	Project Reviews	Department of Public Works	Report non-compliant permits	Departments coordinate to resolve issues of non-compliance or the potential thereof.	Measurable goals for 2003 General Permit have been met. Continue to implement BMP.

6. Pollution Prevention and Good Housekeeping in Municipal Operations

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 15 (Reliance on non-municipal partners indicated, if any)	Planned Activities
6-1	Predictive Catch Basin Program	Department of Public Works	Continue with current program	City continued to inspect catch basins, storm drains, outfalls, and tide gates as part of drainage operations plan, public complaints, and flooding issues. In PY12 and early PY13, the City completed Phase II of its proactive Comprehensive Storm Drain/Catch Basin Cleaning and Evaluation Program. Utilizing City personnel and an outside contractor, approximately 1,400 tons of debris were removed from close to 2,000 catch basins across the City. Structures (catch basins, drainage storm drains, and outfalls) are also cleaned, repaired, and replaced by the DPW on an as needed basis to address flooding issues. Approximately 75 catch basins were repaired, or replaced in 2017.	Continue to implement BMP.
Revised					
6-2	Street Cleaning Program	Department of Public Works	Continue with current program, review the effectiveness of the program	With the purchase of a new street sweeper in PY11, the Highway Operations Department initiated a street sweeping "blitz" for the spring and fall that covers the entire City, and allows crews to reduce street sweeping operations to one week. During 2017, all streets were swept once during the spring and once in the fall. A PSA with the street sweeping schedule was broadcasted on QATV. Weather permitting, the City sweeps the business district and high traffic areas daily throughout the year. Eight thousand	Continue to implement BMP.
Revised					

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 15 (Reliance on non-municipal partners indicated, if any)	Planned Activities
				(8,000) tons of street sweeping residuals were removed from the streets and disposed in accordance with state guidelines. In PY12, the Highway Operations Department implemented a new "salt-only" strategy to eliminate sand from the roadways during winter months and prevent sand from entering catch basins. This ongoing effort will reduce sweeping cleanup needs in all future permit years. DPW operates a curbside pickup of yard waste throughout the year. The yard waste pickup schedule is posted on the DPW's webpage. In PY 15, the DPW collected over 10,700 yards of yard waste.	
6-3	Inspect City owned BMPs, ID Retrofit Opportunities	Department of Public Works	Inspect three structural BMPs per year. Implement two retrofit projects	As needed, the City inspects Stormceptors, sand filtration systems, tide gates, and other drainage structures based on complaints or flooding issues. The City also constructed a DPW truck wash station. Many Operations are benefiting from the completion of the truck wash which will keep the Department in compliance with vehicle washing regulations. BMP complete. The City has implemented many stormwater retrofit projects over the permit term to manage both flooding and water quality, such as the Broad Meadow Marsh Restoration project on Town River and the Town Brook Realignment and Restoration project.	Continue to inspect/maintain City's BMPs and identify retrofit opportunities to improve water quality and reduce flooding.
Revised					

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 15 (Reliance on non-municipal partners indicated, if any)	Planned Activities
6-4	Municipal Employee Training	Department of Public Works	Continue with current program	City staff continued to be aware of proper maintenance procedures for parks and open space, City-owned vehicles and equipment, buildings, street sweeping, and the drainage system. City staff is familiar with proper practices to prevent pollution in stormwater due to municipal operations and new employees go through an orientation program covering these topics. Additionally, DPW staff attends conferences such as those sponsored by AWWA and NEWEA where technical seminars regarding stormwater are presented. During the summer of PY15 the City continued the multiple phase HAZMAT training program for employees across Public Works. This training program will improve handling, labeling and best practices associated with materials and materials management.	Measurable goals for 2003 General Permit have been met. Continue to implement BMP.

Revised				City staff attended all four NSP meetings during the reporting period which included training opportunities through guest presentations, staff presentations, inter-municipal information sharing, and discussion. The major topics covered during the reporting period included: ● Strategies for reviewing stormwater design plans submitted by developers ● Walkthrough of the EPA Performance Extrapolation Tool ● Overview of updated NSP model stormwater bylaw including off-site provisions ● Stormwater related zoning and subdivision rule changes implemented in Canton ● Overview of NSP SWMP template ● Member MS4 program priorities for the next two years ● Best practices for de-icing and snow management ● EEA municipal vulnerability preparedness (MVP) program ● Stormwater BMP retrofit site visit field trip ● Meetings also included discussion of NSP work plan items and administrative tasks The City Engineer and Sr. Civil Engineer is also participating in the four-part training session "Engaging Your Community in Stormwater Funding" by EPA New England and the Consensus Building Institute. Two sessions were held in March 2018. Two more sessions will be held in May during Permit Year 16.	

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 15 (Reliance on non-municipal partners indicated, if any)	Planned Activities
6-5	Woodbine Street Stormwater Improvements Project	Engineering Department	PY7 and 8 – Proceed with Woodbine Street area drainage improvements	Measurable goal met. No work planned in Permit Year 15.	Measurable goals for 2003 General Permit have been met. The City continues to implement their CIP that includes drainage improvement and stormwater treatment projects.

7a. BMPs for Meeting Total Maximum Daily Load (TMDL) Waste Load Allocations (WLA)

The Final Pathogens TMDL for the Neponset River was developed on May 31, 2002 and addresses the following water body:

- Neponset River, Milton Lower Falls Dam, Milton/Boston to mouth at Dorchester Bay, Boston/Quincy (MA73-04).

The TMDLS is being met by BMP ID # 1-2, 2-2, 2-4, 2-5, 3-2, 3-3, 3-4, 3-5, and 3-6.

7b. WLA Assessment

The following table summarizes the WLA for the Neponset River:

Fecal Coliform Waste Load Allocations (WLAs) and Load Allocations (LAs) for the Neponset River and Identified Tributary Streams

Surface Water Classification	Bacteria Source Category	WLA (organisms per 100 ml)	LA (organisms per 100 ml)
B	Illicit Discharges to Storm Drains	0	N/A
B	Leaking Sanitary Sewers	0	0
B	Failing Septic Systems	N/A	0
B	Storm Water Runoff	GM $\leq$ 200 90% $\leq$ 400	GM $\leq$ 200 90% $\leq$ 400
B	Sanitary Sewer Overflows	0	0
SB	Illicit Discharges to Storm Drains	0	N/A
SB	Failing Septic Systems	N/A	0
SB	Storm Water Runoff (Boston, Milton and Quincy)	GM $\leq$ 88 90% $\leq$ 260	GM $\leq$ 88 90% $\leq$ 260
SB	Sanitary Sewer Overflows	0	0
SB	Combined Sewer Overflows	0	N/A

GM means geometric mean
N/A means not applicable

The City is making steady progress towards meeting the WLA through implementation of existing BMPs.

Part IV. Summary of Information Collected and Analyzed

- Sampling was conducted at Quincy's public beaches. Results are available at: http://mass.digitalhealthdepartment.com/public_21/beaches.cfm
  http://www.mass.gov/eohhs/gov/departments/dph/programs/environmental-health/
  http://www.epa.gov/region1/eco/beaches/
- Results of outfall screenings available at the Engineering Department.

Appendix J

Plan Amendment Log

STORMWATER MANAGEMENT PLAN
AMENDMENT LOG

Amend. No.	Description of the Amendment	Date of Amendment	Amendment Prepared by (Name/Signature)
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			

Appendix K

Delegation of Authority Documentation