Municipality/Organization:

Arlington, Massachusetts

**EPA NPDES Permit Number:** 

MA041027

MassDEP Transmittal Number:

X251417

**Annual Report Number** 

& Reporting Period:

April 1, 2016 - March 31, 2017

# NPDES PII Small MS4 General Permit Annual Report

(Due: May 1, 2017)

#### Part I. General Information

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#### Certification:

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

Signature:

Printed Name: Adam W. Chapdelaine

Title:

Town Manager

Date:

4-25-2017

#### Part II. Self-Assessment

The Town of Arlington has completed the required self-assessment and has determined that our municipality is in compliance with all permit conditions, except for the following provisions.

Part II.F – None

Submitted on or before May 1, 2017

# Part III. Summary of Minimum Control Measures

## 1. Public Education and Outreach

BMP	BMP	Responsible	Measurable Goal(s)	Progress on Goal(s) –	Planned Activities –
ID#	Description	Department/Person		Permit Year 14	Future
1-1	Place Educational Information on the Town's Website	Town Webmaster; Department of Public Works	<ul> <li>Spring 2003 – Spring 2017</li> <li>Post stormwater related information on the Town Hall website.</li> <li>Update website regularly.</li> </ul>	The final Stormwater Management Program (SWMP) has been posted on the Town's website.  Review of the existing SWMP is underway to determine requirements for next General Permit.	In 2017 the Engineering Division coordinated one presentation as part of the Stormwater Awareness Series. This was open to the public and was recorded and broadcast on local public cable and covered by local media. Broadcast presentations are available on-demand online.  The Department of Public Works has developed a webpage devoted to stormwater issues and related topics. Where additional information sheets and supporting educational materials are available at the Town's Engineering website.

BMP	BMP	Responsible	Measurable Goal(s)	Progress on Goal(s) –	Planned Activities –
ID#	Description	Department/Person		Permit Year 14	Future
1-2	Conduct Household Hazardous Waste Collection Days	Arlington Recycling Committee; Department of Public Works	Spring 2003 – Spring 2017  Sponsor 8 household hazardous waste collection days/yr.  Develop the Arlington Recycling Program brochure and distribute to all Arlington residents via a mass mailing on an annual basis.  Track the number and type of informational brochures collected by Arlington residents at the DPW and at the booth at Arlington Town Day.  Send 8 press releases advertising the event to the Arlington Advocate and track whether they were published.  Advertise the events on the Town's website.	The DPW co-sponsored 8 household hazardous waste collection days at the Minuteman Hazardous Product Facility in Lexington, MA, events were advertised in the Arlington Advocate, at town offices, on the Town's website and the Town email Notice System.  The Town performs a year round battery collection program, as well as a year round fluorescent bulb collection program with partnering local hardware stores and our waste-to-energy contractor Wheelabrator Techologies.  Additionally, the Town expanded recycling collection event hours to include 12 Saturdays a year. At each event the following are collected; electronic waste, CRTs, thermometers, thermostats, and batteries. The first 18 months of the program resulted in 2200 household visits were documented to have participated in the events.  Rigid plastic, soft plastic films and foam products have been added as separate recycling products and are included in the collections at the DPW yard.  Yard waste collection from residences takes place 36 weeks per year, and in FY2016 resulted in 3,190 tons of yard debris source-separated and composted offsite.  The Town runs discounted Rain Barrel and subsidized Compost Bin sale promotions annually.  FY 2016 solid waste tonnage- 12,943 recycling tonnage- 5,452  CY 2016 solid waste tonnage- 12,483 recycling tonnage- 5,319	A trash and recycling guide is provided annually to all Arlington households.  Send 8 press releases advertising the event to the Arlington Advocate and track whether they were published.

BMP	ВМР	Responsible	Measurable Goal(s)	Progress on Goal(s) -	Planned Activities –
ID#	Description	Department/Person	Wedstraste Gour(s)	Permit Year 14	Future
1-3	Intensify the Existing Pet Waste and Waterfowl Management Campaign	Board of Health; Animal Control Officer; Spy Pond Committee	Spring 2004 – Spring 2017  Track the number of brochures distributed.  Educate Animal Control Officer on the importance of pet waste and waterfowl management.  Develop an informational press release on pet waste and waterfowl management for the Arlington Advocate and track whether it was published.	The Board of Health & Animal Control Officer continue to make brochures available regarding Pet Waste and Waterfowl Management through their office, the public libraries, and at various events in Town.  The Spy Pond Committee continued an eggaddling program that was instituted by the Town. No goslings were observed this year.  Dog Waste Receptacles have been installed and in use at all Public Parks.  Pet waste and stormwater fact sheet link included at Town Dog Information web page.  Arlington Animal Control Officer developed information sheets and social media pertaining to Canada Geese and Wild Turkeys for dissemination as well as develop a "Poop Fairy" Flyer/Poster as an outreach document. Additional efforts include a pet waste cleanup encouragement program which provides a reward raffle implemented through the Leash it and Ticket program.	Continue to educate the public on the importance of pet waste and waterfowl management.  Continue providing informational posts and updated on Pet Waste and Waterfowl Management for the Arlington Advocate or on-line at Town Website.  A new volunteer program is being developed to educate people to why leashing and cleaning up after pets is required.
				Utilize dog/s to disrupt wild geese at congregation areas on a monthly basis.	
1-4	Place Educational Information on Arlington Cable Television (ACTV)	Arlington Community Television; Department of Public Works	Fall 2004 – Spring 2016  Dobtain "Oil Leak" and "Fertilizer" PSA's from the Washington State Department of Ecology Water Quality Consortium.  Track how frequently the PSA's are broadcast on ACTV.	PSA's pertaining to "Oil Leak" and "Fertilizer" and others were included on the Stormwater Information web page.  Information regarding town sponsored CRT/TV drop-offs were regularly shown on ACTV.	The Engineering Division will continue to maintain stormwater tip sheets for "Oil Leak" and "Fertilizer" usage etc. on the Engineering website.  Post Bulletin Board PSA's to ACMI for public outreach and viewing and begin random replaying of previous stormwater presentations.  Track how frequently the PSA's are broadcast on ACTV if possible.

BMP ID#	BMP Description	Responsible Department/Person	Measurable Goal(s)	Progress on Goal(s) – Permit Year 14	Planned Activities – Future
1-5	Promote Water Conservation Practices for Homeowners	Department of Public Works	Spring 2003 – Spring 2017  Post water conservation posters at Town Hall and the public libraries.  Include water conservation bill inserts with the water bill.	Posters promoting Water Conservation Practices and Educational displays were hung in the Town Hall and public libraries.  Water Reducing Shower/Sink Heads were made available to Residents at the Public Works Offices.  Residents were able to buy rain barrels and adjustable hose heads provided by the DEP at the Town sponsored/organized EcoFest Event in 2016.	Continue to provide water conservation posters and information to residents of the Town of Arlington.
1-6	Develop a Stormwater Press Release and Flyer Targeting Community Businesses	Town Webmaster; Department of Public Works	<ul> <li>Fall 2005 – Spring 2017</li> <li>Submit the press release to the <i>Arlington Advocate</i> and track whether it was published.</li> <li>Submit copies of the informational flyers to the Arlington Chamber of Commerce (ACC) and track whether it was included in the newsletter.</li> <li>Post the informational flyer on the Town's website.</li> </ul>	Periodic emails on Stormwater Issues were sent to Town Mailing Lists.	To date, the Stormwater Awareness series has been covered in the Arlington Advocate & Arlington Patch. Local Cable: ACMI, has committed to record, broadcast and make available on-demand the series which will be available on the Town's Website. The series, targeted to residents and businesses will reach out to the public and Arlington Chamber of Commerce as well as local community groups.

## 2. Public Involvement and Participation

BMP ID#	BMP Description	Responsible Department/Person	Measurable Goal(s)	Progress on Goal(s) – Permit Year 14	Planned Activities – Future
2-1	Public Access to SWMP and Receipt of Comments	Town Webmaster; Department of Public Works	<ul> <li>Winter 2003 – Spring 2017</li> <li>Make draft SWMP available to the public for the review and comment period.</li> <li>Finalize SWMP.</li> <li>Make the final SWMP accessible to the public via the Town's public libraries and website.</li> </ul>	The Town Website continues to host the Final SWMP for public use. The Final SWMP is also available to the public via the Town's public libraries and DPW Offices.  The SWMP is currently being reviewed to ascertain compliance and update for new upcoming requirements.	Measurable Goals Achieved for Permit Year 14.
2-2	Educational Outreach for Spy Pond	Spy Pond Committee, Friends of Spy Pond Park, Planning and Community Development Department	<ul> <li>Spring 2003 – Spring 2017</li> <li>Develop "Reduce Fertilizer Flyer" and track the number of volunteers involved in its distribution.</li> <li>Develop door hanger and track the number of volunteers involved in its distribution.</li> <li>Post Spy Pond-related information on the Spy Pond website and update website regularly. Website was re-designed in 2014.</li> <li>The Spy Pond Committee hosts a booth at Arlington Town Day &amp; Eco-Fest including photo's, printed material, informational handouts and demonstrations.</li> <li>Host booths at Arlington Town Day. A Spy Pond Documentary was prepared by the Spy Pond Committee and aired on ACMI TV.</li> </ul>	Educational outreach continued through distribution of fertilizer reduction flyers to homes in the Spy Pond Watershed by newsletter & hand delivery by high school volunteers. It was reported that flyers were distributed to every household in the watershed.  A booth was staffed at "Town Day" through a combined effort with the Vision2020 Group with many visitors reported. Table provided photographs, printed material, handouts and demonstrations.  The annual "Eco-Fest" included a planning session for the up-coming year.	Measurable Goals Achieved for Permit Year 14. Continue Educational Outreach for Spy Pond.
2-3	Sponsor Annual Cleanup at Spy Pond	Spy Pond Committee, Friends of Spy Pond Park, Department of Public Works, Planning and Community Development Dept.	<ul> <li>Spring 2003 – Spring 2017</li> <li>Track the number of cleanup volunteers and supporting businesses.</li> <li>Track the quantity and types of waste collected as a result of the cleanup event.</li> </ul>	Spy Pond Trails Day is an annual event, which took place again in 2016. There were 2 events in 2016, with approximately 60 volunteers aiding in removing invasive species, performing trail maintenance & stabilization and miscellaneous trash removal and cleanup.	Measurable Goals Achieved for Permit Year 14. Continue to sponsor and track Cleanup Events at Spy Pond.

BMP ID#	BMP Description	Responsible Department/Person	Measurable Goal(s)	Progress on Goal(s) – Permit Year 14	Planned Activities – Future
2-4	Sponsor Storm Drain Marking Activities at Spy Pond	Spy Pond Committee, Planning and Community Development Department	<ul> <li>Spring 2005 – Spring 2017</li> <li>Identify areas where marking will take place and establish schedule for the activity.</li> <li>Track the number of storm drains marked each year.</li> <li>Track the number of volunteers assisting in the marking activity.</li> <li>Provide maintenance to previously installed markers as necessary.</li> <li>Publicize storm drain marking event(s) via a press release to the <i>Arlington Advocate</i>.</li> </ul>	No additional Storm Drain Markers were placed in 2015.	Institute monitoring and maintenance to previously installed markers as necessary is under consideration as the Town develops plans for the implementation of steps necessary for the General Permit.  Identify potential watershed areas where similar marking activities can/should be instituted. Engineering is working with the GIS Department to map watershed tributary areas and identify outfalls located within each.  Update accuracy of outfall tributary locations, storm drain system on GIS Stormwater Pageon-going
2-5	Sponsor Annual Clean-up at Arlington Reservoir	Arlington Reservoir Committee, Department of Public Works	<ul> <li>Spring 2003 – Spring 2017</li> <li>Track the number of cleanup volunteers and supporting businesses.</li> <li>Track the quantity and types of waste collected as a result of the cleanup event.</li> <li>An information kiosk was installed at the Habitat Garden.</li> <li>Events were publicized using email existing lists and the local paper.</li> <li>Information is posted regularly on the site Kiosk</li> </ul>	Work days (6 total) were scheduled one day a month, April – October and included general cleanup, weeding, planting, invasive control & fence mending.  Volunteer days were tracked as follows:  50 days in Habitat Garden  40 days for an Art Show 200 days for MyRWA water chestnut harvesting hand  Website update monthly April - October	Future activities are planned to be extended to the wooded section adjacent to Lowell Street and Lexington Farm.  Measurable Goals Achieved for Permit Year 14.

BMP ID#	BMP Description	Responsible Department/Person	Measurable Goal(s)	Progress on Goal(s) – Permit Year 14	Planned Activities – Future
2-6	Conservation Land Stewards	Arlington Conservation Commission	<ul> <li>Spring 2003 – Spring 2017</li> <li>Track the number of Land Steward volunteers.</li> <li>Maintain records of major activities, such as cleanups, at individual sites.</li> <li>Develop an informational press release on the Land Steward Program for the Arlington Advocate and track whether it was published.</li> <li>Develop an informational brochure on the Land Steward Program and track the number of brochures distributed by residents.</li> <li>Land Steward meeting is held annually.</li> </ul>	There were no Land Steward Meetings held in 2016.  Stewards performed work at the Town's "Crusher Lot and at Cook's Hollow.  The Land Steward Program was advertised at Town Day, gaining one additional volunteer.  The Conservation Commission reevaluates and considers new ways to infuse energy into and participation in the Conservation Land Stewards Program.  A "Policy on Volunteer Projects on Conservation Lands" has been developed and is posted on the Town website.	Solicit new volunteers and interest in the Land Steward Volunteer Program.  Continue to post informational press release on the Land Steward Program for the <i>Arlington Advocate</i> and track whether it was published.  Develop and update informational brochure on the Land Steward Program and track the number of brochures distributed by residents.
2-7	A-B-C Stormwater Flooding Board to Address Issues in the Little River and Alewife Brook Areas	Board of Selectmen, Town Webmaster	<ul> <li>Spring 2004 – Spring 2017</li> <li>Execute the Environmental Joint Powers Agreement.</li> <li>A-B-C Stormwater Flooding Board to meet throughout the permit term.</li> <li>Information and status of Board's activities to be reported on Town website and in the <i>Arlington Advocate</i>.</li> </ul>	The Joint Powers Agreement for the A-B-C Tri-Community Flooding Group was renewed for another 5 years. The group meets on the 2 <sup>nd</sup> Tuesday of alternating months. Notices, Agendas, and Minutes are posted on the Town Website.	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. The meeting notices and/or agenda was posted on the Town Web Page & Calendar.  Invite speakers to provide informational presentations.
2-8	Conduct Lawn Care/Landscaping Survey in Spy Pond Watershed	Spy Pond Committee, Planning and Community Development Department	Summer 2005 – Spring 2016  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.	The Fertilizer Reduction Flyer was updated and distributed to all homes in the Spy Pond Watershed.  Information associated with lawn care/landscaping to reduce fertilizer use was included in flyers provided at the "EcoFest" Annual Forum and at Town Day.	Provide Lawn Care Fact Sheets to be aired as a Community bulletin Board on local ACMI Cable Station.

# 3. Illicit Discharge Detection and Elimination

BMP ID#	BMP Description	Responsible Department/Person	Measurable Goal(s)	Progress on Goal(s) – Permit Year 14	Planned Activities – Future
3-1	Maintain Outfall Location Map	Department of Public Works	Spring 2003 – Spring 2017  Update the outfall location map if there are any changes to the stormwater drainage system during the permit term.	The Stormwater Outfall Location Map has been updated as required.  GIS Mapping has commenced and the accuracy of the locations for many outfalls has been improved.  On the ground survey has been performed along the entire length of Mill Brook. These outfall locations will be provided to the GIS Department.	Continue to update the Stormwater Outfall Location Map as required.  Refine GIS Mapping of the Stormwater Drainage System and its Outfall Locations to include watershed & sub-watershed boundaries, historic properties and districts, and areas of critical habitat and endangered species and Soil hydrologic group classifications.  Plan strategies to map additional infrastructure including oil/gas separators and floor drains, stormwater BMP's, grease traps and Underground Storage Tanks.
3-2	Revision of Existing General and Zoning Bylaws	Planning and Community Development Department, Arlington Conservation Commission, Engineering Division of the Department of Public Works	<ul> <li>Spring 2004 – Spring 2017</li> <li>Review Town's existing General and Zoning Bylaws.</li> <li>Passed bylaws so that they fulfill the regulatory requirements of NPDES Phase II Minimum Control Measures 3, 4, and 5.</li> <li>Have revised bylaws available for public comment to gauge public acceptance and revise as necessary.</li> <li>Present revised bylaws at Town Meeting for adoption.</li> <li>Stormwater bylaws on Town's website.</li> </ul>	The Town's Stormwater By-Laws are posted on the Town Website.  Current sewer & water regulations are being reviewed to provide up to date industry standards.	Continue to maintain the Stormwater By-Laws on the Town Website and update/revise as necessary.  Continue review of sewer & water regulations and include consideration to prepare expanded stormwater regulations.  Strategize to develop the necessary regulations and/or by-laws to track the proper Operation & Maintenance of critical infrastructure and devices (either public or private).

BMP	BMP	Responsible	Measurable Goal(s)	Progress on Goal(s) –	Planned Activities –
ID#	Description	Department/Person		Permit Year 14	Future
3-3	Implement an Illicit Discharge Detection and Elimination Plan	Department of Public Works	Winter 2004 – Winter 2007/2008 Revise Date to Spring 2007 – Spring 2017  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.	On-going sampling and investigation is underway as part of the IDDE program.  Sewer & Drainage rehabilitation work was completed in numerous locations, including re-lining and spot repairs for areas identified as potential cross-contamination locations. Town consultant monitored progress and administration of the construction project. Sampling and investigation continued for Mill Brook outfalls at Grove St. and Beck & Ryder St.  Sewer lining and manhole lining was performed to correct cross connection flow observed by Lexington near 1542 Massachusetts Ave.	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.  Review of the current IDDE Program is planned in conjunction with the new General Permit.

BMP	BMP	Responsible	Measurable Goal(s)	Progress on Goal(s) –	Planned Activities –
ID#	Description	Department/Person		Permit Year 14	Future
3-4	Rehabilitate and Replace Sanitary Sewer Pipes	Department of Public Works	Spring 2003 – Fall 2005 Revise dates to Spring 2003 – Spring 2017  Rehabilitation/replacement of sanitary sewer pipes exfiltrating wastewater.  There is a 12-segment (town areas)-15 year plan to evaluate, design and rehabilitate the entire town's sanitary sewer system.	The Town continues to follow the developed 15 year plan to evaluate, design, and rehabilitate the entire Town's sanitary sewer system.  In 2016, the Town completed the Ph 7 & Ph.8 Sewer rehabilitation work: - 8,700 linear feet of cured-in-place liners to remove infiltration and correct structural defects Grouting and cementitious lining of 370 vertical feet of sewer manholes to remove infiltration Grouting of 213 sewer services to remove infiltration 2,711 linear feet of root treatment to control root intrusion.	There is a 12-segment (town areas)- 15 year plan to evaluate, design and rehabilitate the entire town's sanitary sewer system. The Town Consultant continues to develop and administer the program and update the Town at monthly progress meetings.

3-4	Rehabilitate and Replace Sanitary Sewer Pipes	Department of Public Works	Spring 2003 – Fall 2005 Revise dates to Spring 2003 – Spring 2017  Rehabilitation/replacement of sanitary sewer pipes exfiltrating wastewater.  There is a 12-segment (town areas)-15 year plan to evaluate, design and rehabilitate the entire town's sanitary sewer system.	(continued from previous pg.)  In 2016, the Town completed the following Investigation Work:  Sewer System Investigation: - up to 85,000 linear feet of light cleaning and/or television inspection (Area #10 & Area #11) - 85,000lf of follow up flow isolation - 600 manhole inspections (Area #10 & Area #11)	There is a 12-segment (town areas)- 15 year plan to evaluate, design and rehabilitate the entire town's sanitary sewer system. The Town Consultant continues to develop and administer the program and update the Town at monthly progress meetings.
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BMP ID#	BMP Description	Responsible Department/Pe rson	Measurable Goal(s)	Progress on Goal(s) – Permit Year 14	Planned Activities – Future
3-5	Replacement and Maintenance of Mill Brook Culverts	Department of Public Works	<ul> <li>Summer 2005 – Spring 2017</li> <li>Replace Mill Brook Culvert near Grove Street.</li> <li>Maintain culvert as required.</li> <li>Replace Mill Brook Culvert near Brattle Lane.</li> <li>Construction work has been completed</li> </ul>	After numerous years, work has been completed on this project and been administratively closed.	Project has been closed outMeasurable Goals have been achieved
3-6	Maintenance of Town Water Bodies	Department of Public Works	<ul> <li>Summer 2006 – Spring 2017</li> <li>Establish a fund for the maintenance of Town water bodies.</li> <li>Maintain water bodies as required.</li> </ul>	Approximately \$50,000 a year is used to fund "Article 24" projects. These projects include removing /treatment of weeds at Spy Pond, Arlington Reservoir and other identified water bodies.	Measurable Goals achieved for Permit Year 14.  Continue to maintain water bodies as required.

### 4. Construction Site Stormwater Runoff Control

BMP ID#	BMP Description	Responsible Department or Person	Measurable Goal(s)	Progress on Goal(s) – Permit Year 14	Planned Activities – Future
4-1	Develop a Site Inspection Form and Conduct Site Inspections	Department of Public Works (Engineering Section)	<ul> <li>Spring 2005 – Spring 2017</li> <li>Track the frequency of inspections conducted for each site.</li> <li>Track the completion of inspection forms.</li> <li>Track the number of failed ESC BMPs discovered on each site.</li> <li>Develop a formalized program to review and inspect proposed development plans for stormwater runoff controls and ESC best management practices.</li> <li>Maintain records of the reviews and inspections.</li> </ul>	The town directs construction contractors to clean out and refurbish their erosion controls.  Large projects are required to provide inspection reports associated with SWPP to the Town on an on-going basis.  Reports are archived by the Town.	Track the frequency of inspections conducted for each site when performed.  Track the completion of inspection forms.  Track the number of failed ESC BMPs discovered on each site.  Develop a formalized program to review and inspect proposed development plans for stormwater runoff controls and ESC best management practices.  Maintain records of the reviews and inspections.
4-2	Develop and Implement a Citizen Tip Line	Department of Public Works, Town Webmaster	<ul> <li>Fall 2005 – Spring 2017</li> <li>Establish the Citizen Tip Line.</li> <li>Advertise the Citizen Tip Line.</li> <li>Track the number of complaints received via the Citizen Tip Line.</li> <li>Track the problems/incidents remedied as a result of the Citizen Tip Line.</li> </ul>	The Town uses a web-based question and answer forum, which permits residents to make complaints or comments directly to town offices.	Continue to track the number of complaints received via the Citizen Tip Line.  Continue to track the problems/incidents remedied as a result of the Citizen Tip Line.

#### 4a. Additions

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

BMP ID#	BMP Description	Responsible Department/Pe rson	Measurable Goal(s)	Progress on Goal(s) – Permit Year 14	Planned Activities – Future
5-1	Arlington Redevelopment Board Stormwater Design Guidelines	Planning and Community Development Department, Arlington Redevelopment Board	Spring 2017  > Use DEP's handbook for BMPs.  > Direct developers and consultants to the BMP handbook through DEP's website.	The Environmental Design Review process continues to require proposed development to manage stormwater on-site to the maximum extent possible.  During Permit Year 2016, there were 12 Projects that were reviewed by the Engineering Division for compliance with the Town of Arlington Stormwater Mitigation Bylaw.  Developers and consultants are directed to DEP's website handbook for BMPs and Town Bylaw, Title V, Article 15.	Measurable Goals achieved for Permit Year 14.
Revised			The measurable goals for this BMP have been modified to reflect the Town's decision to direct developers and contractors to information provided through DEP relative to stormwater BMPs.		

### 5a. Additions

BMP ID#	BMP Description	Responsible Department/Pe rson	Measurable Goal(s)	Progress on Goal(s) – Permit Year 14	Planned Activities – Future
5-2	Conservation Commission Permits to Improve Stormwater Quality	Conservation Commission; Department of Public Works	Spring 2006 – Spring 2017  ➤ Issue permits for projects that will improve stormwater quality.  ➤ Track the number of permits issued.	Permits issued: (1) All Redevelopment/New Development projects that fall under the Stormwater Regulations are permitted in accordance with these regulations.	Measurable Goals achieved for Permit Year 14.  Continue to issue permits for projects that will improve stormwater quality

# **6.** Pollution Prevention and Good Housekeeping in Municipal Operations

BMP ID#	BMP Description	Responsible Department/ Person	Measurable Goal(s)	Progress on Goal(s) – Permit Year 14	Planned Activities – Future
6-1	Develop a Formal Training Program for DPW Staff	Department of Public Works	Fall 2004 – Winter 2008/2009 Revise dates to Fall 2008 – Spring 2017  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 participants trained. Conduct refresher training for employees after every two years of employment.	No training program was established. Staffing constraints prevented full training.  The town anticipates that the program will be initiated in the future.	Establish a formal training program for DPW employees. Conduct training sessions with all current employees and refresher training for employees after two years of employment  Train all new DPW employees in accordance with the training program requirements.  Track employee training activities and participants trained.
6-2	Catch Basin Cleaning Program	Department of Public Works	<ul> <li>Spring 2003 – Spring 2017</li> <li>Track the catch basins that are cleaned each year, including the leaching catch basins, Vortechnic devices and oil/water separator.</li> <li>Maintain a log of the disposed materials.</li> </ul>	The DPW completed the annual catch basin cleaning program as scheduled. The DPW maintained a log of disposed materials.  Measurable Goals achieved for Permit Year 14.	Coordinate with GIS Department to create a labeling system for catch basins on the GIS stormwater data layer – In Progress  Create a pilot tracking system to document catchbasin cleaning date and location using GIS. (still in development) – In Progress
6-3	Parking Lot and Street Sweeping Program	Department of Public Works	Spring 2003 – Spring 2017  Track the streets and lots that are swept each year.  Maintain a log of the disposed materials.	The DPW completed annual parking lot and street sweeping program as scheduled. The Town has been divided into 35 districts and this grid system is used to schedule the street sweeping. The DPW maintained a log of disposed materials.  The Hurd Field Porous Pavement Parking Lot was cleaned bi-annually by the Parks Department and vacuumed with a Regenerative Vacuum Machine by a subcontractor.  Measurable Goals achieved for Permit Year 14.	Create a pilot tracking system to document street sweeping date and location using GIS(still in development)

BMP ID#	BMP Description	Responsible Department/ Person	Measurable Goal(s)	Progress on Goal(s) – Permit Year 14	Planned Activities – Future	
6-4	Implement Stormwater Pollution Prevention Plan	Department of Public Works	Fall 2004 – Winter 2008/2009 Revise dates to Fall 2007 – Spring 2017  Review the recommendations outlined in Table 5 of the SWPPP.  Develop a schedule to implement these recommendations.  Track progress in implementing recommendations.	No activities were performed during Permit Year 14.  A program is underway to review current regulations and ordinances including the SWPPP.	Awaiting comments and recommendations from current review of ordinances, by-laws and MS4 General Permit Requirements by Stantec Engineers.  Review the recommendations outlined in Table 5 of the SWPPP.  Develop a schedule to implement these recommendations.  Track progress in implementing recommendations.	
			Spring 2003 – Spring 2017			
6-5	Vehicle and	Department of	Continue to wash vehicles and equipment indoors.	No training program was established.	Incorporate policy requirements into	
	Equipment Cleaning Policy	Public Works	<ul> <li>Incorporate policy requirements into the DPW employee-training program.</li> <li>Construct a new wash bay.</li> </ul>	Staffing constraints prevented full training.	the DPW employee-training program.	
6-6	Develop a Landscaping and	Department of	Spring 2005 – Winter 2008/2009 Revise dates to Spring 2006 – Spring 2017  Develop and implement a landscaping and lawn care	The DPW did not develop a landscaping and lawn care policy during Permit Year	Develop and implement a landscaping and lawn care policy.  Place policy in the DPW employee-	
	Lawn Care Policy	Public Works	policy.  > Place policy in the DPW employee-training manual.  > Document employee training and periodic re-training.	14.	training manual.  Document employee training and periodic re-training.	
			Summer 2004 – Fall 2006 Revise Dates to Summer 2004 – Spring 2017			
6-7	Replace Stormwater Drainage System Along Summer Street	Department of Public Works	<ul> <li>Install new stormwater drainage system in Summer Street.</li> <li>Summer Street drainage installation was completed during the Mass DOT Summer Street Improvements Project.</li> </ul>	The Town continued investigation of drainage infrastructure in 2016. Activities will continue if possible in Permit Year 14.	Investigate and rehabilitate other stormwater system as necessary	
6-8	Maintenance of the Detention Basin at Reed's Brook	Department of Public Works	<ul> <li>Spring 2004 – Spring 2017</li> <li>Develop a maintenance plan for the detention basin at the Reed's Brook site.</li> <li>Educate DPW employees on the proper maintenance of the detention basin and document training and periodic retraining.</li> <li>Maintain records of maintenance activities.</li> </ul>	The DPW continued regular inspection activities 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.	

BMP ID#	BMP Description	Responsible Department/ Person	Measurable Goal(s)	Progress on Goal(s) – Permit Year 14	Planned Activities – Future
6-9	Install Leaching Catch Basins In Spy Pond Watershed	Planning and Community Development Department, Department of Public Works	Summer 2005/2006 – Spring 2017  Develop plans for leaching catch basins.  Install leaching catch basins.	There were two (2) Leaching Catch Basins installed during the 2016 construction season; Permit Year 14.	Develop plans for & install leaching catch basins at strategic locations when possible throughout Town, especially in permeable areas located in East Arlington.
6-10	Stormwater Best Management Practices	Planning and Community Development Department	Spring 2008 – Spring 2017  Develop plans for town rain gardens or other Low Impact Development techniques.	In coordination with an EPA grant, the Town monitored and maintained the 1/3 acre permeable asphalt parking lot at Hurd Field.  The Town in coordination with the Mystic River Watershed Association and the Hardy Elementary School maintained 2 rain gardens; at the Hurd Field Parking Lot and the Hardy Elementary School.  The DEP 604b Water Quality Initiative Grant evaluating low impact development projects was completed in 2014, recommendation from this project are under consideration as future projects.	Continue maintaining and monitoring the three Town rain Gardens located at:  - Hardy Elementary School - Hurd Athletic Field Parking Lot  Consider implementing the projects conceptualized by the DEP 604b Water Quality Initiative Grant in 2014.  Perform outreach to State Agencies to initiate consideration of stormwater BMP's where applicable in Arlington.

## 7. BMPs for Meeting Total Maximum Daily Load (TMDL) Waste Load Allocations (WLA)

### NOT APPLICABLE TO THE TOWN OF ARLINGTON

BMP ID#	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 14 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Future
Revised					
Revised				_	
Revised					
Revised					
Revised					
	dditions				

#### 7b. WLA Assessment

## Part IV. Summary of Information Collected and Analyzed

The Town of Arlington did not collect and/or analyze any data during Permit Year 14.

#### Part V. Program Outputs & Accomplishments (OPTIONAL)

(Since beginning of permit coverage unless specified otherwise by a \*\*, which indicates response is for period covering April 1, 2016 through March 31, 2017)

### **Programmatic**

	(Preferred Units)	Response
Stormwater management position created/staffed	(y/n)	N
Annual program budget/expenditures **	(\$)	
Total program expenditures since beginning of permit coverage	(\$)	
Funding mechanism(s) (General Fund, Enterprise, Utility, etc)		

### **Education, Involvement, and Training**

Estimated number of property owners reached by education program(s)	(# or %)	100
Stormwater management committee established	(y/n)	N
Stream teams established or supported	(# or y/n)	N
Shoreline clean-up participation or quantity of shoreline miles cleaned **		2.25m Spy Pond
	(y/n or mi.)	0.6m Arlington
		Reservoir annually
Shoreline cleaned since beginning of permit coverage	(mi.)	Annual
	(1111.)	accumulation
Household Hazardous Waste Collection Days		
<ul> <li>days sponsored **</li> </ul>	(#)	12
<ul><li>community participation **</li></ul>	(# or %)	~1200
<ul> <li>material collected **</li> </ul>	(tons or	NA
	gal)	NA
School curricula implemented	(y/n)	n

# Legal/Regulatory

	In Place	Reviewing		Draft	
	Prior to	Existing		in	
	Phase II	Authorities	Drafted	Review	Adopted
Regulatory Mechanism Status (indicate with "X")					
Illicit Discharge Detection & Elimination					
Erosion & Sediment Control					
Post-Development Stormwater Management					X
Accompanying Regulation Status (indicate with "X")					
<ul> <li>Illicit Discharge Detection &amp; Elimination</li> </ul>					
■ Erosion & Sediment Control					
<ul> <li>Post-Development Stormwater Management</li> </ul>					

## **Mapping and Illicit Discharges**

	(Preferred Units	) Response
Outfall mapping complete	(%)	100
Estimated or actual number of outfalls	(#)	219
System-Wide mapping complete (complete storm sewer infrastructure)	(%)	100
Mapping method(s)		
<ul> <li>Paper/Mylar</li> </ul>	(%)	100 %
■ CADD	(%)	5 %
■ GIS – (on-going accuracy and confirmation check for condition, size & photo underway)	(%)	95 %
Outfalls inspected/screened **	(# or %)	As by EPA & MyRWA
Outfalls inspected/screened (Since beginning of permit coverage)	(# or %)	As by FST & MyRWA
Illicit discharges identified **	(#)	As by FST & MyRWA
Illicit discharges identified (Since beginning of permit coverage)	(#)	As by FST & MyRWA
Illicit connections removed **	(#); and	As by FST & MyRWA
	(est. gpd)	AS by 151 & MyKWA
Illicit connections removed (Since beginning of permit coverage)	(#); and	As by FST & MyRWA
	(est. gpd)	AS Dy 151 & MyKWA
% of population on sewer	(%)	100
% of population on septic systems	(%)	0

#### Construction

(Preferred Units) Response Number of construction starts (>1-acre) \*\* (#) 0 Estimated percentage of construction starts adequately regulated for erosion and sediment control \*\* (%) NA Site inspections completed \*\* (# or %) NA Tickets/Stop work orders issued \*\* (# or %) NA Fines collected \*\* (# and \$) NA Complaints/concerns received from public \*\* < 5 (#)

#### **Post-Development Stormwater Management**

Estimated percentage of development/redevelopment projects adequately regulated for post-construction stormwater control	(%)	75
Site inspections (for proper BMP installation & operation) completed **	(# or %)	100 %
BMP maintenance required through covenants, escrow, deed restrictions, etc.	(y/n)	N
Low-impact development (LID) practices permitted and encouraged	(y/n)	Y

#### **Operations and Maintenance**

Average frequency of catch basin cleaning (non-commercial/non-arterial streets) **	(times/yr)	Once every 2 years
Average frequency of catch basin cleaning (commercial/arterial or other critical streets) **	(times/yr)	Once every 2 years
Qty of structures cleaned **	(#)	~ 1,000 +/-
Qty. of storm drain cleaned **	(%, LF or mi.)	As Needed
Qty. of screenings/debris removed from storm sewer infrastructure **	(lbs. or tons)	~ 600 ton +/-
Disposal or use of screenings (landfill, POTW, compost, beneficial use, etc.) **	(location)	Landfill

Basin Cleaning Costs		
Annual budget/expenditure (labor & equipment)**	(\$)	Completed in House
Hourly or per basin contract rate **	(\$/hr or \$ per basin)	Completed in House
• Disposal cost**	(\$)	
Cleaning Equipment		
Clam shell truck(s) owned/leased	(#)	1
Vacuum truck(s) owned/leased	(#)	2
Vacuum trucks specified in contracts	(y/n)	N
% Structures cleaned with clam shells **	(%)	99
% Structures cleaned with vactor **	(%)	1

(Preferred Units) Response

	(Preferred Units	(a) Response
Average frequency of street sweeping (non-commercial/non-arterial streets) **	(times/yr)	2
Average frequency of street sweeping (commercial/arterial or other critical streets) **	(times/yr)	30
Qty. of sand/debris collected by sweeping **	(lbs. or tons)	~ 2,250 SY
Disposal of sweepings (landfill, POTW, compost, beneficial use, etc.) **	(location)	Landfill
Annual Sweeping Costs		
Annual budget/expenditure (labor & equipment)**	(\$)	Completed In House
Hourly or lane mile contract rate **	(\$/hr. or	Completed In House
	ln mi.)	Completed in House
Disposal cost**	(\$)	
Sweeping Equipment		
Rotary brush street sweepers owned/leased	(#)	2
Vacuum street sweepers owned/leased	(#)	0
Vacuum street sweepers specified in contracts	(y/n)	0
% Roads swept with rotary brush sweepers **	%	100
% Roads swept with vacuum sweepers **	%	0

Reduction (since beginning of permit coverage) in application on public land of: ("N/A" = never used; "100%" = elimination)		
( N/A – never used, 100% – eminimation)		1
<ul><li>Fertilizers</li></ul>	(lbs. or %)	
<ul> <li>Herbicides</li> </ul>	(lbs. or %)	N/A
<ul> <li>Pesticides</li> </ul>	(lbs. or %)	N/A
Integrated Pest Management (IPM) Practices Implemented	(y/n)	

	(Preferred Units)	Response
Average Ratio of Anti-/De-Icing products used **	% NaCl % CaCl <sub>2</sub>	
(also identify chemicals and ratios used in specific areas, e.g., water supply protection areas)	% MgCl <sub>2</sub> % CMA	98% NaCl
	% Kac	2% Sand
	% KCl % Sand	
Pre-wetting techniques utilized **	(y/n or %)	100%
Manual control spreaders used **	(y/n or %)	50 %
Zero-velocity spreaders used **	(y/n or %)	50 %
Estimated net reduction or increase in typical year salt/chemical application rate	(±lbs/ln mi. or %)	10 %
Estimated net reduction or increase in typical year sand application rate **	(±lbs/ln mi. or %)	10 %
% of salt/chemical pile(s) covered in storage shed(s)	(%)	100
Storage shed(s) in design or under construction	(y/n or #)	No
100% of salt/chemical pile(s) covered in storage shed(s) by May 2008	(y/n)	Yes

## **Water Supply Protection**

Storm water outfalls to public water supplies eliminated or relocated	# or y/n	N/A
Installed or planned treatment BMPs for public drinking water supplies and their protection areas	# or y/n	N/A
• Treatment units induce infiltration within 500-feet of a wellhead protection area	# or y/n	N/A