

Town of Arlington, Massachusetts

STORMWATER MANAGEMENT PROGRAM Final

DECEMBER 2004





Engineers • Scientists • Planners • Landscape Architects • Surveyors



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Introduction

Stormwater Management Program Overview

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 (2000) 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 MADEP. 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

There are no endangered or threatened species or critical habitat located in proximity to Arlington's 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 published by the Massachusetts Natural Heritage & Endangered Species Program (NHESP) (last updated 3/1/2003), the Threatened and Endangered Species System (TESS) database for the State of Massachusetts (last viewed on 7/15/2003) 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

According to the *Massachusetts Year 2002 Integrated List of Waters*, there are four 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. Because this document is currently in draft form, Arthur Johnson of the MADEP was contacted by email to verify this information. He confirmed in an email dated July 15, 2003 that the four waterbodies in the *Massachusetts Year 2002 Integrated List of Waters* would maintain their current designation and indicated that one additional waterbody would be included in the final *Massachusetts Year 2002 Integrated List of Waters*.

| Name | Segment I.D | Surface Area | Pollutant of Concern |
|-------------------------|---|--------------|--|
| Lower Mystic Lake | MA71027_2002 | 93 acres | Organic enrichment/Low DO Salinity/TDS/Chlorides |
| Spy Pond | MA71040_2002 | 103 acres | Nutrients Organic enrichment/Low DO Noxious aquatic plants Exotic species* |
| Alewife Brook | MA71-04_2002 | 2.25 miles | Metals/Nutrients/Pathogens Organic enrichment/Low DO Oil and grease/Taste, odor and color Objectionable deposits* |
| Mystic River | MA71-02_2002 | 5.4 miles | Metals/Nutrients/Pathogens |
| Mill Brook ¹ | Outlet of Arlington Reservoir to inlet of Lower Mystic Lake | 2.8 miles | Pathogens/Other habitat alternations* |

Arlington Category 5 - Waters Requiring a TMDL

¹Waterbody will be added to final *Massachusetts Year 2002 Integrated List of Waters* per email communication with Arthur Johnson.

* Non-Pollutants

As identified in the Notice of Intent, the Town of Arlington has 118 direct discharges to impaired waterbodies requiring TMDLs. The Town has proposed to install 11 leaching catch basins to provide pre-treatment of stormwater runoff prior to discharging into Spy Pond, if the Town receives Federal Grant support. Regardless of whether the Town receives this grant, 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 2002 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.

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

The MADEP 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 MADEP 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, 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 2002 Integrated List of Waters* identifies five waterbodies within the Town of Arlington as impaired waters requiring TMDLs. Currently there are no approved TMDLs for any of the impaired waterbodies within the Town of Arlington as impaired waterbodies within the MADEP has not included a schedule for their development in the *Massachusetts Year 2002 Integrated List of Waters*. The Town will assess the best method of addressing any TMDLs developed for Arlington's impaired waterbodies as they are approved.

Stressed Basin Analysis

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 gages 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



BRP WM 08A NPDES Stormwater General Permit Notice of Intent for Discharges from Small Municipal Separate Storm Sewer Systems (MS4s) W040959 Transmittal Number

Facility ID (if known)

A. Instructions

Important:

When filling out forms on the computer, use only the tab key to move your cursor - do not use the return key.



Submission of this Notice of Intent constitutes notice that the entity named at item B1. of this form intends to be authorized by the DEP General Permit issued jointly with EPA for stormwater discharges from the small municipal separate storm sewer system (MS4), in the location identified at item B2. of this form. Submission of the Notice of Intent also constitutes notice that the party identified at item B1. has read, understands and meets the eligibility conditions of Part I.B. of the NPDES Small MS4 General Permit, agrees to comply with all applicable terms and conditions of the NPDES Small MS4 General Permit, and understands that continued authorization to discharge is contingent on maintaining eligibility for coverage. In order to be granted coverage, all information required on BRP WM 08A, including the Stormwater Management Program Summary and Time Frames form, must be completed. Please read the permit and make sure you comply with all requirements, including the requirement to develop and implement a stormwater management program.

B. Applicant Information

| 1. | Small MS4 | Operator/Owner | Information: |
|----|-----------|----------------|--------------|
|----|-----------|----------------|--------------|

| | Nancy Galkowski, Interim Town Manager |
|----|---|
| | Name |
| | First Floor, Town Hall Annex, 730 Mass. Ave. |
| | Mailing Address |
| | Arlington MA |
| | City/Town State |
| | 781-316-3010 NGalkowski@town.arlington.ma.us |
| | Telephone Number Email (if available) |
| 2. | Municipality Name |
| | Town of Arlington |
| | City/Town |
| 3. | Legal Status: |
| | □ Federal |
| | Other public entity: Specify Public Entity |
| 4. | Other regulated MS4(s) within municipal boundaries: |
| | U.S. Rte 2, Rt. 2A - from Lexington town line to Hospital Road |
| | |
| 5. | Based on the instructions provided in Part I of the NPDES Small MS4 General Permit, have the eligibility criteria for "listed species" and critical habitat been met? |
| | 🛛 yes 🗌 pending 🔲 no |



BRP WM 08A NPDES Stormwater General Permit

Notice of Intent for Discharges from Small Municipal Separate

W040959 **Transmittal Number**

Facility ID (if known)

B. Applicant Information (cont.)

Storm Sewer Systems (MS4s)

6. Based on the instructions provided in Part I of the NPDES Small MS4 General Permit, have the eligibility criteria for protection of historic properties been met?

🛛 yes pending no no

Note:

Section C may be duplicated to accommodate a larger list of receiving waters

C. Names of (Presently Known) Receiving Waters

| Receiving Water: | No. of Outfalls | Listed as Impaired? | Impairment |
|-------------------|--------------------|------------------------|-------------------------------|
| Lower Mystic Lake | 5 | – 🛛 Yes 🗌 No | Org. enrich./Low DO/ |
| Name | Number | | Salinity/TDS/Chlorides |
| Upper Mystic Lake | 6 | – 🗌 Yes 🛛 No | |
| Name | Number | | Specify |
| Spy Pond | 25 | – 🛛 Yes 🗌 No | Nutr./Org. enrich./Low DO/ |
| Name | Number | | Nox. aq. plant/Ex. species |
| Alewife Brook | 26 | – 🛛 Yes 🗌 No | Met./Nutr./Path/Org. enrich./ |
| Name | Number | | Low DO/Oil/Grease/Taste/ |
| | | – 🗌 Yes 🗌 No | Odor/Color/Obj. deposits |
| Name | Number | | Specify |
| Mill Brook | 61 | – 🛛 Yes 🗌 No | Path./ Other habitat alter. |
| Name | Number | | Specify |
| Clematis Brook* | 1 | - □ Yes ⊠ No | |
| Name | Number | – 📋 Yes 🖄 No | Specify |
| Name | Number | - 🗌 Yes 🗌 No | Specify |
| Name | Number | - 🗌 Yes 🗌 No | Specify |
| Name | Number | - 🗌 Yes 🗌 No | Specify |
| Name | Number | - 🗌 Yes 🗌 No | Specify |
| Name | Number | - 🗌 Yes 🗌 No | Specify |
| Name | Number | - 🗌 Yes 🗌 No | Specify |
| Name | Number | – 🗌 Yes 🗌 No | Specify |
| Name | Number | – 🗌 Yes 🗌 No | Specify |
| Name | Number | - 🗌 Yes 🗌 No | Specify |
| Name | Number | - 🗌 Yes 🗌 No | Specify |
| Name | Number | - 🗌 Yes 🗌 No | Specify |

*Added outfall to Clematis Brook per March 30, 2004 comment letter. Outfall map also revised.



BRP WM 08A NPDES Stormwater General Permit Notice of Intent for Discharges from Small Municipal Separate Storm Sewer Systems (MS4s) W040959 Transmittal Number

Facility ID (if known)

D. Stormwater Management Program Summary

1. Public Education:

| 1-1 BMP ID # | | |
|---|---|---|
| Place Educational Info. on | See Attached | See Attached |
| Town's Website | Responsible Dept./Person Name | Specify Measurable Goal |
| 1-2 BMP ID # | | |
| Conduct HHW Collection Days | See Attached | See Attached |
| Specify Best Management Practice | Responsible Dept./Person Name | Specify Measurable Goal |
| <u>1-3</u> BMP ID # | | |
| Intensify Pet Waste and | See Attached | See Attached |
| Waterfowl Mgmt. Campaign | Responsible Dept./Person Name | Specify Measurable Goal |
| <u>1-4</u> BMP ID # | | |
| Place Educational Info. on | See Attached | See Attached |
| Arlington Cable TV | Responsible Dept./Person Name | Specify Measurable Goal |
| <u>1-5</u> BMP ID # | | |
| Promote Water Conservation | See Attached | See Attached |
| Practices for Homeowners | Responsible Dept./Person Name | Specify Measurable Goal |
| 1-6 Develop Press Release For Community Businesses | See Attached | See Attached |
| Public Participation: 2-1 BMP ID # | | |
| Public Access to SWMP and | See Attached | See Attached |
| Receipt of Comments | Responsible Dept./Person Name | Specify Measurable Goal |
| 2-2 BMP ID # | | |
| Educational Outreach for Spy | See Attached | See Attached |
| Pond | Responsible Dept./Person Name | Specify Measurable Goal |
| 2-3 BMP ID # | | |
| Sponsor Annual Cleanup at | See Attached | See Attached |
| Spy Pond | Responsible Dept./Person Name | Specify Measurable Goal |
| 2-4 BMP ID # | | |
| Sponsor Storm Drain Marking | See Attached | See Attached |
| Activities at Spy Pond | Responsible Dept./Person Name | Specify Measurable Goal |
| 2-5 | | |
| BMP ID # | | |
| Sponsor Annual Clean-up at | See Attached | See Attached |
| Arlington Reservoir 2-6 Conservation Land Stewards | Responsible Dept./Person Name See Attached | Specify Measurable Goal See Attached |
| 2-7 A-B-C Flooding Board | See Attached | See Attached |
| 2-8 Lawn Care/Landscaping Survey | See Attached | See Attached |

2.



BRP WM 08A NPDES Stormwater General Permit Notice of Intent for Discharges from Small Municipal Separate Storm Sewer Systems (MS4s) W040959 Transmittal Number

Facility ID (if known)

D. Stormwater Management Program Summary (Cont.)

3. Illicit Discharge Detection and Elimination:

| Maintain Outfall Location Map | See Attached | See Attached |
|--|---|---|
| Specify Best Management Practice 3-2 BMP ID # | Responsible Dept./Person Name | Specify Measurable Goal |
| Revision of Existing General | See Attached | See Attached |
| and Zoning Bylaws | Responsible Dept./Person Name | Specify Measurable Goal |
| 3-3 BMP ID # | | |
| Implement an Illicit Discharge | See Attached | See Attached |
| Detection & Elimination Plan | Responsible Dept./Person Name | Specify Measurable Goal |
| 3-4 BMP ID # | | |
| Rehabilitate and Replace | See Attached | See Attached |
| Sanitary Sewer Pipes | Responsible Dept./Person Name | Specify Measurable Goal |
| BMP ID # | | |
| Specify Best Management Practice | Responsible Dept./Person Name | Specify Measurable Goal |
| onstruction Site Runoff Control: | | |
| 3-2 | | |
| 3-2 BMP ID # | See Attached | See Attached |
| 3-2 BMP ID # Revision of Existing General | See Attached Responsible Dept./Person Name | See Attached Specify Measurable Goal |
| 3-2 BMP ID # Revision of Existing General and Zoning Bylaws 4-1 | | |
| 3-2 BMP ID # Revision of Existing General and Zoning Bylaws 4-1 BMP ID # Develop Site Inspec. Form & | Responsible Dept./Person Name | Specify Measurable Goal See Attached |
| 3-2 BMP ID # Revision of Existing General and Zoning Bylaws 4-1 BMP ID # Develop Site Inspec. Form & Conduct Site Inspec. | Responsible Dept./Person Name | Specify Measurable Goal |
| 3-2 BMP ID # Revision of Existing General and Zoning Bylaws 4-1 BMP ID # Develop Site Inspec. Form & Conduct Site Inspec. 4-2 | Responsible Dept./Person Name | Specify Measurable Goal See Attached |
| 3-2 BMP ID # Revision of Existing General and Zoning Bylaws 4-1 BMP ID # Develop Site Inspec. Form & Conduct Site Inspec. 4-2 BMP ID # Develop and Implement a | Responsible Dept./Person Name | Specify Measurable Goal See Attached |

BMP ID #

Specify Best Management Practice

BMP ID #

Specify Best Management Practice

Responsible Dept./Person Name

Responsible Dept./Person Name

Specify Measurable Goal

Specify Measurable Goal



BRP WM 08A NPDES Stormwater General Permit Notice of Intent for Discharges from Small Municipal Separate Storm Sewer Systems (MS4s) W040959 Transmittal Number

Facility ID (if known)

D. Stormwater Management Program Summary (Cont.)

5. Post Construction Runoff Control:

| Revision of Existing General | See Attached | See Attached |
|--|---|---|
| and Zoning Bylaws | Responsible Dept./Person Name | Specify Measurable Goal |
| 5-1 BMP ID # | | |
| Arlington Revedelopment | See Attached | See Attached |
| Board SW Design Guidelines | Responsible Dept./Person Name | Specify Measurable Goal |
| BMP ID # | | |
| Specify Best Management Practice | Responsible Dept./Person Name | Specify Measurable Goal |
| BMP ID # | | |
| Specify Best Management Practice | Responsible Dept./Person Name | Specify Measurable Goal |
| BMP ID # | | |
| | Deer creikle Dert /Dersen Norse | Specify Measurable Goal |
| Specify Best Management Practice Iunicipal Good Housekeeping: 6-1 BMP ID # | Responsible Dept./Person Name | |
| lunicipal Good Housekeeping: 6-1 BMP ID # Develop a Formal Training | See Attached | See Attached |
| lunicipal Good Housekeeping: 6-1 BMP ID # Develop a Formal Training Program for DPW Staff | | |
| lunicipal Good Housekeeping: 6-1 BMP ID # Develop a Formal Training Program for DPW Staff 6-2 | See Attached | See Attached |
| lunicipal Good Housekeeping: 6-1 BMP ID # Develop a Formal Training Program for DPW Staff 6-2 BMP ID # | See Attached Responsible Dept./Person Name See Attached | See Attached Specify Measurable Goal |
| lunicipal Good Housekeeping: 6-1 BMP ID # Develop a Formal Training Program for DPW Staff 6-2 BMP ID # Catch Basin Cleaning Program 6-3 | See Attached Responsible Dept./Person Name | See Attached Specify Measurable Goal |
| lunicipal Good Housekeeping: 6-1 BMP ID # Develop a Formal Training Program for DPW Staff 6-2 BMP ID # Catch Basin Cleaning Program 6-3 BMP ID # | See Attached Responsible Dept./Person Name See Attached Responsible Dept./Person Name | See Attached Specify Measurable Goal See Attached Specify Measurable Goal |
| lunicipal Good Housekeeping: 6-1 BMP ID # Develop a Formal Training Program for DPW Staff 6-2 BMP ID # Catch Basin Cleaning Program 6-3 BMP ID # Parking Lot and Street | See Attached Responsible Dept./Person Name See Attached | See Attached Specify Measurable Goal |
| lunicipal Good Housekeeping: 6-1 BMP ID # Develop a Formal Training Program for DPW Staff 6-2 BMP ID # Catch Basin Cleaning Program 6-3 BMP ID # Parking Lot and Street Sweeping Program 6-4 | See Attached Responsible Dept./Person Name See Attached Responsible Dept./Person Name See Attached | See Attached Specify Measurable Goal See Attached Specify Measurable Goal See Attached |
| lunicipal Good Housekeeping: 6-1 BMP ID # Develop a Formal Training Program for DPW Staff 6-2 BMP ID # Catch Basin Cleaning Program 6-3 BMP ID # Parking Lot and Street Sweeping Program 6-4 BMP ID # | See Attached Responsible Dept./Person Name See Attached Responsible Dept./Person Name See Attached | See Attached Specify Measurable Goal See Attached Specify Measurable Goal See Attached |
| lunicipal Good Housekeeping: 6-1 BMP ID # Develop a Formal Training Program for DPW Staff 6-2 BMP ID # Catch Basin Cleaning Program 6-3 BMP ID # Parking Lot and Street Sweeping Program 6-4 BMP ID # Implement Stormwater Pollution Prevention Plan | See Attached Responsible Dept./Person Name See Attached Responsible Dept./Person Name See Attached Responsible Dept./Person Name | See Attached Specify Measurable Goal See Attached Specify Measurable Goal See Attached Specify Measurable Goal |
| lunicipal Good Housekeeping: 6-1 BMP ID # Develop a Formal Training Program for DPW Staff 6-2 BMP ID # Catch Basin Cleaning Program 6-3 BMP ID # Parking Lot and Street Sweeping Program 6-4 BMP ID # Implement Stormwater Pollution Prevention Plan 6-5 | See Attached Responsible Dept./Person Name See Attached Responsible Dept./Person Name See Attached Responsible Dept./Person Name See Attached | See Attached Specify Measurable Goal See Attached Specify Measurable Goal See Attached Specify Measurable Goal See Attached Specify Measurable Goal |
| lunicipal Good Housekeeping: 6-1 BMP ID # Develop a Formal Training Program for DPW Staff 6-2 BMP ID # Catch Basin Cleaning Program 6-3 BMP ID # Parking Lot and Street Sweeping Program 6-4 BMP ID # Implement Stormwater Pollution Prevention Plan 6-5 BMP ID # | See Attached Responsible Dept./Person Name See Attached Responsible Dept./Person Name See Attached Responsible Dept./Person Name See Attached | See Attached Specify Measurable Goal See Attached Specify Measurable Goal See Attached Specify Measurable Goal See Attached Specify Measurable Goal |
| lunicipal Good Housekeeping: 6-1 BMP ID # Develop a Formal Training Program for DPW Staff 6-2 BMP ID # Catch Basin Cleaning Program 6-3 BMP ID # Parking Lot and Street Sweeping Program 6-4 BMP ID # Implement Stormwater Pollution Prevention Plan 6-5 BMP ID # Vehicle and Equipment | See Attached Responsible Dept./Person Name See Attached Responsible Dept./Person Name See Attached Responsible Dept./Person Name See Attached Responsible Dept./Person Name | See Attached Specify Measurable Goal Specify Measurable Goal Specify Measurable Goal Specify Measurable Goal |
| lunicipal Good Housekeeping: 6-1 | See Attached Responsible Dept./Person Name See Attached Responsible Dept./Person Name See Attached Responsible Dept./Person Name See Attached Responsible Dept./Person Name See Attached Responsible Dept./Person Name | See Attached Specify Measurable Goal See Attached Specify Measurable Goal |



BRP WM 08A NPDES Stormwater General Permit Notice of Intent for Discharges from Small Municipal Separate Storm Sewer Systems (MS4s) W040959 Transmittal Number

Facility ID (if known)

D. Stormwater Management Program Summary (cont.)

7. BMPs for Meeting TMDL:

| BMP ID # | | |
|----------------------------------|-------------------------------|-------------------------|
| Specify Best Management Practice | Responsible Dept/Person Name | Specify Measurable Goal |
| BMP ID # | | |
| Specify Best Management Practice | Responsible Dept./Person Name | Specify Measurable Goal |
| BMP ID # | | |
| Specify Best Management Practice | Responsible Dept/Person Name | Specify Measurable Goal |
| BMP ID # | | |
| Specify Best Management Practice | Responsible Dept./Person Name | Specify Measurable Goal |
| BMP ID # | | |
| Specify Best Management Practice | Responsible Dept./Person Name | Specify Measurable Goal |

E. 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.

| Nancy Galkowski | |
|--------------------|---------|
| Printed Name | |
| Hancing & Halkminh | 7/28/03 |
| Signature / | Date |

Public Education and Outreach

| BMP | | Measurable Goals | Responsible Parties |
|-----|---|---|---|
| 1-1 | Place Educational Information on the Town's Website | Post stormwater related information on the Town Hall web page. Update website regularly. | Department of Public Works Town Webmaster |
| 1-2 | Conduct Household Hazardous Waste Collection Days | Continue to sponsor eight household hazardous waste collection days per year. Continue to develop the <u>Arlington Recycling</u> <u>Program</u> 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. Send eight press releases advertising the event to the Arlington Advocate and track whether they were published. Advertise the events on the Town's website. | Department of Public Works Arlington Recycling Committee |
| 1-3 | Intensify the Existing Pet Waste and Waterfowl Management Campaign | Track the number of brochures distributed annually. Track the number of violations issued annually. Develop an informational press release on pet waste and waterfowl management for the <i>Arlington Advocate</i> and track whether it was published. | Board of Health Animal Control Officer |
| 1-4 | Place Educational Information on Arlington Cable Television | Obtain "Oil Leak" and "Fertilizer" PSAs from the Washington State Department of Ecology Water Quality Consortium. Track how frequently the PSAs are broadcast on ACTV. | Department of Public Works Arlington Cable Television |
| 1-5 | Promote Water Conservation Practices for Homeowners | Post water conservation posters at Town Hall and the public libraries. Include water conservation bill inserts with the water bill. Issue an annual press release to the <i>Arlington Advocate</i> to promote water conservation. | Department of Public Works |
| 1-6 | Develop a Press Release and Flyer Targeting Community Businesses | Submit the press release to the <i>Arlington Advocate</i> and track whether it was published. Submit copies of the informational flyers to the Arlington Chamber of Commerce and track whether it was included in the newsletter. Post the informational flyer on the Town's website. | Department of Public Works Town Webmaster |

Public Involvement and Participation

| BMP | | Measurable Goals | Responsible Parties |
|-----|---|---|---|
| 2-1 | Public Access to SWMP and Receipt of Comments | 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. | Department of Public Works Town Webmaster |
| 2-2 | Educational Outreach for Spy Pond | 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. Sponsor ecological gardening classes and track the number of participants. Post Spy Pond-related information on the Spy Pond website and update website regularly. Host booths at Arlington Town Day | Spy Pond Committee Friends of Spy Pond Park Planning and Community Development Department |
| 2-3 | Sponsor Annual Cleanup at Spy Pond | Track the number of cleanup volunteers and supporting businesses. Track the quantity and types of waste collected as a result of the cleanup event. | Spy Pond Committee, Friends of Spy Pond Park Department of Public Works Planning and Community Development Dept. |
| 2-4 | Sponsor Storm Drain Marking Activities at Spy Pond | 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 <i>Arlington Advocate</i>. | Spy Pond Committee Planning and Community Development Department |
| 2-5 | Sponsor Annual Clean-up at Arlington Reservoir | Track the number of cleanup volunteers and supporting businesses. Track the quantity and types of waste collected as a result of the cleanup event. | Arlington Reservoir Committee Department of Public Works |

| BMP | | Measurable Goals | | | | | |
|-----|---|---|--|--|--|--|--|
| 2-6 | Conservation Land Stewards | 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 <i>Arlington Advocate</i> and track whether it was published. Develop an informational brochure on the Land Steward Program and track the number of brochures collected by residents. | Arlington Conservation Commission | | | | |
| 2-7 | A-B-C Stormwater Flooding Board to Address Issues in the Little River and Alewife Brook Areas | Execute the Environmental Joint Powers Agreement. A-B-C Stormwater Flooding Board to meet throughout the permit term. Information and status of Board's activities to be reported on Town website and in the <i>Arlington</i> <i>Advocate</i>. | Board of Selectmen Town Webmaster | | | | |
| 2-8 | Conduct Lawn Care/Landscaping Survey in Spy Pond Watershed | Develop and distribute survey. Send a press release explaining the lawn care/landscaping survey to the <i>Arlington Advocate</i>. Track the number of completed surveys. Compile surveys to develop future educational outreach materials. | Spy Pond Committee Planning and Community Development Department | | | | |

Illicit Discharge Detection and Elimination

| BMP | | Measurable Goals | Responsible Parties |
|-----|--|---|--|
| 3-1 | Maintain Outfall Location Map | Update the outfall location map if there are any changes to the stormwater drainage system during the permit term. | Department of Public Works |
| 3-2 | Revision of Existing General and Zoning Bylaws | Review Town's existing General and Zoning 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 gage public acceptance and revise as necessary. Present revised bylaws to Town Meeting for adoption. Post revised bylaws on Town's website. | Planning and Community Development Department Arlington Conservation Commission Engineering Division of the Department of Public Works |
| 3-3 | Implement an Illicit Discharge Detection and Elimination Plan | 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. | Department of Public Works |
| 3-4 | Rehabilitate and Replace Sanitary Sewer Pipes | Rehabilitation/replacement of sanitary sewer pipes exfiltrating wastewater. Maintain documentation of construction activities and re-sampling. | Department of Public Works |

Construction Site Stormwater Runoff Control

| BMP | | Measurable Goals | Responsible Parties |
|-----|--|---|--|
| 3-2 | Revision of Existing General and Zoning Bylaws | Review Town's existing General and Zoning 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 gage public acceptance and revise as necessary. Present revised bylaws to Town Meeting for adoption. Post revised bylaws on Town's website. | Planning and Community Development Department Arlington Conservation Commission Engineering Division of the Department of Public Works |
| 4-1 | Develop a Site Inspection Form and Conduct Site Inspections | 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. | Engineering Division of the Department of Public Works |
| 4-2 | Develop and Implement a Citizen Tip Line | Establish the Citizen Tip Line. Advertise the Citizen Tip Line. Track the number of complaints received via the Citizen Tip Line. Track the problems/incidents remedied as a result of the Citizen Tip Line. | Department of Public Works Town Webmaster |

Post Construction Stormwater Management in New Development & Redevelopment

| BMP | | Measurable Goals | | | | | |
|-----|---|---|---|--|--|--|--|
| 3-2 | Revision of Existing General and Zoning | Review Town's existing General and Zoning | Planning and Community Development | | | | |
| | Bylaws | Bylaws. | Department | | | | |
| | | Draft revised bylaws so that they fulfill the | Arlington Conservation Commission | | | | |
| | | regulatory requirements of NPDES Phase II | Engineering Division of the Department of | | | | |
| | | Minimum Control Measures 3, 4, and 5. | Public Works | | | | |
| | | Have revised bylaws available for public comment | | | | | |
| | | to gage public acceptance and revise as necessary. | | | | | |
| | | Present revised bylaws to Town Meeting for | | | | | |
| | | adoption. | | | | | |
| | | Post revised bylaws on Town's website. | | | | | |
| 5-1 | Arlington Redevelopment Board | Obtain approval of the handbook by the Arlington | Planning and Community Development | | | | |
| | Stormwater Design Guidelines | Redevelopment Board. | Department | | | | |
| | | Track the distribution of handbook to developers. | Arlington Redevelopment Board | | | | |

BMP Measurable Goals **Responsible Parties** Develop a Formal Training Program for Establish a formal training program for DPW 6-1 Department of Public Works • **DPW Staff** 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 trained. Conduct refresher training for employees after every two years of employment. Catch Basin Cleaning Program Department of Public Works Track the catch basins that are cleaned each year. 6-2 . including the leaching catch basins, Vortechnic devices and oil/water separator. Maintain a log of the disposed materials Track the streets and lots that are swept each year. Parking Lot and Street Sweeping Department of Public Works 6-3 Maintain a log of the disposed materials Program Implement Stormwater Pollution Department of Public Works 6-4 Review the recommendations outlined in Table 5 of Prevention Plan the SWPPP. Develop a schedule to implement these • recommendations. Track progress in implementing recommendations. Continue to wash vehicles and equipment indoors. Vehicle and Equipment Cleaning Policy Department of Public Works 6-5 Incorporate policy requirements into the DPW employee-training program. Construct a new wash bay. Develop and implement a landscaping and lawn Develop a Landscaping and Lawn Care Department of Public Works 6-6 Policy care policy. Place policy in the DPW employee-training manual. Document employee training and periodic re-training. Replace Stormwater Drainage System Install new stormwater drainage system in Summer Department of Public Works 6-7 Along Summer Street Street. Maintain records of water quality sampling from the detention basin. Develop a maintenance plan for the detention basin Maintenance of the Detention Basin at 6-8 . Department of Public Works at the Reed's Brook site. Reed's Brook Educate DPW employees on the proper maintenance of the detention basin and document training and periodic re-training. Maintain records of maintenance activities.

Pollution Prevention & Good Housekeeping in Municipal Operations

| BMP | | Measurable Goals | | | | | | |
|-----|--------------------------------------|--|------------------------------------|--|--|--|--|--|
| 6-9 | Install Leaching Catch Basins In Spy | Develop plans for leaching catch basins. | Planning and Community Development | | | | | |
| | Pond Watershed | Install leaching catch basins. | Department | | | | | |
| | | | Department of Public Works | | | | | |

| Massachusetts Department of Environmental Protection | | | | | | | | | _ | | | | | | | | | | | |
|--|----|--------|---------|--------|----|--------|---------|--------|---|--------|------------|------------|--------------|--------|----------------|--------|----|----------|--------------|--------|
| Bureau of Resource Protection - Watershed Management | | | | | | | | | | | Transmitta | al Number | W04095 | 9 | | | | | | |
| BRP WM 08A NPDES Stormwater General Permit Notice of Intent | | | | | | | | | | | | Facility I | D (if known) | I | | | | | | |
| for Discharges from Small Municipal Separate Storm Sewer Systems (MS4s) | | | | | | | | | | | | | | | | | | | | |
| F. Storm Water Management Program TIME FRAMES | | | | | | | | | | | Page | 1 of | 1 | | | | | | | |
| PERMIT YEAR ONE PERMIT YEAR TWO PERMIT YEAR THREE PERMIT YEAR FOUR | | | | | | | | | | | | | | | | | | | | |
| | | Summer | | Winter | | Summer | | Winter | | Summer | | Winter | | Summer | | Winter | | ERMIT YE | | Winter |
| BMP ID # | 03 | 03 | Fall 03 | 03-04 | 04 | 04 | Fall 04 | 04-05 | 05 | 05 | Fall 05 | 05-06 | 06 | 06 | Fall 06 | 06-07 | 07 | 07 | Fall 07 | 07-08 |
| BMP 1-1 | | | | | | | | | | | | | | | | | | | | |
| BMP 1-2 | Х | Х | Х | | Х | Х | Х | | Х | Х | X | | Х | Х | Х | | Х | Х | Х | |
| BMP 1-3 | | | | | Х | | | | Х | | | | Х | | | | Х | | | |
| BMP 1-4 | | | | | | | Х | | | | | | | | | | | | | |
| BMP 1-5 | | | | | Х | | | | х. | | | | X | | | | Х | | | |
| BMP 1-6 | | | | | | | | | | | Х | | | | | | | | Х | |
| | | | | | | | | | | | | | | | | | | | | |
| BMP 2-1 | | | | Х | | | | Х. | | | | | | | | | | | | |
| BMP 2-2 | | | | | | | | | | | | | | | | | | | | |
| BMP 2-3 | Х | | | | Х | | | | X | | | | Х | | | | Х | | | |
| BMP 2-4 | | | | | | | | | Х | | | | | | | | | | | |
| BMP 2-5 | Х | | | | Х | | | | Х | | | | Х | | | | Х | | | |
| BMP 2-6 | | | | | X | | | | | | | | | | [] | | | | | |
| BMP 2-7 | | | | | Х | | | | | X | | | | V | [] | | | | | |
| BMP 2-8 | | | | | | | | | | Х | | | | Х | | | | | | |
| | | | | | | | | | | | | | | | <u> </u> | | | | <u> </u> | |
| BMP 3-1 | | | | | | | | | | | | | | | | | | | | |
| BMP 3-2 | | | | | | | | Х | | | | | | | | | | | | |
| BMP 3-3 BMP 3-4 | | | | | | | | ^ | | | | | | | | | | | | |
| DIVIF 3-4 | | | | | | | | | | | | | | | | | | | | |
| BMP 4-1 | | | | | | | | | Х | | | | | | | | | | | |
| BMP 4-1 BMP 4-2 | | | | | | | | | ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~ | | X | | | | ⊨ | | | | | |
| | | | | | | | | | | | | | | | | | | | | |
| BMP 5-1 | | | | | X | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | |
| BMP 6-1 | | | | | | | Х | | | | | | | | | | | | | |
| BMP 6-2 | | | | | | | | • | | | | | | | l | | | | | |
| BMP 6-3 | | | | | | | | | | | | | | | J | | | | | |
| BMP 6-4 | | | | | | | Х | | | | | | | | | | | | | |
| BMP 6-5 | | | | | | | Х | | | | | | | | Х | | | | | |
| BMP 6-6 | | | | | | | | | Х | | | | | | | | | | | |
| BMP 6-7 | | | | | | | | | | | | | | | | | | | | |
| BMP 6-8 | | | | | Х | | | | | | | | | | | | | | | |
| BMP 6-9 | | | | | | | | | | Х | | | | Х | | | | | | |



Figure 1: Outfall Location Map



Public Education and Outreach

Required Elements

□ The Permitee 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

| BMP 1-1 Place Educational Information on the | e 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 Place Educational Information on Arlington Cable Television
- BMP 1-5 Promote Water Conservation Practices for Homeowners
- BMP 1-6 Develop a Press Release and Flyer Targeting Community Businesses
- BMP 2-2 Educational Outreach for Spy Pond
- BMP 2-6 Conservation Land Stewards
- BMP 2-8 Conduct Lawn Care/Landscaping Survey in Spy Pond Watershed



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

BMP Description

Recognizing that the Internet was increasingly becoming a powerful means of communication, the Town of Arlington established a community website, Arlington Online, in 1999. Currently, interested persons can access the website at <u>www.town.arlington.ma.us</u> to get information about town government, community news, and the public school system. The website currently has links to Town-related groups, such as the Spy Pond and Reservoir Committees, which have some involvement in stormwater management. To expand upon the Town's public education program, information regarding stormwater issues will also be posted on the website.

The Town will place information relating to stormwater issues and the status of the Town's Stormwater Management Program (SWMP) under the "Town Hall" web page on the Town's official website. Information placed on this web page will include the Town's SWMP and all stormwater related press releases issued by the Town. Links to other web pages that have information regarding the Town's pet and goose waste management campaign (*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 at Spy Pond (*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.

Primary Audience

General public

Measurable Goals

- Post stormwater related information on the Town Hall web page.
- Update website regularly.

Responsible Parties

Department of Public Works (DPW), Town Webmaster

Implementation Strategies

All information to be posted on the Arlington website will be directed to the DPW who will work with the Town's Webmaster 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.

Annual Evaluation

The DPW 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

For the past five years the Arlington Department of Public Works (DPW) and the Arlington Recycling Committee (ARC) have sponsored eight Household Hazardous Waste (HHW) Collection Days per year. They are held monthly on Saturdays from April through November at the Minuteman Hazardous Product 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 <u>Arlington Recycling Program</u>. 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.

Primary Audience General public

Measurable Goals

- Continue to sponsor eight household hazardous waste collection days per year.
- Continue to develop the <u>Arlington Recycling Program</u> 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.
- Send eight press releases advertising the event to the *Arlington Advocate* and track whether they were published.
- 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 ARC 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. Door hangers and flyers sent out by the Spy Pond Committee (BMP 2-2) similarly remind residents to properly dispose of pet waste and not feed the waterfowl. 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 addling 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.

Annually, the Town's Board of Health will issue a press release to the *Arlington Advocate* that will include information regarding the Town's bylaws pertaining to dogs and waterfowl, the effects of pet/waterfowl wastes on water quality, and techniques for appropriate pet waste disposal.

Primary Audience General public

Measurable Goals

- Track the number of brochures distributed annually.
- Track the number of violations issued annually.
- Develop an informational press release on pet waste and waterfowl management for the *Arlington Advocate* and track whether it was published.

Responsible Parties

Board of Health (BOH), Animal Control Officer

Implementation Strategies

The BOH will develop brochures regarding pet waste and waterfowl management and ensure their distribution at the rabies clinic, as well as the Town Hall and libraries. The BOH will also issue an annual press release as outlined above. The Animal Control Officer will continue to enforce the Town's pet waste removal and waterfowl management bylaws.

Timeline

The BOH will develop brochures regarding pet waste and waterfowl management by the Spring of 2004, and they will be distributed at the Town's rabies clinic beginning in the Spring of 2004. The BOH will issue the annual press release beginning in the Spring of 2004.

Annual Evaluation

The BOH 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 Place Educational Information on Arlington Cable Television

BMP Description

The Town will use Arlington Cable Television Channel 8 (ACTV) as an educational tool throughout the implementation of the Stormwater Management Program (SWMP). ACTV was created through a licensing agreement between the Town of Arlington and Comcast (formerly Continental Cablesystems Corporation) and is available to all of Arlington's Comcast cable subscribers.

The Town will purchase two public service announcements (PSAs) from the Washington State Department of Ecology Water Quality Consortium. These generic PSAs entitled "Oil Leak" and "Fertilizer" were developed by the Water Quality Consortium as a component of their non-point water pollution education program. The Water Quality Consortium now markets these videos, as a well as many other educational tools, through the Washington State Department of Ecology website. The Town will provide the video containing the PSAs to ACTV so that they may be incorporated into the station's regular broadcast as frequently as possible. The Town has received confirmation from Jeff Munro, a Programming Director for ACTV, that the PSAs will be run on the public access channel. The "Fertilizer" PSA will be run during the spring, summer and fall months, while the "Oil Leak" PSA will run throughout the year.

Throughout the SWMP implementation, the Town will tape public meetings related to stormwater management and broadcast them on ACTV. These broadcasts will be listed on the ACTV schedule, which is published regularly in the *Arlington Advocate*. ACTV broadcasts relevant to the Town's SWMP also will be advertised on the Town's website.

Primary Audience General public

Measurable Goals

- Obtain "Oil Leak" and "Fertilizer" PSAs from the Washington State Department of Ecology Water Quality Consortium.
- Track how frequently the PSAs are broadcast on ACTV.

Responsible Parties

Department of Public Works (DPW), Arlington Cable Television (ACTV)

Implementation Strategies

The DPW will obtain the PSAs from the Washington State Department of Ecology Water Quality Consortium and provide them to ACTV. The Programming Director at ACTV will be responsible for incorporating the PSAs into the regular broadcasts.

Timeline

The DPW will obtain videos of the PSAs during the Fall of 2004 and begin airing them during the Winter of 2004/2005. These PSAs will be incorporated into ACTV's programming as frequently as possible.

Annual Evaluation

The DPW, with the assistance of ACTV, will be responsible for preparing a summary of the SWMP information broadcast on the public access channels, including an assessment of the progress made towards achieving the identified measurable goals.



BMP 1-5 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.
- Issue an annual press release to the Arlington Advocate to promote water conservation.

Responsible Parties

Department of Public Works

Implementation Strategies

The DPW will continue promoting water conservation practices throughout the year by providing various educational materials. In addition to these existing efforts, the DPW will also issue an annual press release during the spring of each year as outlined above. 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. Beginning in the Spring of 2004 the DPW will issue annually a press release to the *Arlington Advocate* throughout the permit term.

The MWRA educational bill inserts will be incorporated into the Town's water bills during the 2004 permit year and during subsequent permit years if they are made available by the MWRA. Water conservation posters will be placed in public locations throughout the Town as outlined above in the Fall of 2003 and updated if and when the MWRA provides new posters.

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 1-6 Develop a Press Release and Flyer Targeting Community Businesses

BMP Description

The Town will develop and submit an educational stormwater press release targeting businesses in the community to the *Arlington Advocate* during the 2005 permit year. The press release will explain what stormwater is and will frame stormwater concerns from the Town's perspective as it discusses potential impacts by businesses on stormwater quality and flow. The Town will convert this press release into an educational flyer that will include additional information regarding improved housekeeping in parking areas, litter management in loading docks, maintenance of grease traps, stores carrying and promoting environmentally-friendly products, employee training, and other similar activities. This flyer will be provided to the Arlington Chamber of Commerce for inclusion in its bimonthly newsletter, as well as posted on the Town's website (*BMP 1-1*). The press release and flyers are meant to be both educational and motivational tools, increasing awareness of stormwater in the business community and challenging businesses to take steps towards stormwater quality improvements in their own business practices.

Primary Audience

Arlington businesses, General public

Measurable Goals

- Submit the press release to the Arlington Advocate and track whether it was published.
- Submit copies of the informational flyers to the Arlington Chamber of Commerce and track whether it was included in the newsletter.
- Post the informational flyer on the Town's website.

Responsible Parties

Department of Public Works (DPW), Town Webmaster

Implementation Strategies

The DPW will draft the press release and create the layout for the flyer. The press release will be submitted to the *Arlington Advocate* and the flyers will be sent to the Arlington Chamber of Commerce. The DPW will provide an electronic copy of the press release to the Town's webmaster for the Town's website.

Timeline

The press release will be distributed to the *Arlington Advocate* and posted on the Town's website in the Fall of 2005. Flyers will be provided to the Arlington Chamber of Commerce in the Fall of 2005 and the Fall of 2007.

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

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

- 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 2-8 Conduct Lawn Care/Landscaping Survey in Spy Pond Watershed



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 to the *Arlington Advocate* 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, March 1, 2004 through 4:00 p.m. on Friday, April 2, 2004 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 to the *Arlington Advocate* and 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), Town Webmaster

Implementation Strategies

The DPW will work with the Town's Webmaster 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

The informational press release will be issued to the *Arlington Advocate* on February 26, 2004 and will appear in the *Arlington Advocate* on March 4, 2004. 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, March 1, 2004 through Friday, April 2, 2004 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 from some available at the Robbins and Fox Libraries, the DPW (Town Hall and Grove Street offices), and on the Town's website during the Winter of 2004/2005.

Annual Evaluation

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



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. In 2000, the Town of Arlington received a three-year, \$299,000 grant from the MA Department of Environmental Management (DEM) for stormwater management and water quality improvement for Spy Pond. The grant will expire in 2004. As part of Arlington's match for this grant, there has been an effort to educate the public on water quality issues for Spy Pond. The Town's Spy Pond Committee (SPC) of the Vision 2020 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. <u>Fertilizer Flyers</u>: 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. <u>Door Hangers</u>: 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. <u>Ecological Gardening</u>: The SPC will sponsor classes in ecological gardening practices for residents in Arlington. Ecological gardening emphasizes the use of native plants, which require less water and fertilizer, and environmentally friendly landscaping, such as terracing. The ecological gardening classes will address site preparation and design, plant selection and propagation, and integrated pest management and pest control. These classes will be publicized in the *Arlington Advocate*, on Arlington Cable Television (ACTV), and on the Spy Pond website. To demonstrate the practicality of ecological gardening, the SPC will also sponsor tours of ecological gardens at private residences in Arlington. The ecological gardening classes are a joint activity with the Sustainable Arlington Committee of Vision 2020.
- 4. <u>Spy Pond Website</u>: 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 2-3*).
- 5. <u>Arlington Town Day</u>: For Arlington Town Day, the SPC shares a booth with Vision 2020, 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.
- Sponsor ecological gardening classes and track the number of participants.
- Post Spy Pond-related information on the Spy Pond website and update website regularly.
- Host booths at Arlington Town Day

Responsible Parties

Spy Pond Committee, Friends of Spy Pond Park, Planning and Community Development Department (PCDD)

Implementation Strategies

The SPC and FSPP, with oversight from PCDD, will continue its educational outreach program for Spy Pond as described in Items 1 through 5 above.

Timeline

Educational flyers will be developed and distributed each spring throughout the permit term. Door hangers will be developed and distributed in the Fall of 2003 and the Spring of 2004. Similarly, ecological gardening classes will be offered in the Fall of 2003 and late Winter/early Spring of 2004. 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 Cleanup at Spy Pond

BMP Description

An effective method of promoting stormwater awareness is hosting a pond cleanup. In recent years the Town's Spy Pond Committee (SPC) and the Friends of Spy Pond Park (FSPP) have co-sponsored annual cleanup activities at Spy Pond. These groups will continue to make the cleanup 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, Arlington Cable Television (ACTV), 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, Planning and Community Development Department (PCDD), Department of Public Works (DPW)

Implementation Strategies

The SPC and FSPP, with oversight from PCDD, 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. As part of the three-year, \$299,000 grant received from the MA Department of Environmental Management (MADEM), the Town's Spy Pond Committee (SPC) of the Vision 2020 Environmental Task Group partnered with the Arlington Conservation Commission (ACC), the Arlington High School SAVE (Students Against Violations of the Environment) Group, the Boston Society of Civil Engineers Younger Members Group, and many Arlington residents in 2002 to mark storm drains in the Spy Pond watershed. The four-inch diameter plastic curb markers were glued to the top of curbs adjacent to catch basin grates. The SAVE Group designed the curb markers. One marker shows an orange fish that reads "Only Rain Down the Drain – Flows to Spy Pond." The SPC will continue to partner with groups for future storm drain marking until all catch basins in the 500-acre watershed have been marked.

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, on the local cable access channel (ACTV), 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, Planning and Community Development Department (PCDD)

Implementation Strategies

Prior to marking the drain inlets, the SPC, with oversight from PCDD, 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 Fall of 2003 and Spring of 2005. if the Town is successful in obtaining a 319 Federal Grant for stormwater issues in the Spy Pond watershed.

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 Vision 2020 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, Arlington Cable Television (ACTV), 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)

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 nearly 30 acres of conservation land, including Meadowbrook Park, which is mostly wetlands, and Window-On-The-Mystic, which borders Lower Mystic Lake. 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 *Stewardship Handbook for Arlington Conservation Land*, produced by the ACC in 2002, the primary purpose of this program "...is protection of: soil from erosion, plants and animals from destruction, ponds and streams from pollution, and the beauty of the land from litter and vandalism." Another objective of this program is public education of the value of land and the responsibility residents have towards it. The *Stewardship Handbook for Arlington Conservation Land* 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 50 active participants in this program. The *Stewardship Handbook for Arlington Conservation Land* 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 for Arlington Conservation Land* 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 track whether it was published.
- Develop an informational brochure on the Land Steward Program and track the number of brochures distributed to residents.

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 informational brochure for the Town library and Town Hall.

Timeline

The informational press release and brochure will be ready for distribution by the Spring of 2004, 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

- Execute the Environmental Joint Powers Agreement.
- 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 Webmaster

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 regular basis. Twice a year, Arlington's representative to the Board will prepare a summary of the Board's activities and actions for posting on the Town's website and for a press release to the *Arlington Advocate*.

Timeline

The Environmental Joint Powers Agreement will be executed within the second year of the permit term. Once executed, the Board will meet on a regular basis throughout the permit term.

Annual Evaluation

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



BMP 2-8 Conduct Lawn Care/Landscaping Survey in Spy Pond Watershed

BMP Description

The Towns of Arlington and Belmont have applied for a 319 Federal Grant to address stormwater issues in the Spy Pond watershed. If the Town receives the grant, the Spy Pond Committee (SPC) of the Vision 2020 Environmental Task Group intends to use some of the funds to conduct a survey of residences in the Spy Pond watershed regarding lawn care and landscaping practices. Participants will be asked several questions about their current lawn care/landscaping practices, including watering, fertilizer usage, and pesticide/herbicide application. The survey will also ask participants what they would be willing to do to make their lawns and gardens more environmentally friendly, such as using no-phosphorus fertilizer. This survey will be written to educate the participants, as well as provide guidance for the SPC for future educational outreach efforts.

Primary Audience

General public

Measurable Goals

- Develop and distribute survey.
- Send a press release explaining the lawn care/landscaping survey to the Arlington Advocate.
- Track the number of completed surveys.
- Compile surveys to develop future educational outreach materials.

Responsible Parties

Spy Pond Committee, Planning and Community Development Department (PCDD)

Implementation Strategies

The SPC, with oversight from PCDD, will develop the survey and distribute it to residences in the Spy Pond watershed. The SPC will track the number of completed surveys and compile the results to tailor future educational outreach efforts.

Timeline

If awarded the 319 Federal Grant, the SPC will conduct the survey in the Summer of 2005. The results will be compiled by the Summer of 2006.

Annual Evaluation

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



Illicit Discharge Detection and Elimination

Required Elements

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

BMP 3-1 Maintain Outfall Location Map

Ordinance

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

Illicit Discharge Detection and Elimination Plan

BMP 3-3Implement an Illicit Discharge Detection and Elimination PlanBMP 3-4Rehabilitate and Replace Sanitary Sewer Pipes

Public Education

| 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 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 4-2 | Develop and Implement a Citizen Tin Line |
| BMP 4-2 | Develop and Implement a Citizen Tip Line |

Address Non-Stormwater Discharges

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.

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 (MADEP) *Stormwater Management Policy Handbook and Technical Handbook.* The MADEP 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.

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

- <u>Standard 4, Removal of 80% Total Suspended Solids (TSS)</u>: Requires that new stormwater management systems be designed to remove 80% of the average annual load of TSS for post-development conditions.
- <u>Standard 7, Redevelopment</u>: 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.
- <u>Standard 9, Operation and Maintenance Plans</u>: 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 gage 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 gage 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 PCDD, the ACC, the Engineering Division of the DPW, ARB, and other relevant Town departments/boards, will review the Town's existing bylaws during the second year of the permit term. Revisions to the existing bylaws will occur during the third year of the permit term. The revised bylaws will be available for review and comment during the fourth year of the permit term to gage public acceptance of them. In the fifth 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 PCDD 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 Winter of 2004/2005. Dry weather field screening will begin in the Spring of 2005 and continue through the Fall of 2007. 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 as follows:

| Cross Street and Waldo Road: | Spring to Fall 2003 |
|---|---------------------|
| Landsdowne Road, Hemlock Street, and Pine Street: | Spring to Fall 2004 |
| Sunnyside Avenue: | Spring to Fall 2005 |

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

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 22.26(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.*
- **D** *Procedures for receipt and consideration of information submitted by the public.*
- **D** *Procedures for inspections and enforcement of control measures at construction sites.*

Proposed BMPs

| 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

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 2005. 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.



BMP 4-2 Develop and Implement a Citizen Tip Line

BMP Description

A Citizen Tip Line will provide 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 Town will establish an electronic complaint form linked to the Department of Public Works (DPW) web page. The form will request information about the individual placing the complaint, information regarding the alleged violation, and information describing any vehicles involved in the allegation.

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

The Town will advertise the Tip Line regularly on the Town's website. The Tip Line will also be advertised every six months via paid advertisements in the *Arlington Advocate*. Residents that do not have personal access to the Internet can use public computers available at the Town's libraries to make complaints via the Tip Line, or can mail in or drop off hand-written complaints to the DPW.

Primary Audience

General public

Measurable Goals

- Establish the Citizen Tip Line.
- Advertise the Citizen Tip Line.
- Track the number of complaints received via the Citizen Tip Line.
- Track the problems/incidents remedied as a result of the Citizen Tip Line.

Responsible Parties

Department of Public Works, Town Webmaster

Implementation Strategies

The DPW will work with the Town's Webmaster to develop the electronic complaint form that will be linked to the DPW web page to serve as the Citizen Tip Line.

Timeline

The DPW and Webmaster will have the Citizen Tip Line operational by Fall of 2005. Upon establishment of the Citizen Tip Line, the Town will begin the advertising campaign as outlined above.

Annual Evaluation

The DPW will prepare a summary of the development of the Citizen Tip Line, including progress towards achieving the identified measurable goals.

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 redevlopment 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.
- D 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

| BMP 3-2 | Revision of Existing General and Zoning Bylaws |
|---------|--|
| BMP 5-1 | Arlington Redevelopment Board Stormwater Design Guidelines |



BMP 5-1 Arlington Redevelopment Board Stormwater Design 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 Planning and Community Development Department (PCDD) has developed the handbook, *Arlington Redevelopment Board Stormwater Design Guidelines*, which has not yet received approval from the Arlington Redevelopment Board. This handbook provides design criteria for structural and non-structural Best Management Practices (BMPs) that developers can use in projects to provide stormwater treatment prior to discharging into the Town's stormwater drainage system. Even though all developers will be given a copy of this handbook, they will not be limited to the BMPs presented in it. However, the developer will need to select BMPs that will be in compliance with the Massachusetts Department of Environmental Protection's *Stormwater Management Policy Handbook and Technical Handbook*.

Primary Audience

Developers

Measurable Goals

- Obtain approval of the handbook by the Arlington Redevelopment Board.
- Track the distribution of handbook to developers.

Responsible Parties

Planning and Community Development Department, Arlington Redevelopment Board (ARB)

Implementation strategies

The PCDD will work with the ARB to obtain its approval of the handbook. Once approved, the PCDD will distribute copies of the handbook to developers as a guidance document for structural and/or non-structural BMPs that can be used for stormwater treatment.

Timeline

The PCDD will attempt to obtain approval of the handbook by the Arlington Redevelopment Board by the Spring of 2004. Upon adoption of the revised General and Zoning Bylaws, the distribution of the handbook to developers will commence.

Annual Evaluation

The PCDD will prepare a summary of the approval and distribution of the handbook, including progress towards achieving the identified measurable goal.



Pollution Prevention & Good Housekeeping in Municipal Operations

Required Elements

- 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

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

Municipal Maintenance Activities

| 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 6-6 | Develop a Landscape and Lawn Care Policy |
| BMP 6-8 | Maintenance of the Detention Basin at Reed's Brook Site |
| | |

Other

| BMP 6-7 | Replace Stormwater Drainage System Along Summer Street |
|---------|--|
| BMP 6-9 | Install Leaching Catch Basins in Spy Pond Watershed |



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 2004 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 completed document was submitted to the Arlington DPW in May 2003.

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 2004. All BMPs will be fully implemented by the Fall of 2007.

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 included in its capital planning the construction of an indoor wash bay that would be an addition to one of the existing garage buildings. The DPW plans on constructing this facility in 2005/2006. In the interim, the Town's vehicles and equipment are cleaned in standard work bays located in Buildings C and D at the DPW Town Yard. Floor drains in these buildings collect the wash water and direct it to a sand and gas trap system prior to discharging to the sanitary sewer system. The DPW will ensure that all vehicle-washing activities continue to be conducted within these standard bays until the new wash bay is constructed. 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.
- Construct a new wash bay.

Responsible Parties

Department of Public Works

Implementation Strategies

The DPW will incorporate Vehicle and Equipment Cleaning Policy into the employee-training manual. The DPW will retain the services of a consultant to design and construct the new wash bay.

Timeline

The DPW will continue to wash vehicles and equipment indoors throughout the permit term. The DPW will incorporate the Vehicle and Equipment Cleaning Policy into the formal training program ($BMP \ 6-1$) upon its anticipated completion in the Fall of 2004. Construction of the new wash bay will be completed by the Fall of 2006.

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.



BMP 6-6 Develop a Landscaping and Lawn Care Policy

BMP Description

The Town will establish a Landscaping and Lawn Care Policy to control the stormwater impacts of the Town's lawn care practices. The Department of Public Works (DPW) carries out Arlington's landscape and lawn care practices.

While phosphorous- and nitrogen-containing fertilizers are used to provide nutrients necessary for plant growth, an excess of these nutrients can be a source of stormwater pollution, causing eutrophication in the receiving waters. The Town's policy will establish accepted management practices to reduce risks of nutrient pollution to the receiving waters. The policy will include guidance that recommends applying fertilizers at the minimum rate and to the minimum area needed, working the fertilizer deeply into the soil to reduce nutrient runoff in stormwater, applying fertilizer at lower application rates with a higher application frequency, and limiting hydroseeding, which is the simultaneous application of lime and fertilizers.

Since the presence of pesticides in stormwater runoff can be detrimental to aquatic organisms, the Town's policy will also provide guidance that is intended to reduce the amount of pesticides that come into contact with stormwater. The policy will be used to educate the DPW about the appropriate techniques for the storage and application of pesticides. The policy will include guidance that recommends that pesticides be stored in a dry covered area, bermed to contain pesticides in case of spillage, and applied according to the recommended rates and methods. The policy will also recommend that equipment and absorbent materials be available in areas where pesticides are stored and used to contain and clean up any accidental spills.

The information contained in this 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

- Develop and implement a Landscaping and Lawn Care Policy.
- Place policy in the DPW employee-training manual.
- Document employee training and periodic re-training.

Responsible Parties

Department of Public Works

Implementation Strategies

The DPW will develop the Town's Landscaping and Lawn Care Policy and will ensure that this policy is placed in the employee-training manual.

Timeline

The Town's Landscaping and Lawn Care Policy will be developed and implemented by the Spring of 2005.

Annual Evaluation

The DPW will prepare a summary of the Town's Landscaping and Lawn Care Policy's development and implementation, including an assessment of the progress towards achieving the identified measurable goals.



BMP 6-7 Replace Stormwater Drainage System Along Summer Street

BMP Description

The Reed's Brook Project involves the redevelopment of a former sanitary landfill site on Summer Street. This project will create recreational opportunities for Town residents and will alleviate flooding problems from the surrounding neighborhood, particularly in the Thesda Street area, by the construction of a three-acre detention basin that will discharge to Reed's Brook. In 2002, the Department of Public Works (DPW) installed 6,100 feet of new drainpipe in the Thesda Street area that ultimately discharges to the detention basin. Most of the construction for the Reed's Brook Project has been completed, with the final phases of the recreational facilities being completed in 2004.

However, the DPW plans to upgrade the stormwater drainage system along Summer Street as part of the reconstruction of Summer Street, and tie part of the new stormwater drainage system into the Reed's Brook site. From the Lexington town line to Arthur Road, stormwater runoff collected in the new system will discharge to the detention basin at the Reed's Brook site. From Arthur Road to Brattle Street, stormwater runoff collected in Summer Street will discharge into the existing storm drain system. The installation of a new drainage system in Summer Street will provide an improvement in water quality to downstream waterbodies. The proposed system will be comprised of new, adequately-sized pipes and deep-sump catch basins to capture sediments. Runoff that discharges to the Reed's Brook site will receive additional treatment in the detention basin, as sediments and other contaminants are captured in the basin. As an added protection to waterbodies, the DPW currently has a contractor, Geological Field Services, sample the water exiting the detention basin for contaminants.

Primary Audience General public

Measurable Goals

- Install new stormwater drainage system in Summer Street.
- Maintain records of water quality sampling from the detention basin.

Responsible Parties

Department of Public Works

Implementation Strategies

The DPW will oversee the installation of new storm drain pipes in Summer Street. The DPW will hire an outside contractor to conduct water quality sampling of the detention basin outflow.

Timeline

The installation of storm drain pipes will begin in the Fall of 2004 and will conclude in the Fall of 2006. Water quality sampling is already being conducted on a regular basis.

Annual Evaluation

The DPW will prepare a summary of the installation of storm drains along Summer Street and the results of water quality sampling, including an assessment of the progress towards achieving the identified measurable goals.



BMP 6-8 Maintenance of the Detention Basin at Reed's Brook

BMP Description

The Reed's Brook Project involves the redevelopment of a former sanitary landfill site on Summer Street. This project will create recreational opportunities for Town residents and will alleviate flooding problems from the surrounding neighborhood by the construction of a three-acre detention basin that will discharge to Reed's Brook. The construction of the detention basin, which contains a permanent pond, is complete. The Department of Public Works (DPW) will be responsible for providing adequate maintenance of the detention basin. The maintenance activities will occur concurrently with the cleaning of the catch basins along Summer Street. The maintenance schedule and requirements will be described in the employee training manual (*BMP 6-1*). The DPW will also keep records of the maintenance activities.

Primary Audience DPW Staff

Measurable Goals

- Develop a maintenance plan for the detention basin at the Reed's Brook site.
- Educate DPW employees on the proper maintenance of the detention basin and document training and periodic re-training
- Maintain records of maintenance activities.

Responsible Parties

Department of Public Works

Implementation Strategies

The DPW will develop a plan to adequately maintain the detention basin at the Reed's Brook site. The DPW will educate its employees on proper maintenance activities, including record-keeping.

Timeline

The DPW will develop a maintenance plan for the detention basin by the Spring of 2004 and will immediately begin maintenance activities as required. This maintenance plan will be incorporated into the employee training manual by the Fall of 2004.

Annual Evaluation

The DPW will prepare a summary of the maintenance activities for the detention basin at the Reed's Brook site, including an assessment of progress towards achieving the identified measurable goals.



BMP 6-9 Install Leaching Catch Basins In Spy Pond Watershed

BMP Description

The Towns of Arlington and Belmont have applied for a 319 Federal Grant to address stormwater issues in the Spy Pond watershed. If the Town receives the grant, the Planning and Community Development Department (PCDD) will use some of the funds to address stormwater runoff between Route 2 and Spy Pond. Currently, only 15 of the 40 outfalls at Spy Pond receive some pre-treatment prior to discharging into Spy Pond. With funds from the 319 Federal Grant, the Town will install 11 additional leaching catch basins in the area adjacent to Route 2. These basins will provide pre-treatment of stormwater runoff prior to discharging into Spy Pond by trapping sediment and other pollutants.

Primary Audience

General public

Measurable Goals

- Develop plans for leaching catch basins.
- Install leaching catch basins.

Responsible Parties

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

Implementation Strategies

The PCDD, with the assistance of the DPW, will develop plans for the leaching catch basins. The DPW will oversee the installation of the leaching catch basins.

Timeline

If the Town receives the grant, plans for the leaching catch basins will be completed by the Summer of 2005. The installation of the catch basins will be completed by the Summer of 2006.

Annual Evaluation

The PCDD, with some assistance from the DPW, will prepare a summary of the plan to make drainage improvements in the Spy Pond watershed, including an assessment of the progress towards achieving the identified measurable goals.



Attachment A

NPDES Stormwater General Permit for Discharges from Small MS4s

Please go to EPA link <u>http://www.epa.gov/ne/npdes/permits/permit_final_ms4.pdf</u> for the NPDES Stormwater General Permit for Discharges from Small MS4s.



Attachment B

Endangered Species Act Eligibility Criteria

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) (last updated 3/1/2003), the Threatened and Endangered Species System (TESS) database for the State of Massachusetts (last viewed on 7/15/2003) 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 June 25, 2003. 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.



Attachment C

Letter from the Massachusetts Historical Commission



March 3, 2004

The Commonwealth of Massachusetts

Dianne E. Velardocchia William Francis Galvin, Secretary of the Commonwealth Project Engineer Fay, Spofford & Thorndike, LLC 5 Burlington Woods Burlington, MA 01803

RE: Stormwater Discharges, Arlington, MA. MHC #RC.34405.

Dear Ms. Velardocchia:

Thank you for submitting the Project Notification Form (PNF) for the proposed project referenced above. Staff of the Massachusetts Historical Commission have reviewed the PNF and have the following comments.

Review of MHC's Inventory of the Historic and Archaeological Assets of the Commonwealth indicates that there are 65 individual properties, districts, multiple property submissions, or thematic nominations listed in the National Register of Historic Places and eight individual properties or local historic districts listed in the State Register of Historic Places for the Town of Arlington. There are a total of 1126 historic resources in Arlington listed in MHC's inventory. Finally, there are nine historical and 16 ancient Native American archaeological sites recorded in Arlington. Many of the outfalls are located adjacent to archaeological sites.

MHC understands that no construction is planned for this project.

After review of MHC files and the materials submitted, MHC staff has determined that the project as proposed will have "no effect" on the historic, architectural, and cultural resources listed above (36 CFR 800.4(d)(1); 950 CMR 71.07(2)(b)(1)) and is unlikely to affect significant archaeological or historic resources. If construction is planned for this project at a future date, MHC requests the opportunity to review scaled project plans and photos keyed to a base map as early in the planning process as possible.

Please be aware that MassGIS datalayers do not accurately reflect the most up-to-date information regarding properties listed in the State and National Registers of Historic Places. Additionally, not all properties eligible for listing in the National Register of Historic Places have been evaluated. You are welcome in the future to come to the MHC to use MHC's Inventory of the Historic and Archaeological Assets of the Commonwealth to find the most up-to-date listings of historic and archaeological properties.

These comments are offered to assist in compliance with Section 106 of the National Historic Preservation Act of 1966 as amended (36 CFR 800) and Massachusetts General Laws, Chapter 9, Sections 26-27C as amended by Chapter 254 of the Acts of 1988 (950 CMR 71). If you have any questions, please feel free to contact Margo Muhi Davis, Archaeologist/Preservation Planner, at this office.

Sincerely,

Brona Juron

Brona Simon State Archaeologist Deputy State Historic Preservation Officer Massachusetts Historical Commission

F.S.&T., ING.

xc: Jeannie Brochi, EPA Water Quality Unit (CWQ) DEP–NERO

220 Morrissey Boulevard, Boston, Massachusetts 02125

(617) 727-8470 • Fax: (617) 727-5128 www.state.ma.us/sec/mhc



Attachment D

Town of Arlington Outfall Inspection Form

Town of Arlington Illicit Discharge Detection & Elimination Plan Outfall Inspection Form

| Outfall # | | | | | Date: | // | |
|-------------------|------------------|------------|---------|------------------|---------------|--------------------|--------|
| Photograph # | | | | | Inspectors: _ | | |
| Location: | | | | | | | |
| Weather: | | | | | | | |
| Air Temp | °C | | | Rain: Yes | No | Sunny | Cloudy |
| Outfall Flow R | ate Estimate: | I | L/Secon | d | | | |
| Known industr | ial or commercia | al uses in | area? | Yes | No | | |
| Describe: | | | | | | | |
| | | | | | | | |
| Physical Obse | | | | | | | |
| Odor | | | | | | | |
| None | Sewage | Sulfide | | Oil | Gas | Rancid-Sour | |
| | Sewage | | | | Gus | Tuniela Sour | |
| Color | | | | | | | |
| None | Yellow | Brown | | Green | Gray | | |
| | | | | | • | | |
| | | | | | | | |
| Turbidity | Claudy | Onegue | | Othom | | | |
| None | Cloudy | Opaque | | Other: | | | |
| Floatables | | | | | | | |
| None | Petroleum Sheen | | Sewage | | | | |
| Other: | | | | | | _ (collect sample) | |
| Deposits/Stains | | | | | | | |
| None | Sediment | | Oily | | | | |
| Describe: | | | | | | (collect sample) | |
| Vegetation Con | ditions | | | | | | |
| Normal | Excessive Growt | h | | Inhibited Growth | 1 | | |
| Extent: | | | | | | | |
| Damage to Outf | fall Structures | | | | | | |
| Identify Structur | e: | | | | | | |
| Damage: | | | | | | | |
| None | Concrete Crackin | ng | Concret | e Spalling | Peeling Paint | Corrosion | |
| Other Damage: | | | | | | | |
| Extent: | | | | | | | |



Attachment E

Table 5 from Arlington's Stormwater Pollution Prevention Plan

| TABLE 5 – POLLUTANT | SOURCES, EXISTING MANAGEMENT PRACTIC NEW BMP OPTIONS | CES, AND | Completed by: <u>Richard Niles, CEI</u> Date: <u>January 2003</u> | | | |
|--|---|---|--|--|--|--|
| | Instructions: List all identified storm water pollutant sources and describe existing management practices that address those sources. In the third column, list BMP options that can be incorporated into the plan to address remaining sources of pollutants. | | | | | |
| Storm Water Pollutant Sources | Existing Management Practices | Description of New BMP Options | | | | |
| Road Salt | Stored under cover in Buildings E and G. Limited exposure during loading of sheds and loading of salt trucks between sheds. Some excess materials in loading area. | | 1) Ensure cleanup of all salt materials once loading operations are complete (include in employee training). | | | |
| Sand/Salt 50:50 Mix | Stored in a pile on asphalt pavement adjacent to Building G. Materials maintained in a neat pile, periodic sweeping around pile. Sand and salt are mixed prior to storms to reduce outdoor storage time. | necessary fo | Provide covering for sand/salt mix pile; and/or mix sand and salt as necessary for storms to limit exposure. Construct a berm for sand/salt pile to prevent migration with runoff. | | | |
| Waste Fluids from Junk Equipment, Scrap Metal, Drums | Open roll-off and ground storage. Emulsion drums are only stored outdoors when empty. | 2) Store drun materials). | Provide covering for junk equipment, scrap metals, and drums. Store drums indoors (currently or previously containing hazardous materials). Drain fluids from equipment prior to disposal in container. | | | |
| Road Maintenance Materials and Wastes | Piles located in 3-sided concrete storage bins. | 1) Ensure cleanup of all loose materials once loading and unloading operations are complete (include in employee training). | | | | |
| Diesel and Gasoline Fuels | USTs equipped with leak detection, overfill protection, and tank gauging systems. Weekly inspections conducted for gasoline Stage II vapor collection and recovery system (Stage II). Signs for proper fueling operations and Stage II system. Annual testing of Stage II equipment. Fuel dispensing pumps are covered. | Post list o Inform all | Install spill materials at fueling station. Post list of emergency contacts at fueling station. Inform all Town departments of pollution prevention practices and goals of pollution prevention plan at the fueling station. Include in employee training. | | | |
| Vehicle Wash Water | Previous vehicle rinsing, washing, and steam cleaning water discharged to proprietary treatment device to remove floatables and solids prior to discharge to Mill Brook. Current vehicle rinsing and washing to floor drains in Buildings C and D. | 2) Conduct a and D or cor | butdoor vehicle rinsing, washing, and steam cleaning activities. All vehicle rinsing and washing activities indoors at Buildings C instruct a vehicle wash facility or structure at the Town Yard. with upcoming DEP policy for outdoor vehicle rinsing to a jection well. | | | |
| Basement Flood Water | No hazardous material storage in basement. | 1) Prohibit hazardous material storage in basement of Building A. | | | | |
| Waste Motor Oil Waste Oil Management Plan for handling and onsite recycling. | | between buil 2) Do not tra 3) Update W | rums for leaks, clean drips, seal, and tightly secure for transport ldings. ansfer waste oil drums during rainstorms. Vaste Oil Management Plan with information from SWPPP. te proper waste oil handling into storm water training. | | | |



| Storm Water Pollutant Sources | Existing Management Practices | Description of New BMP Options | |
|---|---|--|--|
| Waste Antifreeze, Paints, and for DPW activities. DPW Safety Guidelines Manual discusses and counteract leaks and spills. | | Oversee deliveries and removal of materials (waste antifreeze) to detect and counteract leaks and spills. Park delivery trucks indoors, if practical, for delivery of product. | |
| Vehicle and Equipment Drips and Leaks | Vehicles and equipment stored outdoors for normal use and awaiting repair. Vehicles and equipment are maintained when leaks are discovered. | Repair leaking vehicles and equipment immediately. Inspect vehicle and equipment storage areas for leaks and significant fluid drips (included in inspection checklist in Appendix E). Store vehicles waiting repair indoors or provide a drip pan for fluids. | |
| Sediment, Sands | Town Yard is swept periodically and sediments are collected in catch basins and proprietary sediment removal tanks prior to discharge to Mill Brook. Drainage structures are maintained to remove sediments when needed or at least once a year. | Sweep Town Yard on a weekly basis or when needed. Inspect drainage structures on a monthly basis or as determined by facility employees. Install additional sediment control structures for runoff at the open roadway locations to Mill Brook. | |
| Dumpsters | Two dumpsters are equipped with closing lids and one is open. All dumpsters are free of leaks and holes. | Ensure lids are closed on dumpsters to prevent contact with rainfall. Do not dispose of leaky wastes in open dumpster. Inspect dumpsters for leaks and deterioration. | |
| ICE B GONE (MgCl Hexahydrate) Aboveground Storage Tank | Deicing agent stored in a 3,000 gallon poly aboveground storage tank inside Building E. All loading and unloading operations take place inside building. Jersey barriers are installed to protect AST against hits and damage. | Label MgCl AST with contents and loading/unloading instructions with attention to spill prevention and cleanup. Inspect AST for deterioration to prevent a release. Develop a countermeasure for a release that would exit the building and enter the drainage system. | |



References

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Commonwealth of Massachusetts Executive Office of Environmental Affairs, October 2002. *Massachusetts Year 2002 Integrated List of Waters* (Proposed Listing for Public Comment), CN: 125.1.

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