



# Town of Arlington Stormwater Management Plan

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## Introduction

### Stormwater Management Program Overview

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Under the National Pollutant Discharge Elimination System (NPDES) stormwater program, operators of regulated small municipal separate storm sewer systems (MS4) require authorization to discharge stormwater under an NPDES permit. The Town of Arlington, located within an urbanized area as identified by the latest decennial (2010) census and designated as a regulated community, is applying for coverage under NPDES General Permit for Stormwater Discharges (Attachment A). To obtain permit coverage, the Town is required to develop a Stormwater Management Program (SWMP) designed to reduce the discharge of pollutants from Arlington's MS4 to the maximum extent practicable, protect water quality, and satisfy the water quality requirements of the Clean Water Act and Massachusetts Water Quality Standards. The SWMP includes six minimum control measures that are addressed separately in this document. The minimum control measures are as follows:

1. Public Education and Outreach
2. Public Involvement and Participation
3. Illicit Discharge Detection and Elimination
4. Construction Site Stormwater Runoff Control
5. Post Construction Stormwater Management in New Construction and Redevelopment
6. Pollution Prevention and Good Housekeeping in Municipal Operations

To apply for coverage under a General Permit, the Town must submit a Notice of Intent (NOI) to the U.S. Environmental Protection Agency (EPA) and the Massachusetts Department of Environmental Protection (MADEP). The NOI provides information pertaining to the permit applicant, including the applicant's eligibility for a General Permit and a listing of all receiving waters within the community. In addition, the NOI provides a summary of, and implementation schedule for, the Town's SWMP.

Prior to submitting a NOI, the Town must confirm that it is eligible for coverage under the General Permit by establishing that discharges from its storm drain system do not adversely impact endangered species, critical habitat and historic properties. In addition, the Town must perform research to identify all of its receiving waters and identify those that have been classified as Water Quality Impaired Waters by the MassDEP. The following sections briefly summarize the results of research performed to assess the Town's eligibility and investigations conducted to document the status of the Town's impaired waters.

### Eligibility Criteria

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There is one species found in Arlington that is on the Endangered Species Act list and there are no critical habitats located in proximity to Arlington's MS4, or to the points where authorized discharges reach the receiving waters.

The indicated species is: Northern Long-eared Bat (*Myotis septentrionalis*) status is Threatened

It has been determined that the Town of Arlington meets the Endangered Species Act (ESA) eligibility criterion "A" as outlined in Addendum A of the NPDES General Permit for Stormwater Discharges from Small MS4s. The Rare Species by County and Rare Species by Town published by the Massachusetts Natural Heritage & Endangered Species Program (NHESP) (last viewed on 5/28/2019), the Threatened and Endangered Species System (TESS) database for the State of Massachusetts (last viewed on 5/28/2019) published by the U.S. Fish & Wildlife Service, and 50 CFR Parts 17 and 226 were all referenced to make this determination. For further information on the Town of Arlington's eligibility, see Attachment B.

The Town of Arlington is in compliance with the National Historic Preservation Act (NHPA) eligibility criteria for the NPDES General Permit for Stormwater Discharges from Small MS4s. To make this determination, the Town produced a map that delineated all known stormwater outfalls and the State Register of Historic Places

Datalayers within the Town's municipal boundaries. The Historic Places Datalayers were downloaded from MassGIS in July 2003 and include National Register Districts, National Register Individual Properties, National Register Thematic Resource Areas, National Register Multiple Resource Areas, Preservation Districts, and Local Historical Districts. There are no historic properties identified in the path of Arlington's MS4 stormwater discharges or allowable non-stormwater discharges; and the Town does not propose the construction of any structural BMPs for coverage under this permit. Because there were no historical sites eligible for listing on the National Register included in the datalayer, the Town requested confirmation from the Massachusetts Historical Commission (MHC) that the outfalls identified on the Outfall Location Map did not impact any historical sites eligible for listing. The Town also requested that MHC verify that all sites currently listed on the National Register had been identified on the Town's map. The letter from the MHC has been included in Attachment C.

#### Discharges to Water Quality Impaired Waters

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According to the *Massachusetts Year 2016 Integrated List of Waters*, there are seven waterbodies within the Town of Arlington identified as impaired waters requiring Total Maximum Daily Load (TMDL) limits. The attached table lists these waterbodies, their state identification number, surface area, and pollutant of concern.

#### **Arlington Category 5 - Waters Requiring a TMDL**

<b>Name</b>	<b>Segment I.D..</b>	<b>Surface Area</b>	<b>Pollutant of Concern</b>
Upper Mystic Lake	MA71043	176 acres	Dissolved oxygen saturated Enterococcus Oxygen, Dissolved
Lower Mystic Lake	MA71027	93 acres	DDT in Fish Tissue Oxygen, Dissolved PCB in Fish Tissue Salinity Sediment Bioassays- Chronic Toxicity Freshwater Sulfide-Hydrogen Sulfide
Spy Pond	MA71040	98 acres	Chlordane in Fish Tissue DDT in Fish Tissue Harmful Algal Bloom Oxygen, Dissolved Phosphorous (Total)

Alewife Brook	MA71-04	2.3 miles	Metals/Nutrients/Pathogens Organic enrichment/Low DO Oil and grease/Taste, odor and color Objectionable deposits* Debris/Floatables/Trash Copper E. coli Foam/Flocs/Scum/Oil Slicks Load Oxygen, dissolved PCB in fish tissue Phosphorus Secchi disk transparency Sediment bioassays - chronic toxicity freshwater
Mystic River	MA71-02	5 miles	Arsenic Chlordane in Fish Tissue Chlorophyll-a DDT in Fish Tissue Dissolved oxygen saturation E. coli PCB in Fish Tissue Phosphorus (Total) Secchi disk transparency Sediment Bioassays- Chronic Toxicity Freshwater
Mill Brook <sup>1</sup>	MA71-07	3.9 miles	Physical substrate habitat alterations E. coli
Hills Pond	MA71018	2 acres	Eurasian Water Milfoil

\* Non-Pollutants

As identified in the Notice of Intent, the Town of Arlington has 118 direct discharges to impaired waterbodies requiring TMDLs. The Town installed 11 leaching catch basins to provide pre-treatment of stormwater runoff prior to discharging into Spy Pond. The overall goal of the Town's SWMP is to reduce the discharge of pollutants from the storm drain system to all receiving waters, including those listed as impaired in the *Massachusetts Year 20016 Integrated List of Waters*. The following sections briefly summarize how the various components of the Town's SWMP will improve the quality of stormwater discharged to the receiving waters.

The Town's planned public education efforts and public participation activities will raise awareness throughout the community regarding the impacts of non-point source pollution on the receiving waterbodies and will educate the public on methods to reduce this type of pollution. It is expected that as the public becomes more aware of the Town's water quality issues and the responsibilities expected of them, they would modify their behavior to help improve water quality. Public participation activities such as storm drain marking and pond cleanups will be planned to target the Town's impaired waters. In addition to public participation activities, the Town will also conduct a Stormwater Educational Campaign. This Campaign will include online and social media posts, integration of stormwater education into Elementary School curriculums and environmental extracurricular groups, and bi-monthly stormwater forums for residents to engage directly with Town Staff.

Meeting the requirements of the Illicit Discharge Detection and Elimination minimum control measure will assist the Town in eliminating any illicit discharges to the storm drainage system. Such untreated discharges

contribute high levels of pollutants, including heavy metals, toxics, oil and grease, solvents, nutrients, viruses, and bacteria to receiving waterbodies, thereby degrading water quality and threatening the health of aquatic wildlife.

Because polluted stormwater runoff from construction sites often includes sediments, solid and sanitary wastes, phosphorous, nitrogen, pesticides, oil and grease, and construction debris, it can become a serious contributor of pollutants to the Town's impaired waters. The BMPs proposed to meet the Construction Site Stormwater Runoff minimum control measure will assist in controlling this type of polluted runoff to all waters, with special attention directed to the Town's impaired waters and other areas of environmental concern.

Similarly, stormwater runoff flowing over areas altered by development can also pick up harmful sediment and chemicals such as oil and grease, pesticides, heavy metals, and nutrients, and deposit them in Arlington's receiving waters. The increased impervious surface that results from new developments in the community also interrupts the natural cycle of water so that it no longer gradually infiltrates through vegetation and soil, but instead increases the quantity of water that is delivered to the receiving waters during a storm event. The proposed BMPs for the Post-Construction Stormwater Management in New Development and Redevelopment minimum control measure will assist the Town in controlling both the quality and quantity of stormwater runoff from these new developments. The Town will closely review new development and redevelopment projects that propose to discharge stormwater runoff to the Town's impaired waters, or other areas of environmental concern, and mitigate the potential for an increase in the pollutants of concern.

The goal of the Pollution Prevention and Good Housekeeping for Municipal Operations minimum control measure is to improve and protect the quality of receiving waters by improving the performance of municipal operations and Department of Public Works (DPW) facility management. Proposed BMPs, such as a formal street sweeping, catch basin cleaning and DPW employee training programs, will assist in reducing the type of pollutants that collect on streets, parking lots, open spaces, and DPW storage and vehicle maintenance areas. Those areas tributary to impaired waters and other areas of environmental concern will be prioritized for more rigorous levels of specific activities such as street sweeping and catch basin cleaning.

#### Total Maximum Daily Load Allocations

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The MassDEP is responsible under Massachusetts General Law (MGL) Chapter 21 for monitoring the State's waters, identifying those waters that are impaired, and developing a plan to bring them back into compliance with the Massachusetts Surface Water Quality Standards. Once a waterbody is identified as impaired, the MassDEP is required by the Federal Clean Water Act to develop a TMDL for the impaired waterbody. The process of developing a TMDL includes identifying the causes and source(s) of the pollutant from direct discharges and indirect discharges, determining the maximum amount of the pollutant that can be discharged to the impaired waterbody to meet water quality standards, and developing the plan to meet that goal. As mentioned in the previous section, the *Massachusetts Year 2016 Integrated List of Waters* identifies seven waterbodies within the Town of Arlington as impaired waters requiring TMDLs. Currently the only approved TMDLs in Arlington fall within the Charles River Watershed. There are no TMDLs associated with the Mystic River Watershed yet. The Town will assess the best method of addressing any TMDLs developed for Arlington's impaired waterbodies as they are approved.

## Stressed Basin Analysis

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The Town of Arlington is not located in an area identified as “high” or “medium” in the December 13, 2001 Massachusetts Water Resources Commission’s report entitled, *Stressed Basins in Massachusetts*. At the time of this Stressed Basin Analysis, there was inadequate coverage of stream gauges to all the river basins in Massachusetts, and, as a result, there were areas where no conclusion could be made about the degree of stress to certain basins. The Town of Arlington is located in such a basin. The lack of adequate coverage of stream gages to this area resulted in no designation being assigned in the area of Arlington.





*Notice of Intent & Schedule*





*Figure 1: Outfall Location Map*





## Public Education and Outreach

### Required Elements

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- *The Permittee must implement a public education program to distribute educational materials to the community. The public education program must provide information concerning the impact of stormwater discharges on water bodies. It must address steps and/or activities that the public can take to reduce the pollutants in stormwater runoff.*

### Proposed Public Education and Outreach Plan

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- BMP 1-1 Place Educational Information on the Town's Website*
- BMP 1-2 Conduct Household Hazardous Waste Collection Days*
- BMP 1-3 Intensify the Existing Pet Waste and Waterfowl Management Campaign*
- BMP 1-4 Promote Water Conservation Practices for Homeowners*
- BMP 1-5 Develop a Press Release and Flyer Targeting Community Businesses, Developers, and Landscapers*
- BMP 2-2 Educational Outreach for Students*
- BMP 2-6 Conservation Land Stewards*



## ***BMP 1-1 Place Educational Information on the Town's Website***

### ***BMP Description***

The Town of Arlington operates and maintains a community website, [ArlingtonMA.gov](http://ArlingtonMA.gov). Currently, access is available to the website at [www.town.arlington.ma.us](http://www.town.arlington.ma.us). This website provides information about town government, community news, the public school system and numerous items. The website currently has links to the DPW Engineering web page that links to items relevant to stormwater issues. Detailed information and public service messages are posted on the Engineering website.

The Town will place information relating to stormwater issues and the status of the Town's Stormwater Management Program (SWMP) under the "Stormwater" web page on the Town's official website. Information placed on this web page will include the Town's SWMP, pertinent maps and stormwater related press releases issued by the Town. Links to other web pages that have information regarding other MS4 related Items are as follows: Town's Pet Waste and Wildlife Management efforts (*BMP 1-3*) and local environmental events, such as Cleanups at Spy Pond and Arlington Reservoir (*BMPs 2-3* and *2-5*), Storm Drain Marking (*BMP 2-4*), and Recycling Day events (*BMP 1-2*), will also be created. Upon completion, the Town's revised General and Zoning Bylaws (*BMP 3-2*) will be made available for viewing on the website. The Citizen Tip Line (*BMP 4-2*) will also be made available via the Town's website via the Request/Answer Center System.

### ***Primary Audience***

General public

### ***Measurable Goals***

- Post stormwater related information on the Engineering Stormwater web page.
- Update website regularly.

### ***Responsible Parties***

Department of Public Works; Engineering Division, Town Public Information Officer

### ***Implementation Strategies***

All information to be posted on the Arlington website will be directed to the DPW who will work with the Town's Public Information Officer to organize the posting of the information.

### ***Timeline***

New information will be continuously posted and updated on the Arlington website, as outlined above, throughout the permit term. Published materials will be seasonally appropriate. For example, leaf litter education and services will be posted in the Fall, and snow removal and maintenance education will be posted in the Winter.

### ***Annual Evaluation***

The DPW: Engineering Division will be responsible for preparing a summary of the information posted on the Town's website, including an assessment of the progress made towards achieving the identified measurable goals.



## ***BMP 1-2 Conduct Household Hazardous Waste Collection Days***

### ***BMP Description***

The Arlington Department of Public Works (DPW) and the Arlington Recycling Committee (ARC) coordinate eight Household Hazardous Waste (HHW) Collection Days per year. They are held monthly on Saturdays from April through November at the Minuteman Household Hazardous Waste Facility in Lexington, MA. The Town uses these events as a vehicle to raise awareness throughout the community about the potential impacts hazardous household materials have on water quality when they are not stored or disposed of properly. During the permit term, the Town will continue to sponsor HHW Collection Days, allowing residents a convenient location and safe method to properly dispose of household hazardous waste. Residents can also drop-off used or excess motor oil on Saturdays at the Arlington-Winchester Waste Oil Recycling Facility. In addition, the DPW will pick up CRTs from TVs and computer monitors curbside for a small fee.

The DPW conducts a mass mailing of a brochure entitled Arlington Recycling Program. This brochure is updated annually and provides the public with information on how they should dispose of trash and recyclables, the schedule for curbside recycling, and procedures for disposal of household hazardous wastes. Additionally, the DPW makes informational flyers about the hazardous waste and recycling programs available to residents at its office. The HHW Collection Day events are advertised to the public in several ways: (1) a press release to the local paper, the *Arlington Advocate*, (2) a flyer at the DPW that lists the materials that will be accepted and the dates of collections, (3) a sign posted outside Town Hall just before the collection event as a reminder to residents, (4) a notice on the DPW's web page, and (5) a booth at Arlington Town Day. The booth at Arlington Town Day also provides educational materials on the proper methods of storing household hazardous wastes and the impacts these hazardous materials can potentially have on the environment if they are improperly discarded or disposed of. Products containing mercury are collected at the DPW Facility and local hardware stores.

### ***Primary Audience***

General public

### ***Measurable Goals***

- Continue to sponsor eight household hazardous waste collection days per year.
- Continue to develop the Arlington Recycling Program brochure and distribute to all Arlington residents via a mass mailing on an annual basis.
- Track the number and type of informational brochures collected by Arlington residents at the DPW and at the booth at Arlington Town Day.
- Advertise the events on the Town's website.

### ***Responsible Parties***

Department of Public Works, Arlington Recycling Committee

### ***Implementation Strategies***

The DPW maintains the budget for the HHW Collection Days and will continue to coordinate and advertise the events. The DPW and Arlington Recycling Committee will be jointly responsible for printing and distributing educational brochures and hosting a booth at Arlington Town Day.

### ***Timeline***

The event will take place eight times per year on Saturdays from April through November to the end of the permit term.

### ***Annual Evaluation***

The DPW, with the assistance of the ARC, will prepare a summary of the household hazardous waste collection events, including an assessment of the progress towards achieving the identified measurable goals.



## ***BMP 1-3 Intensify the Existing Pet Waste and Waterfowl Management Campaign***

### ***BMP Description***

When pet waste is not properly disposed of, it can wash into nearby waterbodies or be carried by stormwater runoff into storm drains. Since the Town's storm drains are not connected to treatment facilities, but rather discharge directly into local waterbodies, the untreated animal feces can become a significant source of runoff pollution. As pet waste decays in a waterbody, it uses up oxygen, sometimes releasing ammonia. When combined with warm temperatures, low oxygen levels and ammonia can produce conditions that are detrimental to the health of fish and other aquatic life. In addition, pet waste contains nutrients that promote weed and algae growth and carries bacteria, viruses, and parasites that can pose risks to human health and threaten wildlife. Similarly, waterfowl droppings kill vegetation, contribute to elevated bacteria on the land and in the water, and promote weed and algae growth. To reduce this type of non-point source pollution, the Town will intensify the existing pet waste and waterfowl management campaign.

Currently, in the Town's General Bylaws, Section 3 of Article 2 in Title VIII addresses pet waste management. Failure to properly remove and dispose of a pet's waste can result in a fine, ranging from \$75.00 for the first offense to \$150.00 for the third and subsequent offenses. Section 3 of Article 5 in Title IV forbids the feeding of waterfowl around any reservoir, public park, and recreation area or in any public place. Persons who violate this prohibition are subject to a fine of \$25.00 for the first offense, \$50.00 for the second and third offenses, and \$100.00 for each subsequent offense.

The Town currently manages pet waste and waterfowl in several ways. The web pages for the Arlington Reservoir Committee and Spy Pond remind residents to not feed the waterfowl, especially Canada Geese. The Town has posted "Do Not Feed The Geese" signs at Spy Pond. In addition, the Town has taken a more aggressive approach to waterfowl management by adding goose eggs at Spy Pond and hiring Border Collie dogs to chase geese away at the Arlington Reservoir.

The Town conducts an annual rabies clinic in April. During this clinic, the Town will distribute a brochure that includes information regarding the effects of pet wastes on water quality and what pet owners can do to reduce water pollution. For example, the fact sheet will identify appropriate methods for disposing of pet waste, such as scooping and flushing the waste down the toilet or sealing the waste in plastic bags and throwing it into the trash. The Town will also give attendees a brochure reminding them to not feed the waterfowl. These brochures will be made available at the Town Hall and libraries. A similar outreach campaign regarding proper pet waste management will be conducted during Dog Licensing, which occurs annually in January. During this time, dog owners will sign a pledge to properly manage pet waste per the Town Bylaws, ensuring the health of local waterbodies.

Finally, in Spring 2019 various Town Departments developed a comprehensive Pet Waste Management Policy, coordinating efforts between the Department of Public Works, Engineering Division, Recreation Department, Health and Human Services, Police Department, Conservation Commission, and Clerks Office.

### ***Primary Audience***

General public

### ***Measurable Goals***

- Track the number of brochures distributed annually.
- Track the number of violations issued annually.
- Track the number of pledges signed.
- Estimate quantities of mismanaged pet waste in known problem areas and track changes in quantity before and after educational campaign.

### ***Responsible Parties***

Board of Health (BOH), Animal Control Officer, Engineering Division, Recreation Department

### ***Implementation Strategies***

The Recreation Department will develop brochures regarding pet waste and waterfowl management and ensure their distribution through various Town Friends Groups (e.g. Friends of Robbins Farm Park, etc.) and the Arlington Dog Owners group (A-DOG). The Animal Control Officer will continue to enforce the Town's pet waste removal and waterfowl management bylaws.

***Timeline***

The Recreation Department will develop brochures regarding pet waste by the Summer 2019, to distribute during the Summer and Fall. The Engineering Division and Clerks Office will coordinate to create and electronic pledge for dog owners to sign during the annual licensing period.

***Annual Evaluation***

The Engineering Division will be responsible for preparing a summary of the pet waste and waterfowl management program, including an assessment of the progress made towards achieving the identified measurable goals.



## ***BMP 1-4 Promote Water Conservation Practices for Homeowners***

### ***BMP Description***

Water and sewer services are provided to the Town's residents through a cooperative effort between the Massachusetts Water Resources Authority (MWRA) and the Department of Public Works (DPW). The Town's water conservation program was originally created to help reduce the demand on the MWRA's water sources; however, this program provides other benefits. A successful water conservation campaign can help reduce the frequency of sanitary sewer surcharges, reduce the load on the Deer Island Sewage Treatment Plant (tributary to the Massachusetts Bay) and reduce the need to expand the existing municipal sewer system.

Arlington will continue to actively promote water conservation practices to all residents throughout the year. A variety of public education materials that have been developed by the MWRA are continuously available at the DPW office. These materials include the brochures, "Irrigation Controllers for the Homeowner", "Home Water Conservation Guide", "Facts About Outdoor Water Conservation", and "Stop Leaks/Save Water." The Town also makes rain barrels available to the public for a fee.

To expand its water conservation efforts, the DPW will issue a press release to the *Arlington Advocate* in the spring of each year throughout the permit term. This annual press release will focus on the benefits of water conservation and the availability of educational materials to Arlington residents. The DPW will place "Green Lawns and Gardens" posters at various locations within the Town Hall and at the public libraries. The posters are supplied by the MWRA and provide the reader with useful tips for conserving water outdoors. The MWRA typically makes water conservation bill inserts available to the Town. The Town will use one of these inserts for one of the water bills beginning in the 2004 permit year. The Town will distribute other water bill insert brochures during subsequent permit years if they are made available by the MWRA.

### ***Primary Audience***

General public

### ***Measurable Goals***

- Post water conservation posters at Town Hall and the public libraries.
- Include water conservation bill inserts with the water bill.
- Post water conservation tips, educational information, and press releases online and through social media.

### ***Responsible Parties***

Department of Public Works: Engineering Division

### ***Implementation Strategies***

The DPW will continue promoting water conservation practices throughout the year by providing various educational materials. The DPW will post water conservation posters at various public locations and include water conservation bill inserts with the resident's water bill if the MWRA provides the Town with these materials.

### ***Timeline***

Existing efforts made by the DPW to promote water conservation practices will take place throughout each year from the present to the end of the permit term.

The MWRA educational bill inserts will be incorporated into the Town's water bills during the 2019 permit year and during subsequent permit years if they are made available by the MWRA.

### ***Annual Evaluation***

The DPW will prepare a summary of the water conservation program, including an assessment of the progress towards achieving the identified measurable goals.





## ***BMP 1-5 Develop a Lunch and Learn Educational Workshop for Landscapers***

### ***BMP Description***

The Town will develop a Lunch and Learn educational workshop for landscapers about proper fertilizer use during the 2020 permit year. The Town will convert the material from this Lunch and Learn into an educational flyer and post it online for community-wide distribution. The Lunch and Learn and flyer are meant to be both educational and motivational tools, increasing awareness of stormwater in the landscaper community and challenging businesses to take steps towards stormwater quality improvements in their own business practices.

### ***Primary Audience***

Arlington landscapers, General public

### ***Measurable Goals***

- Advertise the Lunch and Learn in the *Arlington Advocate*, Town website, and social media. Track RSVPs.
- Survey landscapers about fertilizer use 3-6 months after the lunch and learn.

### ***Responsible Parties***

Department of Public Works (DPW), Department of Planning and Community Development, Public Information Officer

### ***Implementation Strategies***

The DPW will create the educational material for the Lunch and Learn. The event's press release will be submitted to the *Arlington Advocate* and posted on the Town's website.

### ***Timeline***

The Lunch and Learn will be distributed to the *Arlington Advocate* and posted on the Town's website in the Summer of 2019.

### ***Annual Evaluation***

The DPW will be responsible for preparing a summary of this education and outreach to area businesses, including an assessment of the progress made towards achieving the identified measurable goals.



## Public Involvement and Participation

### Required Elements

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*All Public Involvement activities must comply with state public notice requirements at MGL Chapter 39 Section 23B.*

- ❑ *The Permittee must provide an opportunity for the public to participate in the development, implementation and review of the Stormwater Management Program (SWMP).*
- ❑ *Activities may also include volunteer stream monitoring or the formation of a stormwater management committee.*

### Public Involvement During SWMP Development & Implementation

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- BMP 2-1 Public Access to SWMP and Receipt of Comments*
- BMP 2-2 Educational Outreach for Spy Pond*
- BMP 2-3 Sponsor an Annual Cleanup at Spy Pond*
- BMP 2-4 Sponsor Storm Drain Marking Activities at Spy Pond*
- BMP 2-5 Sponsor Clean-up at Arlington Reservoir*
- BMP 2-6 Conservation Land Stewards*
- BMP 2-7 A-B-C Stormwater Flooding Board to Address Issues in the Little River and Alewife Brook Areas*



## ***BMP 2-1 Public Access to SWMP and Receipt of Comments***

### ***BMP Description***

An informational press release concerning the status of the Town's Stormwater Management Program (SWMP) will be prepared by the Town and submitted online to introduce the draft SWMP to the public and kick-off a public comment period. The Town's draft SWMP will be made available for public review and comment from 8:00 a.m. on Monday, June 10, 2019 through 4:00 p.m. on Friday, June 21, 2019 at the Robbins and Fox Public Libraries, the Department of Public Works (Town Hall and Grove Street offices), and the Town's website. Placement of the draft SWMP at these locations and the opportunity to provide written public comment on the program will be publicized in an informational press release submitted on the Town's website (*BMP 1-1*).

The SWMP informational press release and public review period will serve two purposes. First, it ensures adequate public review, input and support of the SWMP. The Town will accept written paper comments and electronic comments submitted via the Town's website. Comments received during the review period will be used by the Town to make decisions about the final SWMP. Comments received after that date will be considered, and any proposed improvements to the SWMP that result from these comments will be presented in the Annual Report. Second, this review period begins educating residents and businesses about the importance of their role in achieving the overall goals of this program. The Town will use the final SWMP as an educational tool throughout the permit term, making it available at the libraries and on the Town's website.

### ***Primary Audience***

General public

### ***Measurable Goals***

- Make draft SWMP available to the public for the review and comment period.
- Finalize SWMP.
- Make the final SWMP accessible to the public via the Town's public libraries and website.

### ***Responsible Parties***

Department of Public Works (DPW), Department of Planning and Community Development, Town Public Information Officer

### ***Implementation Strategies***

The DPW and DPCD will work with the Town's Public Information Officer to place the draft SWMP on the Town's website, and later update the website with the final SWMP. The DPW will provide the Robbins and Fox Libraries with a copy of the Town's draft and final SWMP for the public to access.

### ***Timeline***

A draft of the Town's SWMP program will be available at the Robbins and Fox Libraries, the DPW (Town Hall and Grove Street offices), and on the Town's website from Monday, June 10, 2019 through Friday, June 21, 2019 for review by the public. Written comments will be accepted at the DPW on paper and electronically through the end of the review period. The final SWMP will be available at the Robbins and Fox Libraries, the DPW (Town Hall and Grove Street offices), and on the Town's website on June 30, 2019.

### ***Annual Evaluation***

The DPW will prepare an assessment of the progress towards achieving the identified measurable goals.



## ***BMP 2-2 Educational Outreach for Spy Pond***

### ***BMP Description***

Spy Pond is a 103-acre waterbody located in East Arlington, adjacent to Route 2. Spy Pond suffers from high nutrient loading and contamination because of the highly developed watershed. There are approximately 40 outfalls to Spy Pond, only 15 of which receive treatment prior to discharging. The Town's Spy Pond Committee (SPC) of the Envision Arlington Environmental Task Group has been spearheading most of the educational effort, with the assistance of several volunteers, particularly the Friends of Spy Pond Park (FSPP). Below is a summary of educational efforts that the SPC has planned to do in the future.

1. **Fertilizer Flyers**: The SPC will develop and distribute flyers to residents in the Spy Pond watershed, educating the public on the consequences of using high-phosphorus lawn fertilizer. The flyer provides several tips to homeowners, including using organic or slow-release fertilizers, testing the soil for acidity, not using pesticides or fertilizers near hard surfaces, and contracting with environmentally-friendly lawn services.
2. **Door Hangers**: The SPC will develop and distribute door hangers to residences in the Spy Pond watershed. The door hanger will remind the public that the source of pollutants at Spy Pond comes from yards, driveways, roads, and waste material dumped directly into catch basins. The door hanger will provide a number to report illegal dumping.
3. **Spy Pond Website**: The Spy Pond website's main focus is to educate the public on environmental issues relating to Spy Pond. The SPC and the FSPP jointly run the website. The SPC and FSPP each have a series of web pages that describe their goals, who they are, minutes of meetings, and how to join these groups. There are also web pages entitled, "Your Lawn and the Pond," "Storm Drains," and "Geese." These pages reinforce the educational messages provided in the fertilizer flyers, door hangers, and storm drain marking (*BMP 2-4*). Finally, the SPC and FSPP will use this website to publicize events occurring at Spy Pond, including storm drain marking (*BMP 2-4*), ecological gardening, and Spy Pond clean-ups (*BMP 2-3*).
4. **Arlington Town Day**: For Arlington Town Day, the SPC shares a booth with Envision Arlington, while the FSPP hosts its own booth. At both locations, volunteers hand out educational materials, describe past and future activities occurring at Spy Pond, and provide sign-up sheets for those interested in helping Spy Pond.

### ***Primary Audience***

General public

### ***Measurable Goals***

- Develop fertilizer flyer and track the number of volunteers involved in its distribution.
- Develop door hanger and track the number of volunteers involved in its distribution.
- Post Spy Pond-related information on the Spy Pond website and update website regularly.
- Host booths at Arlington Town Day
- Track all clean-up events and impact of clean-up events around and within Spy Pond.

***Responsible Parties***

Spy Pond Committee, Friends of Spy Pond Park, Engineering Division, Conservation Commission, Department of Planning and Community Development Department

***Implementation Strategies***

The SPC and FSPP, with oversight from DPCD, will continue its educational outreach program for Spy Pond as described in Items 1 through 4 above.

***Timeline***

Educational flyers will be developed and distributed each spring throughout the permit term. Door hangers will be developed and distributed annually. The Spy Pond website already contains information relating to stormwater issues. New information will be continuously added and updated on the website, as outlined above, throughout the permit term. Hosting booths at Arlington Town Day will continue on an annual basis in the fall.

***Annual Evaluation***

The SPC, with the assistance of FSPP, will be responsible for preparing a summary of the status of the educational outreach program for Spy Pond, including an assessment of the progress made towards achieving the identified measurable goals.



## ***BMP 2-3 Sponsor Annual Clean-up at Spy Pond***

### ***BMP Description***

An effective method of promoting stormwater awareness is hosting a pond clean-up. In recent years the Town's Spy Pond Committee (SPC) and the Friends of Spy Pond Park (FSPP) have co-sponsored annual clean-up activities at Spy Pond. These groups will continue to make the clean-up activities an annual spring event.

These groups will work together to organize volunteers and handle logistical issues for the event. Participants will walk along Spy Pond on public property to collect trash and record information about the quantity and types of trash and litter that are removed and the apparent water quality of Spy Pond. The media coverage and publicity efforts that result from this event will continue to help educate members of the community about the importance of pond water quality.

The event will be publicized via the Spy Pond website, the Town website flyers posted at various locations throughout the Town, and a press release to the *Arlington Advocate*. Participation will be encouraged from local environmental groups, neighborhood groups, school children and individuals. The SPC will also solicit charitable donations from local businesses to provide materials for cleanup and a lunch for all the citizen volunteers. This event will have a three-fold impact by producing a cleaner Spy Pond, giving volunteers a sense of responsibility for water resources in their community, and raising awareness in the community at large.

### ***Primary Audience***

General public

### ***Measurable Goals***

- Track the number of cleanup volunteers and supporting businesses.
- Track the quantity and types of waste collected as a result of the cleanup event.

### ***Responsible Parties***

Spy Pond Committee, Friends of Spy Pond Park, Department of Planning and Community Development (DPCD), Department of Public Works (DPW)

### ***Implementation Strategies***

The SPC and FSPP, with oversight from DPCD, will work together to organize volunteers, handle logistical issues for the event, and develop appropriate advertisements for the event. The DPW will coordinate trash disposal of the waste collected during the event.

### ***Timeline***

The event is proposed to take place on an annual basis each spring throughout the permit term.

### ***Annual Evaluation***

The SPC, with some assistance from the FSPP, will prepare a summary of the event, including an assessment of the progress towards achieving the identified measurable goals.



## ***BMP 2-4 Sponsor Storm Drain Marking Activities at Spy Pond***

### ***BMP Description***

Marking storm drain inlets with a simple phrase like “Drains to Pond” is an effective way to identify the connection between the drain inlets and the receiving waterbodies. The purpose of the message is to raise public awareness to help deter littering and other practices that contribute to non-point source pollution. Spy Pond has high nutrient loading and other contamination because the 500-acre watershed is highly developed. Approximately 40 outlets drain into Spy Pond, only 15 of which receive treatment prior to discharging.

The media coverage and publicity efforts that result from these events will help educate members of the community about the importance of environmental management. The event will be publicized via the Spy Pond website, Town website, on the local cable access channel (ACMi), and in a press release to the *Arlington Advocate*. The press release will explain the purpose of the project and solicit volunteers for the activity. Participation will be encouraged from local environmental groups, neighborhood groups, school children and individuals. Similar to the Annual Cleanup at Spy Pond (*BMP 2-3*), the SPC will solicit support from local businesses in the form of a lunch for all the citizen volunteers.

### ***Primary Audience***

General public

### ***Measurable Goals***

- Identify areas where marking will take place and establish schedule for the activity.
- Track the number of storm drains marked each year.
- Track the number of volunteers assisting in the marking activity.
- Provide maintenance to previously installed markers as necessary.
- Publicize storm drain marking event(s) via a press release to the *Arlington Advocate* and on the Town’s website.

### ***Responsible Parties***

Spy Pond Committee, Engineering Division, Conservation Commission, Department of Planning and Community Development (DPCD)

### ***Implementation Strategies***

Prior to marking the drain inlets, the SPC, with oversight from DPCD, will determine the area to conduct the activity. Under the SPC’s supervision, the volunteers will conduct the storm drain marking.

### ***Timeline***

The SPC plans to conduct storm drain marking in the Summer and Fall of 2019.

### ***Annual Evaluation***

The SPC will prepare a summary of the marking activities, including an assessment of the progress towards achieving the identified measurable goals.



## ***BMP 2-5 Sponsor Annual Clean-up at Arlington Reservoir***

### ***BMP Description***

An effective method of promoting stormwater awareness is hosting a cleanup. In recent years the Town's Arlington Reservoir Committee (ARC) of the Envision Arlington Environmental Task Group has sponsored annual cleanup activities at Arlington Reservoir. This group will continue to make the cleanup activities an annual spring event.

The ARC will organize volunteers and handle logistical issues for the event. Participants will walk along Arlington Reservoir on public property to collect trash and record information about the quantity and types of trash and litter that are removed and the apparent water quality of Arlington Reservoir. The media coverage and publicity efforts that result from this event will help educate members of the community about the importance of reservoir water quality.

The event will be publicized via the Arlington Reservoir website, Town website, flyers posted at various locations throughout the Town, and a press release to the *Arlington Advocate*. Participation will be encouraged from local environmental groups, neighborhood groups, school children and individuals. The ARC will also solicit charitable donations from local businesses to provide materials for cleanup and a lunch for all the citizen volunteers. This event will have a three-fold impact by producing a cleaner Arlington Reservoir, giving volunteers a sense of responsibility for water resources in their community, and raising awareness in the community at large.

### ***Primary Audience***

General public

### ***Measurable Goals***

- Track the number of cleanup volunteers and supporting businesses.
- Track the quantity and types of waste collected as a result of the cleanup event.

### ***Responsible Parties***

Arlington Reservoir Committee, Department of Public Works (DPW), Conservation Commission

### ***Implementation Strategies***

The ARC will organize volunteers, handle logistical issues for the event, and develop appropriate advertisements for the event. The DPW will coordinate trash disposal of the waste collected during the event.

### ***Timeline***

The event is proposed to take place on an annual basis each spring throughout the permit term.

### ***Annual Evaluation***

The ARC will prepare a summary of the event, including an assessment of the progress towards achieving the identified measurable goals.





## **BMP 2-6 Conservation Land Stewards**

### ***BMP Description***

The Town of Arlington has approximately 54 acres of conservation land.. In March 2003, the Arlington Conservation Commission (ACC) established a volunteer citizen organization called Arlington Conservation Land Stewards (ACLS), whose role is to assist in managing and protecting the conservation land in the Town. As stated in the *Arlington Conservation Land Stewards Stewardship Handbook*, produced by the ACC in 2002, revised in 2019, the primary purpose of this program " ... is to protect the land from litter and vandalism that threatens to pollute our ponds and streams, and destroy plant and wildlife habitat... Land stewards also help with larger clean-up efforts, invasive species control, trail maintenance, and erosion control and planting projects." Another objective of this program is public education of the value of land and the responsibility residents have towards it. The *Stewardship Handbook* outlines the basic responsibilities that a Land Steward has, including walking the site on a regular basis, working with various Town commissions and departments, reporting problems or issues, assisting in mapping and plant/wildlife inventories, and organizing site clean-ups.

Currently, there are approximately 15 active participants in this program. The *Stewardship Handbook* provides Land Stewards information on the program, such as Land Steward responsibilities, conservation land regulations, Arlington conservation lands, and how to become a Land Steward. The ACC currently describes this program on its web page and makes the *Stewardship Handbook* available for downloading. This program is also publicized at the ACC booth at Arlington Town Day. The ACC will increase the visibility of this program by creating an informational press release for the *Arlington Advocate* and an informational brochure that will be made available at the Town libraries and Town Hall, on an annual basis.

### ***Primary Audience***

General public

### ***Measurable Goals***

- Track the number of Land Steward volunteers.
- Maintain records of major activities, such as clean-ups, at individual sites.
- Develop an informational press release on the Land Steward Program for the *Arlington Advocate* and the Town webpage.

### ***Responsible Parties***

Arlington Conservation Commission

### ***Implementation Strategies***

The ACC will continue to coordinate the day-to-day operation of this program. The ACC will develop the informational press release for the *Arlington Advocate* and Town website, and informational brochure for the Town library and Town Hall.

### ***Timeline***

The informational press release and brochure will be ready for distribution by the Fall of 2019, and will be re-distributed each spring throughout the permit term.

### ***Annual Evaluation***

The ACC will prepare a summary of the Land Steward Program, including an assessment of the progress towards achieving the identified measurable goals.



## ***BMP 2-7 A-B-C Stormwater Flooding Board to Address Issues in the Little River and Alewife Brook Areas***

### ***BMP Description***

A tri-community working group consisting of the neighboring communities of Arlington, Belmont and Cambridge has been formed to address issues related to stormwater in the Little River and Alewife Brook watershed areas. The purpose of this joint effort is to identify and implement cost-effective solutions to reduce or eliminate any adverse effects of flooding and other hazards in the Alewife sub-watershed area. The three communities have agreed that it is necessary to address these issues jointly since the independent actions of one community can affect one or more of the other communities in the watershed area. The communities believe that by developing a consensus approach to managing, protecting and enhancing natural resources and the environment they can work toward reducing or eliminating adverse effects of flooding or other hazards associated with stormwater flow in the Alewife sub-watershed.

At the 2003 Annual Town Meeting, the Town voted to enter an Environmental Joint Powers Agreement with Belmont and Cambridge. It is anticipated that all three Towns will execute the Joint Powers Agreement in the near future. Under this agreement the communities will work together to collect information, identify issues and develop an approach to address the issues within the Alewife sub-watershed area for a period of up to five years. The Arlington-Belmont-Cambridge (A-B-C) Stormwater Flooding Board is required to meet in compliance with open meeting laws of the Commonwealth of Massachusetts (MGL Chapter 39 Section 23B) and is expected to meet on a regular basis throughout much of the permit term. The meetings held by the Board will offer a significant opportunity for the public to participate and be involved in addressing the issues within the Alewife Brook sub-watershed area.

### ***Primary Audience***

General public

### ***Measurable Goals***

- A-B-C Stormwater Flooding Board to meet throughout the permit term.
- Information and status of Board's activities to be reported on the Town's website and in the *Arlington Advocate*.

### ***Responsible Parties***

Board of Selectmen (BOS), Town Public Information Officer, Engineering Division, Department of Planning and Community Development

### ***Implementation Strategies***

The BOS will work with other member communities and the Secretary of Environmental Affairs to meet all requirements necessary to allow for the execution of the Environmental Joint Powers Agreement. Once executed, the newly formed A-B-C Stormwater Flooding Board will meet on a bi-monthly.

### ***Timeline***

The Board will meet on a regular basis throughout the permit term, every other month.

### ***Annual Evaluation***

The Engineering Division will be responsible for preparing an assessment of the progress made towards achieving the identified measurable goals.





## Illicit Discharge Detection and Elimination

### Required Elements

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The Permittee must develop, implement and enforce a program to detect and eliminate illicit discharges. An illicit discharge is any discharge to a municipal separate storm sewer that is not composed entirely of stormwater. Exceptions are discharges pursuant to a NPDES permit (other than the NPDES permit for discharges from the municipal sewer system), allowable non-stormwater discharges described at Part I.F. of the NPDES General Permit and discharges resulting from fire fighting activities.

- ❑ If not already existing, the Permittee must develop a storm sewer map. At a minimum, the map must show the location of all outfalls and the names of all waters that receive discharges from those outfalls. Additional elements may be included on the map, such as, location of catch basins, location of manholes, and location of pipes within the system. Initial mapping should be based on all existing information available to the Permittee including town records and drainage maps. Field surveys may be necessary to verify existing records and locate all outfalls.
- ❑ To the extent allowable under state or local law, the Permittee must effectively prohibit, through an ordinance or other regulatory mechanism, non-stormwater discharges into the system and implement appropriate enforcement procedures and actions. If a regulatory mechanism does not exist, development and adoption of such a mechanism must be included as part of the stormwater management program.
- ❑ The Permittee must develop and implement a plan to detect and address non-stormwater discharges, including illegal dumping, into the system.
- ❑ The Permittee must inform public employees, businesses, and the general public of hazards associated with illegal discharges and improper waste disposal.
- ❑ The non-stormwater discharges listed in Part I.F of the permit must be addressed if they are identified as being significant contributors of pollutants.

### Outfall Location Map

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*BMP 3-1 Maintain Outfall Location Map*

### Ordinance

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*BMP 3-2 Revision of Existing General and Zoning Bylaws*

### Illicit Discharge Detection and Elimination Plan

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*BMP 3-3 Implement an Illicit Discharge Detection and Elimination Plan*

*BMP 3-4 Rehabilitate and Replace Sanitary Sewer Pipes*

### Public Education

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*BMP 1-1 Place Educational Information on the Town's Website*

*BMP 1-2 Conduct Household Hazardous Waste Collection Days*

*BMP 2-2 Educational Outreach for Spy Pond*

*BMP 2-3 Sponsor an Annual Clean-up at Spy Pond*

*BMP 2-4 Sponsor Storm Drain Marking Activities at Spy Pond*

*BMP 2-5 Sponsor Clean-up at Arlington Reservoir*

*BMP 4-2 Maintain the Town's WebQA System*

Address Non-Stormwater Discharges

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The Town has not identified any of the non-stormwater discharges listed in Part I.F of the permit as being significant contributors of pollutants to the municipal stormwater system.



### ***BMP 3-1 Maintain Outfall Location Map***

#### ***BMP Description***

The Town of Arlington currently has a Geographic Information System (GIS) system that is used by several departments within Town, such as Planning and Community Development and Public Works. The base map includes all roadways, waterbodies, wetlands, and land parcels. For the Stormwater Management Program, the Town has taken the outfalls shown on the existing paper stormwater drainage system maps and put them into its GIS system to create the outfall location map. This outfall location map is considered accurate since the existing paper stormwater drainage system is based on as-built data. The Town will update this outfall location map should there be any changes to the stormwater drainage system during the permit term.

#### ***Primary Audience***

DPW Staff

#### ***Measurable Goals***

- Update the outfall location map if there are any changes to the stormwater drainage system during the permit term.
- Create a outfall prioritization list for inspections and sampling.

#### ***Responsible Parties***

Department of Public Works (DPW)

#### ***Implementation Strategies***

The DPW will update the outfall location map if there are any changes to the stormwater drainage system.

#### ***Timeline***

The DPW will update the outfall location map when there are changes to the stormwater drainage system.

#### ***Annual Evaluation***

The DPW will prepare a summary, including an assessment of the progress towards achieving the identified measurable goal.



## ***BMP 3-2 Revision of Existing General and Zoning Bylaws***

### ***BMP Description***

The Arlington Planning and Community Development Department (PCDD), in conjunction with other relevant Town departments/boards, will review the Town's existing General and Zoning Bylaws with the intent to adopt provisions which will address the following mandated state and federal requirements: (1) prohibit illicit discharges from entering the municipal separate storm sewer system (MS4), (2) create a program to address erosion and sedimentation from construction activities, and (3) address stormwater runoff from new development and redevelopment projects.

Illicit discharges to the MS4 result in contaminated wastewater entering the receiving waterbodies before receiving treatment from a wastewater treatment plant. Illicit discharges can result from sanitary sewer services that are illegally connected to the storm drainage system, illegal dumping practices, and improper disposal of sewage from recreational activities. To fulfill the regulatory requirements of Minimum Control Measure 3 (Illicit Discharge Detection and Elimination), it is anticipated that the Town will modify the General Bylaws to incorporate language that will prohibit non-stormwater discharges into the storm drain system and will implement appropriate enforcement procedures and actions. Revisions to the bylaws will establish legal authority to carry out all inspection and monitoring procedures necessary to ensure compliance, provide for appropriate enforcement procedures, and take actions in the event of a violation. The revised bylaws will also create an appeals process.

Erosion and sedimentation that results from work on construction sites can lead to reduced water quality and other environmental degradation. It is anticipated that the Town will revise the General Bylaws to require that a Site Development Permit be obtained for any construction activity that falls within the jurisdiction of Environmental Design Review (EDR) in the Zoning Bylaws. These revisions will meet all the regulatory requirements of Minimum Control Measure 4 (Construction Site Stormwater Runoff Control). To obtain the permit, a project proponent would develop and submit an Erosion and Sedimentation Control Plan (ESCP) to the Engineering Division of the Department of Public Works (DPW). The revised bylaws would outline the requirements and procedures for the submission, review, and approval of an ESCP; Best Management Practices (BMPs) design criteria; and the procedures for inspection and enforcement. Inspections would ensure the proper implementation of the approved plan. The revised bylaws would provide the designated inspector access to the property as deemed necessary to make regular inspections of the ESCP measures on the site. A standard ESC Site Inspection Form will be developed (*BMP 4-1*) and the revised bylaws will require that the inspection report forms be completed during the inspections and maintained at the Engineering Division of the DPW.

To ensure compliance with the terms of the Site Development Permit, the revised bylaws will allow for sanctions, both monetary and non-monetary. The revised bylaws will also include a mechanism that would allow the Engineering Division of the DPW to retain the services of a Professional Engineer or other agent, if necessary, to inspect the ESCP measures, and make the developer responsible for the funds needed to cover the cost of conducting and scheduling these inspections.

The Town will modify the EDR section of the Zoning Bylaws to ensure that all new development and redevelopment projects have stormwater management systems that comply with the Massachusetts Department of Environmental Protection's (MassDEP) *Stormwater Management Policy Handbook and Technical Handbook*. The MassDEP Stormwater Management Policy sets nine standards that are designed to address water quality and water quantity problems through the use of BMPs. Five of the nine standards in this policy meet all of the requirements of Minimum Control Measure 5 (Post-Construction Stormwater Management in New Development and Redevelopment), as described below.

- Standard 2, Post-development Peak Discharge Rates: Specifies that stormwater management systems must be designed so that post-development peak discharge rates do not exceed pre-development peak discharge rates.
- Standard 3, Recharge to Groundwater: Requires that loss of annual recharge to groundwater should be minimized through the use of infiltration measures to the maximum extent practicable.

- Standard 4, Removal of 80% Total Suspended Solids (TSS): Requires that new stormwater management systems be designed to remove 80% of the average annual load of TSS for post-development conditions.
- Standard 7, Redevelopment: Defines what projects would be considered redevelopment and requires redevelopment of previously developed sites to meet the DEP Stormwater Management Standards to the maximum extent practicable.
- Standard 9, Operation and Maintenance Plans: Requires that all stormwater management systems must have an operation and maintenance plan to ensure that systems function as designed.

***Primary Audience***

Developers, Contractors, General public

***Measurable Goals***

- Review Town’s existing bylaws.
- Draft revised bylaws so that they fulfill the regulatory requirements of NPDES Phase II Minimum Control Measures 3, 4, and 5.
- Have revised bylaws available for public comment to gauge public acceptance and revise as necessary.
- Present revised bylaws to Town Meeting for adoption.
- Post revised bylaws on Town’s website.

***Responsible Parties***

Planning and Community Development Department, Arlington Conservation Commission (ACC), Engineering Division of the Department of Public Works, Arlington Redevelopment Board (ARB)

***Implementation Strategies***

The PCDD, the ACC, the Engineering Division of the DPW, ARB, and other relevant Town departments/boards, will review the Town’s existing bylaws and will begin drafting revisions to these bylaws to fulfill the regulatory requirements of the NPDES Phase II Minimum Control Measures 3, 4, and 5. Once the revisions are complete, they will be available for review and comment to gauge public acceptance of them. After further revisions, the Town will present the revised bylaws for a vote of acceptance at the Annual Town Meeting. Upon being adopted, the designated authorities as listed in the revised bylaws will administer, implement, and enforce the new provisions.

***Timeline***

The DPCD, the ACC, the Engineering Division of the DPW, ARB, and other relevant Town departments/boards, will review the Town’s existing bylaws during the first and second years of the permit term. Revisions to the existing bylaws will occur during the second year of the permit term. In the second year of the permit term, the Town will present the revised bylaws for a vote of acceptance at the Annual Town Meeting. Upon being adopted, the designated authorities as listed in the revised bylaws will administer, implement, and enforce the new provisions. After adoption, the revised bylaws will be posted on the Town’s website.

***Annual Evaluation***

The DPCD will prepare a summary that includes the progress made towards revising the existing bylaws, including an assessment of the progress towards achieving the identified measurable goals.





### ***BMP 3-3 Implement an Illicit Discharge Detection and Elimination Plan***

#### ***BMP Description***

The Town's Illicit Discharge Detection and Elimination Plan (IDDEP) will include the following components: identifying priority areas, tracing the source of an illicit discharge, and removing the source of an illicit discharge.

#### ***Identifying priority areas***

The Town will use available information to identify potential priority areas. Local watershed groups will be contacted to solicit any available sampling data, information on the local waterbodies and potential problem areas. The Town will assess complaints that have been received regarding illegal dumping or discharges suspected to be contaminated. The Town's business districts will be reviewed to identify those areas having discharges with a high potential to affect water quality. Older areas of Town will also be reviewed due to the increased potential of having deteriorated sanitary and storm drain infrastructure, which could result in infiltration problems. The Massachusetts Integrated List of Waters will be reviewed to obtain pertinent information from the 303(d) list and 305(b) report.

#### ***Tracing the Source of an Illicit Discharge***

Once the priority areas have been determined the Town will conduct dry-weather surveys of the outfalls to look for non-stormwater flows. The Town has developed an Outfall Inspection Form to standardize the outfall inspections and a draft of this form can be found in Attachment D.

Once outfalls with evidence of illicit discharges have been identified, the Department of Public Works (DPW) will work to detect the source of the discharge. The DPW will utilize techniques such as manhole inspections, video inspections, smoke testing, dye testing, and tracking of illegal dumping activities, to identify the source of the illicit discharges.

#### ***Removing the Source of an Illicit Discharge***

The Town will respond to the discovery of an illegal connection in a graduated manner, beginning with efforts to obtain voluntary compliance. The Town will seek voluntary compliance by notifying the responsible party of the connection, its environmental consequences, and the applicable regulations and will provide information on how the situation can be remedied. If the responsible party fails to voluntarily comply with the Town requirements, then the DPW will follow enforcement measures as outlined in the revised Town Bylaws (*BMP 3-2*). Recognizing that the cost of reconnecting the illicit connection to the sanitary sewer system may make voluntary compliance difficult, the Town will explore the possibility of providing assistance with these costs using municipal public works funds or state or federal grants.

The Town will attempt to prevent illegal dumping by raising awareness throughout the community and by enforcement measures outlined in the revised Town Bylaws (*BMP 3-2*). The Town will continue to sponsor Household Hazardous Waste Collection Days (*BMP 1-2*) to provide residents with a safe method of disposing of their hazardous wastes. The Spy Pond Committee will also continue to mark storm drains (*BMP 2-4*) to help educate the public about the relationship between catch basins and the receiving waterbodies. The Town will publicize a Citizen Tip Line (*BMP 4-2*) for illegal dumping reporting on the Town's website and will post flyers in public areas.

#### ***Primary Audience***

General public

#### ***Measurable Goals***

- Develop an Illicit Discharge Detection and Elimination Plan.
- Conduct dry-weather field screening of outfalls and track the number of surveys indicating a possible illicit connection.
- Trace the source of potential illicit discharges.
- Track the number of illicit connections found.
- Track the number of illicit connections repaired/replaced.
- Report on the success of obtaining alternative funding to assist in illicit connection removal.

***Responsible Parties***

Department of Public Works (DPW)

***Implementation Strategies***

The DPW will work to develop an effective IDDEP that the Town can easily implement given the limited funds and manpower available. An essential component of the plan will include developing a schedule to conduct dry-weather field screening of all outfalls identified in the regulated area. Any additional outfalls that are located during this activity will also be investigated. The investigation results will be reviewed for indications of potential illicit discharges; the sources will be traced and removed.

Throughout the implementation of the IDDEP, the Town will assess and evaluate the efficiency and feasibility of the plan. The Town will identify areas of the IDDEP requiring improvement and make efforts to enhance the plan's effectiveness.

***Timeline***

The DPW will develop the IDDEP by the Summer of 2019. Dry weather field screening will begin in the Summer of 2019 and continue through the Spring of 2020. Illicit discharge source location and removal will be addressed subsequent to reviewing investigation results throughout the permit term.

***Annual Evaluation***

The DPW will prepare a summary of the IDDEP development and implementation. The summary will include an assessment of the progress towards achieving the identified measurable goals.



## ***BMP 3-4 Rehabilitate and Replace Sanitary Sewer Pipes***

### ***BMP Description***

To comply with the requirements of Section 308 of the Clean Water Act, the Town of Arlington conducted a sampling program of outfalls located in the Mystic River watershed to determine whether sanitary sewers were exfiltrating wastewater into the storm drain system. Using the Class B waters fecal coliform threshold of 1000 per 100 ml as a guideline, the results of this study indicated that several sanitary sewer pipes were exfiltrating wastewater into the storm drain system. Consequently, the Town will undertake to rehabilitate or replace sanitary sewer pipes in the following streets: Cross Street, Waldo Road, Landsdowne Road, Hemlock Street, Pine Street, and Sunnyside Avenue. Rehabilitation activities will include testing and sealing of joints and cured-in-place pipe relining. The Town has divided this effort into three phases that will occur over the next three years. At the completion of each phase, the tributary outfalls will be re-sampled to verify elimination of the illicit connections. When this project is complete, water quality in the receiving waterbodies will improve, since untreated sewage will no longer be discharged into them.

### ***Primary Audience***

General public

### ***Measurable Goals***

- Rehabilitation/replacement of sanitary sewer pipes exfiltrating wastewater.
- Maintain documentation of construction activities and re-sampling.

### ***Responsible Parties***

Department of Public Works (DPW)

### ***Implementation Strategies***

The DPW will oversee the rehabilitation/replacement of the sanitary sewer pipes that are exfiltrating wastewater. Upon completion of each phase, the tributary outfalls will be re-sampled to verify elimination of the illicit connections. The DPW will maintain documentation of the construction activities, as well as the results of the re-sampling.

### ***Timeline***

The DPW has scheduled the sanitary sewer rehabilitation/replacement activities.

### ***Annual Evaluation***

The DPW will prepare a summary that includes the progress made towards rehabilitating/replacing the sanitary sewer pipes, including an assessment of the progress towards achieving the identified measurable goals.



## Construction Site Stormwater Runoff Control

### Required Elements

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*The Permittee must develop, implement, and enforce a program to reduce pollutants in any stormwater runoff to the MS4 from construction activities that result in a land disturbance of greater than or equal to one acre. The Permittee must include disturbances less than one acre if part of a larger common plan.*

*The Permittee does not need to apply its construction provisions to projects that receive a waiver from EPA under the provisions of 40 CFR§122.26(b)(15)(i).*

- To the extent allowable under state law, an ordinance or other regulatory mechanism to require sediment and erosion control at construction sites. If such an ordinance does not exist, development and adoption of an ordinance must be part of the program.*
- Sanctions to ensure compliance with the program. To the extent allowable under state law or local law, sanctions may include either monetary or non-monetary penalties.*
- Requirements for construction site operators to implement a sedimentation and erosion control program that includes BMPs that are appropriate for the conditions at the construction site, including efforts to minimize the area of the land disturbance.*
- Required control of wastes, including but not limited to, discarded building materials, concrete truck washout, chemicals, litter, and sanitary wastes.*
- Procedures for site plan review that incorporate consideration of potential water quality impacts. The site plan review should include procedures for preconstruction review.*
- Procedures for receipt and consideration of information submitted by the public.*
- Procedures for inspections and enforcement of control measures at construction sites.*

### Proposed BMPs

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- BMP 3-2 Revision of Existing General and Zoning Bylaws*
- BMP 4-1 Develop a Site Inspection Form and Conduct Site Inspections*
- BMP 4-2 Develop and Implement a Citizen Tip Line*



## ***BMP 4-1 Develop a Site Inspection Form and Conduct Site Inspections***

### ***BMP Description***

During construction, erosion and sedimentation control (ESC) best management practices (BMPs) are rendered ineffective if they are not installed or maintained properly. To maintain the effectiveness of construction site stormwater BMPs, regular inspections of the control measures will be conducted. Inspections will be conducted at various stages of the construction process including clearing and grubbing, rough grading, building/roadway construction, finish grade, and final stabilization. An ESC Site Inspection Form will be developed to assist the inspector in documenting the ongoing inspection and maintenance. The ESC Inspection Form will identify the project site and the stage of construction.

Inspection of the ESC measures for all regulated projects will occur as outlined in the revised Town Bylaws (*BMP 3-2*). The Engineering Division of the Department of Public Works (DPW) will perform the inspections or will retain the services of a Professional Engineer or other agent to inspect the ESC measures. The completed ESC Site Inspection Forms will be maintained at the DPW for the duration of the project.

### ***Primary Audience***

Developers, Contractors

### ***Measurable Goals***

- Develop an ESC Site Inspection Form.
- Track the frequency of inspections conducted for each site.
- Track the completion of inspection forms.
- Track the number of failed ESC BMPs discovered on each site.

### ***Responsible Parties***

Engineering Division of the Department of Public Works, Arlington Conservation Commission, Arlington Redevelopment Board

### ***Implementation Strategies***

The Engineering Division of the DPW will develop the ESC Site Inspection Form and implement the use of the form upon adoption of revised Town Bylaws (*BMP 3-2*).

### ***Timeline***

The Engineering Division of the DPW will draft the ESC Site Inspection Form by the Spring of 2019. Inspections for the ESC measures on all sites will be implemented upon adoption of revised Town Bylaws (*BMP 3-2*).

### ***Annual Evaluation***

The Engineering Division of the DPW will prepare a summary of the development and implementation of the ESC Site Inspection Form and include an assessment of the effectiveness of conducting the inspections and progress made towards achieving the identified measurable goals. The Engineering Division will also ensure consistency across the Town's various stormwater and erosion control regulations and policies, which are administered by the Engineering Division, Inspectional Services, the Arlington Redevelopment Board, and the Arlington Conservation Commission.



## ***BMP 4-2 Maintain the Town's WebQA System***

### ***BMP Description***

Arlington has a WebQA portal for residents to ask questions and identify issues. The portal provides a means for concerned citizens to contact the appropriate authority when they see a water quality problem on a construction site or anywhere else in Town. The form requests information about the individual placing the complaint, information regarding the alleged violation, and information describing any vehicles involved in the allegation.

Complaints received via WebQA are investigated within 2 working days of receipt. If the responsible party can be identified, the investigating team informs them of the problem, offers ways for future remediation, and directs the responsible party to implement appropriate corrective measures. If the responsible party does not resolve the issue, an enforcement action can be taken in accordance with the revised Town Bylaws (*BMP 3-2*). All actions taken related to the complaint are documented.

The Town advertises WebQA regularly on the Town's website. Residents who do not have personal access to the Internet can use public computers available at the Town's libraries to make complaints via WebQA, or can mail in or drop off hand-written complaints to the DPW.

### ***Primary Audience***

General public

### ***Measurable Goals***

- Maintain WebQA.
- Advertise WebQA.
- Track the number of complaints received via WebQA.
- Track the problems/incidents remedied as a result of WebQA.

### ***Responsible Parties***

Department of Public Works, Town Public Information Officer

### ***Implementation Strategies***

The DPW will maintain WEBQA.

### ***Timeline***

The DPW currently maintains and remedies all WebQA complaints.

### ***Annual Evaluation***

The DPW will maintain WebQA and ensure follow-up to all complaints. Complaints will be recorded and tracked for completion.



## Post Construction Stormwater Management in New Development and Redevelopment

### Required Elements

---

*The Permittee must develop, implement and enforce a program to address stormwater runoff from new development and redevelopment projects that disturb greater than one acre and discharge into the municipal system. The program must include projects less than one acre if the project is part of a larger common plan of development that disturbs greater than one acre.*

- To the extent allowable under state and local law, an ordinance or other regulatory mechanism to address post construction runoff from new development and redevelopment. If such an ordinance does not exist, development and adoption of an ordinance must be part of the program.*
- Procedures to ensure adequate long term operation and maintenance of best management practices.*
- Procedures to ensure that any controls that are in place will prevent or minimize impacts to water quality.*

### Proposed BMPs

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*BMP 3-2    Revision of Existing General and Zoning Bylaws*  
*BMP 5-1    Arlington Redevelopment Board and Arlington Conservation Commission Stormwater Guidelines*



## ***BMP 5-1 Arlington Redevelopment Board and Arlington Conservation Commission Stormwater Guidelines***

### ***BMP Description***

The revisions to the General and Zoning Bylaws (*BMP 3-2*) will require developers to treat stormwater runoff by structural and/or non-structural means. To assist developers in meeting these requirements, the Department of Planning and Community Development (DPCD) will work to create consistency between the stormwater regulations administered by the ARB, ACC, and Engineering Division.

### ***Primary Audience***

Developers, General Public

### ***Measurable Goals***

- Revise stormwater regulations to ensure consistency across departments and commissions.

### ***Responsible Parties***

Planning and Community Development Department, Arlington Redevelopment Board (ARB), Arlington Conservation Commission, Engineering Division

### ***Implementation strategies***

The DPCD will work with the ARB and ACC to revise regulations.

### ***Timeline***

The DPCD will work with DPW, Inspectional Services, Town Counsel, and the Town Managers Office to create regulatory consistency.

### ***Annual Evaluation***

The DPCD will track all regulatory changes.





## Pollution Prevention & Good Housekeeping in Municipal Operations

### Required Elements

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- ❑ *Develop and implement a program with a goal of preventing and/or reducing pollutant runoff from municipal operations. The program must include an employee-training component.*
- ❑ *Include, at a minimum, maintenance activities for the following: parks and open space; fleet and building; new construction and land disturbance; and stormwater system maintenance.*
- ❑ *Develop schedules for municipal maintenance activities described above.*
- ❑ *Develop inspection procedures and schedules for long-term structural controls.*

### Employee Training Program

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*BMP 6-1 Develop a Formal Training Program for DPW Staff*

### Municipal Maintenance Activities

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*BMP 6-2 Catch Basin Cleaning Program*

*BMP 6-3 Parking Lot and Street Sweeping Program*

*BMP 6-4 Implement Stormwater Pollution Prevention Plan*

*BMP 6-5 Vehicle and Equipment Maintenance Policy*



## ***BMP 6-1 Develop a Formal Training Program for DPW Staff***

### ***BMP Description***

A formal training program for the Department of Public Works (DPW) staff will be established to teach employees about stormwater management, potential sources of contaminants, and Best Management Practices (BMPs). The training program will instill a thorough knowledge of the spill prevention and response for DPW facilities, good housekeeping techniques, and good materials management practices.

The DPW has developed a *Waste Oil Management Plan* and a *Safety Guidelines Manual* for DPW employees. The *Waste Oil Management Plan* describes the proper procedures and employee responsibilities for handling waste oil from the maintenance garage (Building C) to the waste oil burner (Building D). The *Safety Guidelines Manual* instructs DPW employees on how to safely perform jobs at the DPW. The DPW will use these documents as a starting point to develop the employee training program.

One component of the training program is a Spill Prevention and Response Plan (SPRP). The SPRP will specify materials handling procedures and storage requirements, and identify cleanup procedures for areas and processes in which spills may potentially occur. The SPRP standardizes procedures and employee training to decrease the likelihood of spills.

Employee training regarding good housekeeping practices will encompass the Town's policies regarding vehicle washing (*BMP 6-5*), illegal dumping, catch basin cleaning (*BMP 6-2*), parking lot and street sweeping (*BMP 6-3*), lawn care procedures (*BMP 6-6*), and detention basin maintenance (*BMP 6-8*). DPW employees that will be completing and maintaining records as required by various programs and policies will also be trained to update records correctly.

Failure to properly store and handle hazardous materials increases the probability of accidental spills occurring. The materials management practices component of the training program will establish policies and procedures for proper storage, handling, and disposal of wastes.

As appropriate, other Town departments, such as Fire, Police, and Board of Health, will be included in these training activities.

### ***Primary Audience***

DPW Staff

### ***Measurable Goals***

- Establish a formal training program for DPW employees.
- Conduct training sessions with all current employees.
- Train all new DPW employees in accordance with the training program requirements.
- Track employee training activities and participation.
- Conduct refresher training for employees after every two years of employment.

### ***Responsible Parties***

Department of Public Works

### ***Implementation Strategies***

DPW management will establish a formal employee-training program and conduct all required training activities. As appropriate, other Town Departments, such as Fire, Police and Board of Health, will be included in these training activities. DPW management will track all training received by employees and identify employees requiring refresher training.

### ***Timeline***

The DPW will have a formal training program established by the Fall of 2019 and will immediately schedule training for all current DPW employees. New hires to the DPW will be trained in accordance with the training program requirements within the first month of employment. The DPW will track all training conducted, and will identify and schedule employees for refresher training.

***Annual Evaluation***

The DPW will prepare a summary of the formal training program's development and implementation, including an assessment of the efficiency and feasibility of conducting the training as planned and progress towards achieving the identified measurable goals.



## ***BMP 6-2 Catch Basin Cleaning Program***

### ***BMP Description***

Catch basins are equipped with a low area below the invert of the outlet pipe, known as the sump, that is intended to trap sediment and prevent solids from clogging the storm drains or being washed into the receiving waterbodies. Catch basins must be cleaned periodically to maintain this ability to trap sediment. Removing sediment, decaying debris, and trash from catch basins has aesthetic and water quality benefits, including reducing foul odors, suspended solids, and the load of oxygen-demanding substances that reach the receiving waters. Presently, the Town systematically conducts catch basin cleaning activities on over 3,500 catch basins using a clammer and a vactor truck. Cleaning activities generally begin in the spring of each year and continue through the fall. Throughout the permit term, the Town will continue to clean at least 75% of the catch basins in Town annually.

The DPW will continue with its current practice of having catch basins located in problem areas, such as low spots in the center of Town, cleaned first and more frequently to prevent the build-up of debris. As catch basins are cleaned the overall condition of each catch basin will be surveyed. Catch basins needing repair will be noted.

As part of the Catch Basin Cleaning Program, the DPW will also clean the 15 leaching catch basins at Spy Pond, two leaching catch basins at Bishop Elementary School, two Vortechnic devices at Hill's Pond, and one oil/water separator at Peirce Elementary School. As these structures are cleaned, their overall condition will be noted. Repairs will be made as necessary. Records of all inspection and maintenance activities will be maintained.

The DPW will accurately track the catch basins that are cleaned, as well the frequency of cleanings and the total annual amount of debris and sediment collected from the cleaning effort.

Currently, the debris and sediment recovered from catch basin cleaning is temporarily stored outside in the Town Yard prior to being shipped off site. There are no haybales or berms to prevent the migration of waste materials with stormwater. The DPW will employ appropriate measures to minimize the risk of these waste materials from impacting Mill Brook, which runs through the DPW Town Yard.

Throughout the implementation of the Catch Basin Cleaning Program, the DPW will assess and evaluate the efficiency and feasibility of conducting the cleanings as outlined above. The DPW will identify areas of the program requiring improvement and make efforts to enhance the program's effectiveness.

### ***Primary Audience***

DPW Staff

### ***Measurable Goals***

- Track the catch basins that are cleaned each year, including the leaching catch basins, Vortechnic devices, and oil/water separator.
- Maintain a log of the disposed materials

### ***Responsible Parties***

Department of Public Works

### ***Implementation Strategies***

The DPW will continue to systematically clean catch basins on an annual basis.

### ***Timeline***

The DPW will continue its existing Catch Basin Cleaning Program throughout the permitting period.

***Annual Evaluation***

The DPW will prepare a summary of the Catch Basin Cleaning Program, including an assessment of the efficiency and feasibility of conducting the cleanings planned and progress towards achieving the identified measurable goals.



## ***BMP 6-3 Parking Lot and Street Sweeping Program***

### ***BMP Description***

Street sweeping on a regular basis will remove sediment and other pollutants from roads and parking lot surfaces, minimizing the amount of pollutants delivered to receiving waters. Currently, all municipal streets are swept a minimum of once per year during the spring snowmelt to reduce pollutant loads from road salt and to reduce sand export to receiving waters. The business district streets, such as Massachusetts Avenue, Broadway Street, and Summer Street, are swept more frequently for aesthetic purposes. Additional sweeping activities are conducted on an as-needed basis, based on a visual assessment of the roads.

The Town will continue the practice of street sweeping during the spring snowmelt as a pollution prevention measure. The DPW currently has a defined schedule for sweeping streets and parking lots and will maintain this schedule throughout the permit term. The Town owns three street sweepers. The DPW will accurately track the parking lots and streets swept, as well as the frequency of sweeping and the total annual amount of debris and sediment collected.

Currently, the debris and sediment recovered from street sweeping activities are temporarily stored outside in the Town Yard prior to being shipped off site. There are no haybales or berms to prevent the migration of waste materials with stormwater. The DPW will employ appropriate measures to minimize the risk of these waste materials from impacting Mill Brook, which runs through the DPW Town Yard.

Throughout the implementation of the Parking Lot and Street Sweeping Program, the DPW will assess and evaluate the efficiency and feasibility of conducting the cleanings as outlined above. The DPW will identify areas of the program requiring improvement and make efforts to enhance the program's effectiveness.

### ***Primary Audience***

DPW Staff

### ***Measurable Goals***

- Track the streets and lots that are swept each year.
- Maintain a log of the disposed materials

### ***Responsible Parties***

Department of Public Works

### ***Implementation Strategies***

The DPW will continue to sweep all municipal streets and parking lots a minimum of once per year and provide supplemental sweeping to streets and parking lots as time and resources permit.

### ***Timeline***

The DPW will continue their existing Parking Lot and Street Sweeping Program throughout the permitting period.

### ***Annual Evaluation***

The DPW will prepare a summary of the Parking Lot and Street Sweeping Program, including an assessment of the efficiency and feasibility of conducting the cleanings planned and progress towards achieving the identified measurable goals.



## ***BMP 6-4 Implement Stormwater Pollution Prevention Plan***

### ***BMP Description***

The Department of Public Works (DPW) retained the services of the consulting firm, Comprehensive Environmental Inc. (CEI), to prepare a Stormwater Pollution Prevention Plan (SWPPP) for the Town Yard. Initially, as part of the Phase II program, all municipal industrial facilities, such as the DPW, were required to file for permit coverage under the Multi-Sector General Permit for Industrial Activities and prepare a SWPPP. However, in March 2003, the EPA made a determination that DPW facilities do not fall under SIC Code 4231 and are not required to develop a SWPPP at this time. The EPA has indicated that DPW facilities will likely be permitted under a different sector, at which time the SWPPP will be required. Consequently, the Arlington DPW requested that CEI prepare the SWPPP in anticipation of future requirements.

The SWPPP document outlines several structural and non-structural Best Management Practices (BMPs) that can be applied to several activities that occur at the DPW Town Yard. Table 5 in the SWPPP summarizes pollutant sources, existing management practices, and new BMP options (Attachment E). Examples of stormwater pollutant sources include road salt/sand; waste fluids; road maintenance materials and wastes; diesel and gasoline fuels; vehicle wash water; vehicle and equipment drips and leaks; sediments and sands; and dumpsters. The DPW will implement the BMPs recommended in the SWPPP over the permit term to help improve the water quality of Mill Brook, which flows through the DPW Town Yard.

### ***Primary Audience***

DPW Staff

### ***Measurable Goals***

- Review the recommendations outlined in Table 5 of the SWPPP.
- Develop a schedule to implement these recommendations.
- Track progress in implementing recommendations.

### ***Responsible Parties***

Department of Public Works

### ***Implementation Strategies***

The DPW will review the recommendations outlined in Table 5 of the SWPPP. Based on cost and time considerations, the DPW will develop a schedule to implement the BMPs. The DPW will implement the BMPs according to this schedule.

### ***Timeline***

The DPW will review the BMP recommendations outlined in Table 5 of the SWPPP and will develop a schedule of implementation by the Fall of 2019.

### ***Annual Evaluation***

The DPW will prepare a summary of its progress towards fully implementing the BMP recommendations in the SWPPP.



## ***BMP 6-5 Vehicle and Equipment Cleaning Policy***

### ***BMP Description***

The Department of Public Works (DPW) has an indoor wash bay. The DPW will ensure that all vehicle-washing activities continue to be conducted within this bay. The DPW also operates and maintains a variety of other equipment, each requiring a specific technique for cleaning. It has been general practice to conduct all cleaning activities at the DPW indoors and to ensure that the wash water is disposed of properly.

The information contained in the Vehicle and Equipment Cleaning Policy will be incorporated into the good housekeeping component of the employee-training program and refresher training sessions (*BMP 6-1*).

### ***Primary Audience***

DPW Staff

### ***Measurable Goals***

- Continue to wash vehicles and equipment indoors.
- Incorporate policy requirements into the DPW employee-training program.

### ***Responsible Parties***

Department of Public Works

### ***Implementation Strategies***

The DPW will incorporate Vehicle and Equipment Cleaning Policy into the employee-training manual.

### ***Timeline***

The DPW will continue to wash vehicles and equipment indoors throughout the permit term. The DPW will continue to incorporate the Vehicle and Equipment Cleaning Policy into the formal training program (*BMP 6-1*).

### ***Annual Evaluation***

The DPW will prepare a summary of the Vehicle and Equipment Cleaning Policy's implementation, including an assessment of the progress towards achieving the identified measurable goals.











## *Appendix A*

### NPDES Stormwater General Permit for Discharges from Small MS4s

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Part I: General Conditions

**General Information**

Name of Municipality or Organization:  State:

EPA NPDES Permit Number (if applicable):

**Primary MS4 Program Manager Contact Information**

Name:  Title:

Street Address Line 1:

Street Address Line 2:

City:  State:  Zip Code:

Email:  Phone Number:

Fax Number:

**Other Information**

Stormwater Management Program (SWMP) Location (web address or physical location, if already completed):

**Eligibility Determination**

Endangered Species Act (ESA) Determination Complete?  Eligibility Criteria (check all that apply):  A  B  C

National Historic Preservation Act (NHPA) Determination Complete?  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

<b>MS4 Infrastructure</b> (if covered under the 2003 permit)		
<b>Estimated Percent of Outfall Map Complete?</b> <i>(Part II, III, IV or V, Subpart B.3.(a.) of 2003 permit)</i>	<input type="text" value="100%"/>	If 100% of 2003 requirements not met, enter an estimated date of completion (MM/DD/YY): <input type="text"/>
Web address where MS4 map is published: <i>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)</i>		
<input type="text" value="See attached pdf."/>		
<b>Regulatory Authorities</b> (if covered under the 2003 permit)		
<b>Illicit Discharge Detection and Elimination (IDDE) Authority Adopted?</b> <i>(Part II, III, IV or V, Subpart B.3.(b.) of 2003 permit)</i>	<input type="text" value="No"/>	Effective Date or Estimated Date of Adoption (MM/DD/YY): <input type="text" value="08/01/19"/>
<b>Construction/Erosion and Sediment Control (ESC) Authority Adopted?</b> <i>(Part II, III, IV or V, Subpart B.4.(a.) of 2003 permit)</i>	<input type="text" value="No"/>	Effective Date or Estimated Date of Adoption (MM/DD/YY): <input type="text" value="08/01/19"/>
<b>Post- Construction Stormwater Management Adopted?</b> <i>(Part II, III, IV or V, Subpart B.5.(a.) of 2003 permit)</i>	<input type="text" value="Yes"/>	Effective Date or Estimated Date of Adoption (MM/DD/YY): <input type="text"/>

## 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](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	Pollutants									Other pollutant(s) causing impairments
		Chloride	Chlorophyll-a	Dissolved Oxygen/DO Saturation	Nitrogen	Oil & Grease/ PAH	Phosphorus	Solids/ TSS/ Turbidity	E. coli	Enterococcus	
Alewife Brook		<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	(Debris, Floatables/Trash), Copper, Lead, PCB in fish
Mystic River		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Arsenic, Chlordane, Chlorophyll-a, DDT, PCB in fish,
Mill Brook		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Spy Pond		<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Chlordane, DDT, Excess Algal Growth,
Upper Mystic Lake		<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Lower Mystic Lake		<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	DDT, PCB in fish, salinity, Sulfide-Hyrdogen Sulfide
Charles River: Intercommunity Connection - Belmont		<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Hills Pond		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Eurasian Water Milfoil
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
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		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Click to lengthen table

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

### 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 an 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 requires a target audience). **Use the drop-down menus in each table or enter your own text to override the drop down menu.**

#### MCM 1: Public Education and Outreach

BMP Media/Category <small>(enter your own text to override the drop down menu)</small>	BMP Description	Targeted Audience	Responsible Department/Parties <small>(enter your own text to override the drop down menu)</small>	Measurable Goal	Beginning Year of BMP Implementation
Brochures/Pamphlets	Mailing	Residents	Engineering	Yearly notification	2019
Meeting	Meeting with Chamber of Commerce	Businesses, Institutions and Commercial Facilities	External Contractor	yearly meeting and/or presentation	2019
Meeting	Stormwater presentation to builders	Developers (construction)	Engineering	yearly presentation	2019
Meeting	Meeting with Chamber of Commerce	Industrial Facilities	External Contractor	yearly presentation	2019
School Curricula/Programs	School visit	Residents	External Contractor	Yearly presentations	2018
Web Page	Web posting at DPW	Businesses, Institutions and Commercial Facilities	Engineering	PSA on Engineering Webpage	2019
Web Page	Web Posting at DPW	Developers (construction)	Engineering	PSA on Engineering Webpage	2019
Web Page	Web Posting at DPW	Industrial Facilities	Engineering	PSA on Engineering Webpage	2019









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

Part III: Stormwater Management Program Summary (continued)

MCM 3: Illicit Discharge Detection and Elimination (IDDE)

<b>BMP Categorization</b> (enter your own text to override the drop down menu)	<b>BMP Description</b>	<b>Responsible Department/Parties</b> (enter your own text to override the drop down menu)	<b>Measurable Goal</b> (all text can be overwritten)	<b>Beginning Year of BMP Implementation</b>
SSO inventory	Develop SSO inventory in accordance of permit conditions	Engineering Division & Water/Sewer Division	Complete within 1 year of effective date of permit	2019
Storm sewer system map	Create map and update during IDDE program completion	Engineering Division & GIS Department	Update map within 2 years of effective date of permit and complete full system map 10 years after effective date of permit	2018
Written IDDE program	Create written IDDE program	Engineering Division	Complete within 1 year of the effective date of permit and update as required	2019
Implement IDDE program	Implement catchment investigations according to program and permit conditions	Engineering Division	Complete 10 years after effective date of permit	2019
Employee training	Train employees on IDDE implementation	Department of Public Works & Engineering Division	Train annually	2019
Conduct dry weather screening	Conduct in accordance with outfall screening procedure and permit conditions	Engineering Division	Complete 3 years after effective date of permit	2018
Conduct wet weather screening	Conduct in accordance with outfall screening procedure	Engineering Division and External Consultant	Complete 10 years after effective date of permit	2019
Ongoing screening	Conduct dry weather and wet weather screening (as necessary)	Engineering Division	Complete ongoing outfall screening upon completion of IDDE program	2018



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

Part III: Stormwater Management Program Summary (continued)

MCM 4: Construction Site Stormwater Runoff Control

<b>BMP Categorization</b> (enter your own text to override the drop down menu or entered text)	<b>BMP Description</b>	<b>Responsible Department/Parties</b> (enter your own text to override the drop down menu)	<b>Measurable Goal</b> (all text can be overwritten)	<b>Beginning Year of BMP Implementation</b>
Site inspection and enforcement of Erosion and Sediment Control (ESC) measures	Complete written procedures of site inspections and enforcement procedures	Engineering, Conservation Commission and Building Department	Complete within 1 year of the effective date of permit	2019
Site plan review	Complete written procedures of site plan review and begin implementation	Engineering, Redevelopment Board, Conservation Commission and Building Dep	Complete within 1 year of the effective date of permit	2019
Erosion and Sediment Control	Adoption of requirements for construction operators to implement a sediment and erosion control program	Engineering, Stormwater Discussion Group, Conservation Commission & Building	Complete within 1 year of the effective date of permit	2019
Waste Control	Adoption of requirements to control wastes, including but not limited to, discarded building materials, concrete truck wash out, chemicals, litter, and sanitary wastes	Engineering Division & recycling Coordinator	Complete within 1 year of the effective date of permit	2019



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

### Part III: Stormwater Management Program Summary (continued)

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

<b>BMP Categorization</b> (enter your own text to override the drop down menu or entered text)	<b>BMP Description</b>	<b>Responsible Department/Parties</b> (enter your own text to override the drop down menu)	<b>Measurable Goal</b> (all text can be overwritten)	<b>Beginning Year of BMP Implementation</b>
As-built plans for on-site stormwater control	The procedures to require submission of as-built drawings and ensure long term operation and maintenance will be a part of the SWMP	Engineering, Planning Department & Building Department	Require submission of as-built plans for completed projects	2018
Target properties to 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	Engineering Division, Planning Department and Stormwater Discussion Group	Complete 4 years after effective date of permit and report annually on retrofitted properties	2022
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	Engineering , Building Department, Planning Department & Stormwater Discussit	Complete 4 years after effective date of permit and implement recommendations of report	2022
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.	Engineering , Building Department, Planning Department	Complete 4 years after effective date of permit and implement recommendations of report	2022





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

### Part III: Stormwater Management Program Summary (continued)

#### MCM 6: Municipal Good Housekeeping and Pollution Prevention

<b>BMP Categorization</b> (enter your own text to override the drop down menu or entered text)	<b>BMP Description</b>	<b>Responsible Department/Parties</b> (enter your own text to override the drop down menu)	<b>Measurable Goal</b> (all text can be overwritten)	<b>Beginning Year of BMP Implementation</b>
O&M procedures	Create written O&M procedures including all requirements contained in 2.3.7.a.ii for parks and open spaces, buildings and facilities, and vehicles and equipment	Engineering Division, Department of Public Work, Recreation & Parks D	Complete and implement 2 years after effective date of permit	2020
Inventory all permittee-owned parks and open spaces, buildings and facilities, and vehicles and equipment	Create inventory	Engineering Division, Department of Public Work, Recreation & Parks D	Complete 2 years after effective date of permit and implement annually	2019
Infrastructure O&M	Establish and implement program for repair and rehabilitation of MS4 infrastructure	Engineering Division, Department of Public Works	Complete 2 years after effective date of permit	2020
Stormwater Pollution Prevention Plan (SWPPP)	Create SWPPPs for maintenance garages, transfer stations, and other waste-handling facilities	Engineering Division, Department of Public Works and Facilities Depart	Complete and implement 2 years after effective date of permit	2020
Catch basin cleaning	Establish schedule for catch basin cleaning such that each catch basin is no more than 50% full and clean catch basins on that schedule	Engineering Division, Highway Division & GIS Department	Clean catch basins on established schedule and report number of catch basins cleaned and volume of material moved annually	2019
Street sweeping program	Sweep all streets and permittee-owned parking lots in accordance with permit conditions	Engineering Division, Highway Division & GIS Department	Sweep all streets and permittee-owned parking lots once per year in the spring	2018
Road salt use optimization program	Establish and implement a program to minimize the use of road salt	Engineering Division, DPW Highway Division & Operations Manager	Implement salt use optimization during deicing season	2019



**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)
Lower Charles River (Phosphorus)	Adhere to requirements in part A.I of Appendix F	Engineering & DPW Highway Division



Part IV: Notes and additional information

Use the space below to indicate the part(s) of 2.2.1 and 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.

Click to add text

“Through consultation with the US Fish & Wildlife, it was determined that the only threatened species within Arlington is the northern long-eared bat. Actions currently proposed within this Notice of Intent will not affect this species. As Best Management Practices are constructed in the future, the Town will consult with US Fish & Wildlife prior to construction activities.”

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

## 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:

Adam W. Chapdelaine

Title:

Town Manager

Signature:



Date:

10/01/18

[To be signed according to Appendix B, Subparagraph B.11, Standard Conditions]

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

# MS4 Outfall Map

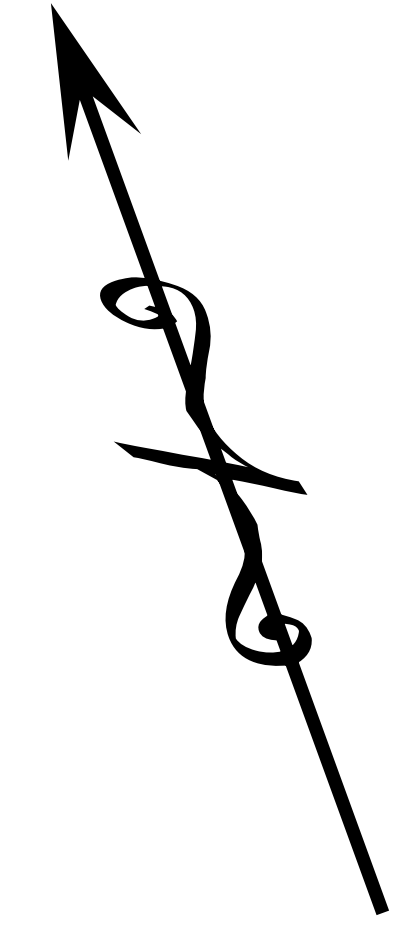
## Town of Arlington, MA

Map created by the Arlington Engineering Division for planning purposes only. Any streets undergoing capital work for the current year are not indicated on this plan but shall be considered moratorium streets once construction has been completed. This list may be revised at the discretion of the Director of Public Works. Plan last updated on 10-1-18.

Winchester

### Legend

▲ Outfall location



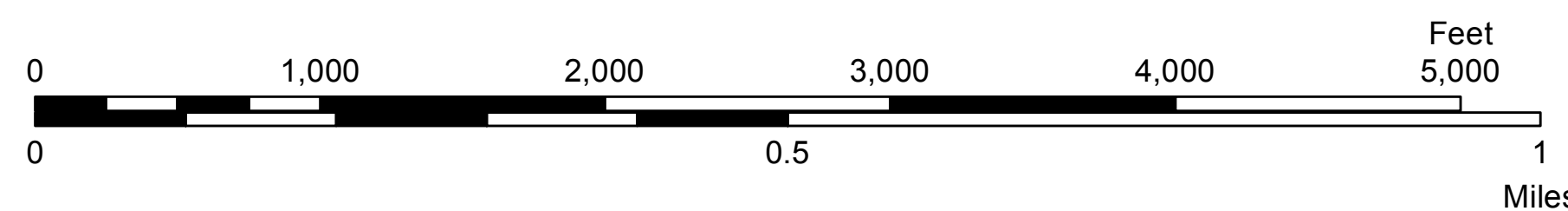
Lexington

Medford

Somerville

Cambridge

Belmont





## *Appendix B*

### Endangered Species Act Eligibility Criteria

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There are no endangered or threatened species or critical habitat located in proximity to the municipal separate storm sewer system (MS4) or to the points where authorized discharges reach the receiving waters. As a result, the Town of Arlington meets the Endangered Species Act (ESA) eligibility criterion "A" as outlined in Addendum A of the NPDES General Permit for Stormwater Discharges from Small MS4s. The Rare Species by County and Rare Species by Town listings published by the Massachusetts Natural Heritage & Endangered Species Program (NHESP) the Threatened and Endangered Species System (TESS) database for the State of Massachusetts (last viewed on 5/28/2019) published by the U.S. Fish & Wildlife Service, and 50 CFR Parts 17 and 226 were all referenced to make this determination.

The TESS database identified 24 federally listed threatened or endangered species for the State of Massachusetts as of 5/28/2019. The NHESP listing also identifies federally endangered and threatened species; however, a disclaimer in the NHESP listing indicates that recent changes in the federal list of endangered and threatened species produced by the U.S. Fish and Wildlife Services are not always reflected in the state NHESP listing. As a result, the federal list of endangered and threatened species produced by the U.S. Fish and Wildlife Services supersedes the state NHESP list of federally endangered and threatened species.

Since the Town of Arlington is located in Middlesex County, the NHESP Rare Species by County listing for Middlesex County was referenced to determine if any of the 24 federally endangered or threatened species listed in the TESS database are found within the county. According to the Rare Species by County listing produced by NHESP, there are no federally listed endangered and threatened species found within Middlesex County.

Some federally listed endangered or threatened species have designated critical habitat, the exact locations of which are provided within the endangered species regulations 50 CFR Parts 17 and 226. These regulations were reviewed for any designated critical habitat located within the State of Massachusetts. According to Sections 17.95 and 17.96 of 50 CFR Part 17 (Critical Habitat-Fish and Wildlife and Critical Habitat-Plants) and Section 226.209 of 50 CFR Part 226 (Critical Habitat for Hawksbill Turtle) there are no critical habitat areas located in proximity to Arlington's MS4, or to the points where authorized discharges reach the receiving waters.





## *Appendix C*

### Town of Arlington Outfall Inspection Form

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## OUTFALL RECONNAISSANCE INVENTORY/ SAMPLE COLLECTION FIELD SHEET

### Section 1: Background Data

Subwatershed:		Outfall ID:	
Today's date:		Time (Military):	
Investigators:		Form completed by:	
Temperature (°F):	Rainfall (in.):	Last 24 hours:	Last 48 hours:
Latitude:	Longitude:	GPS Unit:	GPS LMK #:
Camera:		Photo #s:	
Land Use in Drainage Area (Check all that apply):			
<input type="checkbox"/> Industrial		<input type="checkbox"/> Open Space	
<input type="checkbox"/> Ultra-Urban Residential		<input type="checkbox"/> Institutional	
<input type="checkbox"/> Suburban Residential		Other: _____	
<input type="checkbox"/> Commercial		Known Industries: _____	
Notes (e.g., origin of outfall, if known):			

### Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE	DIMENSIONS (IN.)	SUBMERGED
<input type="checkbox"/> Closed Pipe	<input type="checkbox"/> RCP <input type="checkbox"/> CMP <input type="checkbox"/> PVC <input type="checkbox"/> HDPE <input type="checkbox"/> Steel <input type="checkbox"/> Other: _____	<input type="checkbox"/> Circular <input type="checkbox"/> Single <input type="checkbox"/> Elliptical <input type="checkbox"/> Double <input type="checkbox"/> Box <input type="checkbox"/> Triple <input type="checkbox"/> Other: _____ <input type="checkbox"/> Other: _____	Diameter/Dimensions: _____	In Water: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully  With Sediment: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully
<input type="checkbox"/> Open drainage	<input type="checkbox"/> Concrete <input type="checkbox"/> Earthen <input type="checkbox"/> rip-rap <input type="checkbox"/> Other: _____	<input type="checkbox"/> Trapezoid <input type="checkbox"/> Parabolic <input type="checkbox"/> Other: _____	Depth: _____ Top Width: _____ Bottom Width: _____	
<input type="checkbox"/> In-Stream	<b>(applicable when collecting samples)</b>			
Flow Present?	<input type="checkbox"/> Yes <input type="checkbox"/> No <i>If No, Skip to Section 5</i>			
Flow Description (If present)	<input type="checkbox"/> Trickle <input type="checkbox"/> Moderate <input type="checkbox"/> Substantial			

### Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER	RESULT	UNIT	EQUIPMENT	
<input type="checkbox"/> Flow #1	Volume		Liter	Bottle
	Time to fill		Sec	
<input type="checkbox"/> Flow #2	Flow depth		In	Tape measure
	Flow width	____' ____"	Ft, In	Tape measure
	Measured length	____' ____"	Ft, In	Tape measure
	Time of travel		S	Stop watch
Temperature		°F	Thermometer	
pH		pH Units	Test strip/Probe	
Ammonia		mg/L	Test strip	

## Outfall Reconnaissance Inventory Field Sheet

### Section 4: Physical Indicators for Flowing Outfalls Only

Are Any Physical Indicators Present in the flow?  Yes  No *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	<input type="checkbox"/>	<input type="checkbox"/> Sewage <input type="checkbox"/> Rancid/sour <input type="checkbox"/> Petroleum/gas <input type="checkbox"/> Sulfide <input type="checkbox"/> Other:	<input type="checkbox"/> 1 – Faint	<input type="checkbox"/> 2 – Easily detected	<input type="checkbox"/> 3 – Noticeable from a distance
Color	<input type="checkbox"/>	<input type="checkbox"/> Clear <input type="checkbox"/> Brown <input type="checkbox"/> Gray <input type="checkbox"/> Yellow <input type="checkbox"/> Green <input type="checkbox"/> Orange <input type="checkbox"/> Red <input type="checkbox"/> Other:	<input type="checkbox"/> 1 – Faint colors in sample bottle	<input type="checkbox"/> 2 – Clearly visible in sample bottle	<input type="checkbox"/> 3 – Clearly visible in outfall flow
Turbidity	<input type="checkbox"/>	See severity	<input type="checkbox"/> 1 – Slight cloudiness	<input type="checkbox"/> 2 – Cloudy	<input type="checkbox"/> 3 – Opaque
Floatables -Does Not Include Trash!!	<input type="checkbox"/>	<input type="checkbox"/> Sewage (Toilet Paper, etc.) <input type="checkbox"/> Suds <input type="checkbox"/> Petroleum (oil sheen) <input type="checkbox"/> Other:	<input type="checkbox"/> 1 – Few/slight; origin not obvious	<input type="checkbox"/> 2 – Some; indications of origin (e.g., possible suds or oil sheen)	<input type="checkbox"/> 3 – Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

### Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present?  Yes  No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	<input type="checkbox"/>	<input type="checkbox"/> Spalling, Cracking or Chipping <input type="checkbox"/> Peeling Paint <input type="checkbox"/> Corrosion	
Deposits/Stains	<input type="checkbox"/>	<input type="checkbox"/> Oily <input type="checkbox"/> Flow Line <input type="checkbox"/> Paint <input type="checkbox"/> Other:	
Abnormal Vegetation	<input type="checkbox"/>	<input type="checkbox"/> Excessive <input type="checkbox"/> Inhibited	
Poor pool quality	<input type="checkbox"/>	<input type="checkbox"/> Odors <input type="checkbox"/> Colors <input type="checkbox"/> Floatables <input type="checkbox"/> Oil Sheen <input type="checkbox"/> Suds <input type="checkbox"/> Excessive Algae <input type="checkbox"/> Other:	
Pipe benthic growth	<input type="checkbox"/>	<input type="checkbox"/> Brown <input type="checkbox"/> Orange <input type="checkbox"/> Green <input type="checkbox"/> Other:	

### Section 6: Overall Outfall Characterization

Unlikely   
  Potential (presence of two or more indicators)   
  Suspect (one or more indicators with a severity of 3)   
  Obvious

### Section 7: Data Collection

1. Sample for the lab?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
2. If yes, collected from:	<input type="checkbox"/> Flow	<input type="checkbox"/> Pool
3. Intermittent flow trap set?	<input type="checkbox"/> Yes	<input type="checkbox"/> No    If Yes, type: <input type="checkbox"/> OBM <input type="checkbox"/> Caulk dam

### Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?



## *Appendix D*

### Town of Arlington Erosion and Sediment Control Inspection Form

**SWMP Appendix D  
 EROSION AND SEDIMENTATION CONTROL INSPECTION REPORT**

**General Information**

Project Name			
Project Location			
Inspector's Name			
Site Operator			
Date of Inspection		Date of Last Inspection	
Start Time		End Time	
Subject to USEPA Construction General Permit?    Yes <input type="checkbox"/> No <input type="checkbox"/> If yes, has NOI been approved?                                    Yes <input type="checkbox"/> No <input type="checkbox"/> If yes, attach approved NOI to this report. <p align="center"><b>If no, contact contractor immediately to determine status of NOI.</b></p>			
Type of Inspection: Regular <input type="checkbox"/> Pre-Storm Event <input type="checkbox"/> During Storm Event <input type="checkbox"/> Post-Storm Event <input type="checkbox"/>			
Describe the weather conditions at time of inspection			
Describe the current phase of construction			

**Erosion and Sediment Control (ESC) on Construction Sites**

Document any of the following issues found on the construction site, and the corrective action(s) required for each.

Issue	Status	Corrective Action Needed
Have all ESC features been constructed before initiating other construction activities?	Yes <input type="checkbox"/> No <input type="checkbox"/>	
Is the contractor inspecting and maintaining ESC devices regularly?	Yes <input type="checkbox"/> No <input type="checkbox"/>	
Is existing vegetation maintained on the site as long as possible?	Yes <input type="checkbox"/> No <input type="checkbox"/>	
Is construction staged so as to minimize exposed soil and disturbed areas?	Yes <input type="checkbox"/> No <input type="checkbox"/>	
Are disturbed areas restored as soon as possible after work is completed?	Yes <input type="checkbox"/> No <input type="checkbox"/>	
Is clean water being diverted away from the construction site?	Yes <input type="checkbox"/> No <input type="checkbox"/>	
Are sediment traps and sediment barriers cleaned regularly?	Yes <input type="checkbox"/> No <input type="checkbox"/>	
Are vegetated and wooded buffers protected and left undisturbed?	Yes <input type="checkbox"/> No <input type="checkbox"/>	
Are soils stabilized by mulching and/or seeding when they are exposed for a long time?	Yes <input type="checkbox"/> No <input type="checkbox"/>	
Has vegetation been allowed to establish itself before flows are introduced to channels?	Yes <input type="checkbox"/> No <input type="checkbox"/>	
Is regular, light watering used for dust control?	Yes <input type="checkbox"/> No <input type="checkbox"/>	
Is excessive soil compaction with heavy machinery avoided, to the extent possible?	Yes <input type="checkbox"/> No <input type="checkbox"/>	



(continued)

Issue	Status	Corrective Action Needed
Are erosion control blankets used when seeding slopes?	Yes <input type="checkbox"/> No <input type="checkbox"/>	
Are trees and vegetation that are to be retained during construction adequately protected?	Yes <input type="checkbox"/> No <input type="checkbox"/>	
Are areas designated as off-limits to construction equipment flagged or easily distinguishable?	Yes <input type="checkbox"/> No <input type="checkbox"/>	
If excavated topsoil has been salvaged and stockpiled for later use on the project, are stockpiles adequately protected?	Yes <input type="checkbox"/> No <input type="checkbox"/>	
Are temporary slope drains or chutes used to transport water down steep slopes?	Yes <input type="checkbox"/> No <input type="checkbox"/>	
Do all entrances to the storm sewer system have adequate protection?	Yes <input type="checkbox"/> No <input type="checkbox"/>	

**Non-Compliance Actions**

The municipality shall provide the site operator with a copy of this report, and notice of the corrective action(s) to be taken. The site operator shall have thirty days from the receipt of the notice to commence curative action of the violation.



## *Appendix E*

### Town of Arlington Construction Inspection Form

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**SWMP Appendix E  
CONSTRUCTION SITE STORMWATER INSPECTION REPORT**

**General Information**

Project Name			
Project Location			
Site Operator			
Inspector's Name			
Date of Inspection		Date of Last Inspection	
Start Time		End Time	
Subject to USEPA Construction General Permit?    Yes <input type="checkbox"/> No <input type="checkbox"/> If yes, has NOI been approved?                      Yes <input type="checkbox"/> No <input type="checkbox"/> If yes, attach approved NOI to this report. <p align="center"><b>If no, contact site operator immediately to determine status of NOI.</b></p>			
Type of Inspection: Regular <input type="checkbox"/> Pre-Storm Event <input type="checkbox"/> During Storm Event <input type="checkbox"/> Post-Storm Event <input type="checkbox"/>			
Describe the weather conditions at time of inspection			
Describe the current phase of construction			

**Site-Specific BMPs**

Customize the following BMPs to be consistent with the SWPPP for the site being inspected.

	<b>BMP Description</b>	<b>Installed and Operating Properly?</b>	<b>Corrective Action Needed</b>
1		Yes <input type="checkbox"/> No <input type="checkbox"/>	

2		Yes <input type="checkbox"/>	No <input type="checkbox"/>	
---	--	------------------------------	-----------------------------	--

(continued)

	BMP Description	Installed and Operating Properly?		Corrective Action Needed
3		Yes <input type="checkbox"/>	No <input type="checkbox"/>	
4		Yes <input type="checkbox"/>	No <input type="checkbox"/>	
5		Yes <input type="checkbox"/>	No <input type="checkbox"/>	
6		Yes <input type="checkbox"/>	No <input type="checkbox"/>	
7		Yes <input type="checkbox"/>	No <input type="checkbox"/>	
8		Yes <input type="checkbox"/>	No <input type="checkbox"/>	
9		Yes <input type="checkbox"/>	No <input type="checkbox"/>	
10		Yes <input type="checkbox"/>	No <input type="checkbox"/>	
11		Yes <input type="checkbox"/>	No <input type="checkbox"/>	
12		Yes <input type="checkbox"/>	No <input type="checkbox"/>	
13		Yes <input type="checkbox"/>	No <input type="checkbox"/>	
14		Yes <input type="checkbox"/>	No <input type="checkbox"/>	
15		Yes <input type="checkbox"/>	No <input type="checkbox"/>	
16		Yes <input type="checkbox"/>	No <input type="checkbox"/>	
17		Yes <input type="checkbox"/>	No <input type="checkbox"/>	
18		Yes <input type="checkbox"/>	No <input type="checkbox"/>	
19		Yes <input type="checkbox"/>	No <input type="checkbox"/>	
20		Yes <input type="checkbox"/>	No <input type="checkbox"/>	

**Erosion and Sedimentation Control**

Document any of the following issues found on the construction site, and the corrective action(s) required for each.

Issue	Status	Corrective Action Needed
Have all ESC features been constructed before initiating other construction activities?	Yes <input type="checkbox"/> No <input type="checkbox"/>	
Is the contractor inspecting and maintaining ESC devices regularly?	Yes <input type="checkbox"/> No <input type="checkbox"/>	
Is existing vegetation maintained on the site as long as possible?	Yes <input type="checkbox"/> No <input type="checkbox"/>	
Is construction staged so as to minimize exposed soil and disturbed areas?	Yes <input type="checkbox"/> No <input type="checkbox"/>	
Are disturbed areas restored as soon as possible after work is completed?	Yes <input type="checkbox"/> No <input type="checkbox"/>	
Is clean water being diverted away from the construction site?	Yes <input type="checkbox"/> No <input type="checkbox"/>	
Are sediment traps and sediment barriers cleaned regularly?	Yes <input type="checkbox"/> No <input type="checkbox"/>	
Are vegetated and wooded buffers protected and left undisturbed?	Yes <input type="checkbox"/> No <input type="checkbox"/>	
Are soils stabilized by mulching and/or seeding when they are exposed for a long time?	Yes <input type="checkbox"/> No <input type="checkbox"/>	
Has vegetation been allowed to establish itself before flows are introduced to channels?	Yes <input type="checkbox"/> No <input type="checkbox"/>	
Is regular, light watering used for dust control?	Yes <input type="checkbox"/> No <input type="checkbox"/>	
Is excessive soil compaction with heavy machinery avoided, to the extent possible?	Yes <input type="checkbox"/> No <input type="checkbox"/>	

(continued)

Issue	Status	Corrective Action Needed
Are erosion control blankets used when seeding slopes?	Yes <input type="checkbox"/> No <input type="checkbox"/>	
Are trees and vegetation that are to be retained during construction adequately protected?	Yes <input type="checkbox"/> No <input type="checkbox"/>	
Are areas designated as off-limits to construction equipment flagged or easily distinguishable?	Yes <input type="checkbox"/> No <input type="checkbox"/>	
If excavated topsoil has been salvaged and stockpiled for later use on the project, are stockpiles adequately protected?	Yes <input type="checkbox"/> No <input type="checkbox"/>	
Are temporary slope drains or chutes used to transport water down steep slopes?	Yes <input type="checkbox"/> No <input type="checkbox"/>	
Do all entrances to the storm sewer system have adequate protection?	Yes <input type="checkbox"/> No <input type="checkbox"/>	

**Overall Site Conditions**

Document any of the following issues found on the construction site, and the corrective action(s) required for each.

Issue	Status	Corrective Action Needed
Are slopes and disturbed areas not being actively worked properly stabilized?	Yes <input type="checkbox"/> No <input type="checkbox"/>	
Are material stockpiles covered or protected when not in use?	Yes <input type="checkbox"/> No <input type="checkbox"/>	
Are natural resource areas protected with sediment barriers or other BMPs?	Yes <input type="checkbox"/> No <input type="checkbox"/>	
Are perimeter controls and sediment barriers installed and maintained?	Yes <input type="checkbox"/> No <input type="checkbox"/>	

(continued)

Issue	Status	Corrective Action Needed
Are discharge points and receiving waters free of sediment deposits and turbidity?	Yes <input type="checkbox"/> No <input type="checkbox"/>	
Are storm drain inlets properly protected?	Yes <input type="checkbox"/> No <input type="checkbox"/>	
Is there evidence of sediment being tracked into streets?	Yes <input type="checkbox"/> No <input type="checkbox"/>	
Is trash/litter from the construction site collected and placed in dumpsters?	Yes <input type="checkbox"/> No <input type="checkbox"/>	
Are vehicle/equipment fueling and maintenance areas free of spills and leaks?	Yes <input type="checkbox"/> No <input type="checkbox"/>	
Are potential stormwater contaminants protected inside or under cover?	Yes <input type="checkbox"/> No <input type="checkbox"/>	
Is dewatering from site properly controlled?	Yes <input type="checkbox"/> No <input type="checkbox"/>	
Are portable restroom facilities properly sited and maintained?	Yes <input type="checkbox"/> No <input type="checkbox"/>	
Are all hazardous materials and wastes stored in accordance with local regulations?	Yes <input type="checkbox"/> No <input type="checkbox"/>	

**Non-Compliance Actions**

The municipality shall provide the site operator with a copy of this report, and notice of the corrective action(s) to be taken. The site operator shall have thirty days from the receipt of the notice to commence curative action of the violation.