

April 29, 2011

Ms. Glenda Velez US EPA 5 Post Office Square – OEP06-01 Boston, MA 02109-3912

Re: NPDES Phase II Stormwater General Permit 2010-2011 Annual Report Town of Ayer, MA

Dear Ms. Velez:

On behalf of the Town of Ayer, MA, please find enclosed the NPDES Phase II Stormwater General Permit 2010-2011 Annual Report. The Annual Report has simultaneously been filed with the Massachusetts Department of Environmental Protection (MassDEP).

Should you have any questions or require any additional information, please do not hesitate to contact me at 978-392-5355.

Sincerely,

AMEC Earth & Environmental, Inc.

Rich Niles

Water Resources Project Manager

cc: Fred Civian, MassDEP, Boston Office

Dan Nason, Superintendent of Public Works, Town of Ayer, MA

Enclosure - NPDES Phase II Small MS4 General Permit 2010-2011 Annual Report

Municipality/Organization: Town of Ayer

EPA NPDES Permit Number: MAR04-1179

MaDEP Transmittal Number: W- 040750

Annual Report Number

& Reporting Period: No. 8: May 1, 2010 - April 30, 2011

NPDES PII Small MS4 General Permit Annual Report

Part I. General Information

Contact Person: Daniel F. Nason, CPESC, CPSWQ Title: Superintendent of Public Works

Telephone #: 978-772-8240 Email: dpwsupt@ayer.ma.us

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: James Fay

Title: Chairman, Board of Selectmen

Date: 4-28-2011

Part II. Self-Assessment

The Town of Ayer, Massachusetts has completed the required self-assessment and has determined that our municipality is in compliance with all permit conditions. The Superintendent of Public Works directly managed the stormwater program with various Town Departments, as needed, to implement each of the BMPs. As discussed in the Year 7 Annual Report, the Town obtained funding for a Stormwater Utility Feasibility Study that was completed during the 2010 summer. The Department of Public Works led the efforts to develop a more sustainable funding program for stormwater management and coordinated with various Town Departments to develop an article for the "Stormwater Utility Fund" at the October 25, 2010 Special Town Meeting. DPW conducted two outreach meetings in support of the article on October 4, 2010 for the general public and October 13, 2010 to target local businesses. Approximately 48 people attended the October 13th meeting. Unfortunately, the "Stormwater Utility Fund" article did not pass by a vote of 57 to 53; however, the Town continued to support and implement the activities discussed in this report. Additionally, DPW continued to pursue funding throughout the permit term and met with the Water/Sewer Rate Committee to discuss alternative funding options.

The Town would like to note the following additional activities and progress during the Year 8 reporting period:

- DPW stenciled approximately 400 storm drain in Spring 2011 for a total of 612 in the last 4 years. DPW plans to mark all storm drain locations as part of street sweeping activities and anticipates purchasing metal markers for drains in the highly visible locations (e.g., downtown) of Town.
- The Ayer Parks and Recreation Department conducted an "Organic Lawn Demonstration Project Kick-off Event" at the Ayer Sandy Pont recreation area on June 5, 2010.
- DPW began planning the first "Ayer Public Works Day" for kids in Town to learn about public works operations, including stormwater and water quality. The event is scheduled for May 16, 2011 and will feature a stormwater display and activity.
- An area wide Town Cleanup is scheduled for April 30, 2011. Similar to past years, the Town anticipates that approximately 150 residents will participate and typically ~12-15 cubic yards of trash is collected.
- The Town worked to develop an Intermunicipal Agreement among 9 communities in the Devens Region to create the "Devens Regional Household Hazardous Products Collection Program", which was finalized in January 2011. The program will provide 20 events each year for Ayer residents, starting in June 2011.
- The Town worked with the Montachusett Regional Planning Commission (MRPC) to map parcels and evaluated options/funding for additional mapping.
- The Town hired a consultant to update the SWPPP for the Wastewater Treatment Facility and the SPCC Plan for the DPW Facility. Draft updated plans for each facility were developed in April 2011 and will be completed in May 2011.

Part III. Summary of Minimum Control Measures

1. Public Education and Outreach

BMP ID#	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 8	Planned Activities – Next Permit Term
PE1	Educational materials	DPW	Create educational flyers re stormwater	DPW adapted existing materials available through EPA's website. Posters, brochures, fact sheets, bookmarks and a crossword puzzle were distributed or displayed at the DPW office, Library, Town Hall and Schools based on the audience.	Continue to display existing materials and evaluate the need for additional or new educational materials to address specific behaviors and target audiences. Track the distribution of take-away materials.
Revised			Distribute flyers to residents at two or more events; create a stormwater webpage	DPW created a "Stormwater Information" webpage under the DPW home page to encourage the community to report any stormwater problems. A "Stormwater Hotline" was advertised and a link to a fact sheet for stormwater financing was displayed. DPW distributed flyers related to stormwater funding (see BMP PP2).	Update the Stormwater Information webpage with new materials and upcoming events. Develop a tracking system for calls to the Stormwater Hotline.
PE2	Cable TV info spots	DPW	Create 1 infomercial about stormwater by 5/06	The 10 copies of the EPA video "After the Storm" were still available for viewing at the Town Hall, Library and	Continue to communicate with the Library, School Department, and Cable Access Channel ways in which
Revised			Summer 2007	School Department. The video was also displayed on the local Cable Access Channel. Public meetings related to BMP PP2 were broadcast on local cable TV.	they can use the video and promote its use to raise public awareness. DPW will consider options for a link to EPA's "After the Storm" website on their webpage.
PE3 Revised	Drain Stenciling	DPW	Stencil storm drains by 5/06 25% of storm drains marked by Fall 2007	DPW stenciled approximately 400 storm drain in Spring 2011 for a total of 612 in the last 4 years. DPW plans to mark all storm drain locations as part of street sweeping activities and anticipates purchasing metal markers for drains in the highly visible locations (e.g., downtown) of Town. DPW maintains a list of marked storm drain locations.	Complete storm drain stenciling for all catch basins and refresh stencils as needed. Install metal markers at highly visible locations in Town and maintain a database of marked locations.

Town of Ayer NPDES PII Small MS4 General Permit Annual Report MADEP Transmittal Number: W-040750

BMP ID#	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 8	Planned Activities – Next Permit Term
PE4 Revised	Lawn Care Workshops	SWSC/DPW	Hold 1 workshop by 5/07	Completed in 2007 and no action was planned for Year 8. However, the Ayer Parks and Recreation Department conducted an "Organic Lawn Demonstration Project Kick-off Event" at the Ayer Sandy Pont recreation area on June 5, 2010. An article discussing the event was published in the local paper on June 11, 2010.	Continue organic lawn care workshops as staff time and resources are available. Will look into additional workshops for next permit term.
PE5	Educational Displays on stormwater mgt	SWSC/DPW	Create 1 display for use at town functions by 5/08	Various materials were displayed/ updated at the Town Hall, DPW, Library and schools (see BMP PE 1).	Update and/or refresh posters/materials annually and continue to display them at public places.
				DPW began planning the first "Ayer Public Works Day" for kids in Town to learn about public works operations, including stormwater and water quality. The event is scheduled for May 16, 2011 and will feature a stormwater display and activity.	Display stormwater educational materials at the Ayer Public Works Day and evaluate additional opportunities/events to display educational materials.

None at this time.

2. Public Involvement and Participation

BMP ID#	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 8	Planned Activities – Next Permit Term
PP1	Establish Committee	Board of Selectmen	Est. committee by 11/03	Stormwater Committee members (DPW, Conservation & Town	Committee will continue to develop a funding option for stormwater
Revised			July 2007	Administrator) met on multiple occasions related to the stormwater utility feasibility study and public meetings (seem BMP PP2). The roles/responsibilities for BMP tasks were managed directly by DPW with each Town Department, as needed.	management activities (e.g., utility). DPW will continue to coordinate directly with Town Departments for BMP tasks.

Town of Ayer NPDES PII Small MS4 General Permit Annual Report MADEP Transmittal Number: W-040750

BMP ID#	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 8	Planned Activities – Next Permit Term
PP2 Revised	Public Info Meetings	SWSC	2 meetings in 2004 One meeting annually, # of people attended	The Stormwater Utility Feasibility Study was completed during the 2010 summer and DPW worked with various Town Departments to develop an article for the "Stormwater Utility Fund" at the October 25, 2010 Special Town Meeting. DPW distributed flyers and conducted two outreach meetings in support of the article on October 4, 2010 for the general public and October 13, 2010 to target local businesses. Approximately 48 people attended the October 13 th meeting. The "Stormwater Utility Fund" article did not pass at the October 25 th meeting by a vote of 57 to 43, but DPW continued to pursue funding throughout the permit term and met with the Water/Sewer Rate Committee.	Continue to provide adequate public notice and host Public Informational Meetings annually to discuss stormwater issues and needs, including funding. Track the number of attendees at each meeting.
PP3 Revised	Annual Roadside Cleanup	SWSC/DPW	Schedule 1 cleanup day by 4/05 1 cleanup annually, # participants	An area wide Town Cleanup is scheduled for April 30, 2011. Similar to past years, the Town anticipates that approximately 150 residents will participate and typically ~12-15 cubic yards of trash is collected. A town volunteer, who also heads the Recycling Committee, coordinated the program. An article with the results of the cleanup event will be published in the local paper.	Continue to organize at least one cleanup activity annually and track participation and volume collected. Consider streams and additional priority cleanup priority areas.
PP4 Revised	Establish neighborhood watch groups Establish a Stormwater Hotline	SWSC/DPW	Create 4 groups by 4/06 Hotline established, # calls received & follow-up actions	The Stormwater Hotline was advertised on local TV and posted on the "Stormwater Information" webpage under the DPW home page. One call was received regarding a sump pump discharge into a catch basin near Forest and Calvin Streets. DPW addressed the issue to ensure no pollutants were discharging to the storm drain system.	Continue to promote the hotline through the web page, local TV, and stormwater educational materials. Continue to record calls and follow-up actions to address stormwater issues.

BMP ID#	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 8	Planned Activities – Next Permit Term
PP5	Reforestation	ConsCom	Establish plan to require/encourage planting of cleared areas	Currently there is no funding source for a native tree replanting program. ConsCom requires native tree/shrub	Continue to evaluate potential program funding sources.
Revised	Native Tree Replanting Program	And Tree Warden		species to be planted to fulfill the requirements of specific wetland permits.	

BMP ID#	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 8	Planned Activities – Next Permit Term
PP6	Hazardous Waste Collection Program	Ayer Recycling Committee	Conduct yearly hazardous waste collection day (HWCD)	The Town of Ayer did not host or participate in a household hazardous waste collection event in 2010.	Conduct hazardous waste collections as part of the regional program and incorporate/advertise information to prevent illegal dumping.
Revised				However, the Town worked to develop an Intermunicipal Agreement among 9 communities in the Devens Region to create the "Devens Regional Household Hazardous Products Collection Program", which was finalized in January 2011. The program will provide 20 events each year for Ayer residents, starting in June 2011. The Ayer Transfer Station collected 1,185 gallons of waste oil in 2010.	Begin tracking Ayer resident participation and waste collection results.

BMP ID#	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 8	Planned Activities – Next Permit Term
PP7	Mercury Waste Collection for Residents	Ayer Recycling Committee & DPW	Make mercury waste collection available to residents, # materials collected	Posters were displayed to raise awareness of mercury collection at the Transfer Station and the DPW Office. Information related to the collection of	Continue to promote mercury waste collection boxes through posters and the DPW web page.
Revised				mercury products at the Transfer Station was advertised on the DPW web page.	Continue to track results of mercury collection activities.
				The Town continued to work with Covanta to collect mercury products by setting up collection boxes at the local Aubuchon Hardware store and Transfer Station. 539 various bulbs, 19-4" thermometers, 36 thermostats and 8,060 feet of straight bulbs have been	
				collected. A total of 1,639 grams of elemental mercury were collected.	

${\bf 3.}\ \, {\bf Illicit\ Discharge\ Detection\ and\ Elimination}$

BMP	BMP Description	Responsible	Measurable Goal(s)	Progress on Goal(s) -	Planned Activities –
ID#		Dept./Person		Permit Year 8	Next Permit Term
		Name		(Reliance on non-municipal partners	
				indicated, if any)	
ID1	System Mapping	DPW	Complete system map	The Town previously updated the	Continue to update the drainage map
			by 3/05	drainage map with all known and	as structures are located and as new
Revised	Drainage System		9/06	visible catch basins and outfalls. The	developments are constructed.
	Mapping			Town worked with the Montachusett	Continue to work with NRWA to
				Regional Planning Commission	update the parcel maps and consider
				(MRPC) to potentially map parcels and	additional mapping efforts that relate
				evaluated options/ funding for	to stormwater management.
				additional mapping.	
ID2	ID illicit discharges	DPW	Conduct inspections	No obvious illicit discharges were	Train new staff on how to conduct
			by 11/05	observed during the permit term.	dry weather inspections using the
Revised	Screen Outfalls for	Volunteer &	Record of inspections		existing SOP and refresh training
	Illicit Discharges	Consultant	& follow-up actions	As discussed under BMP PP4, one call	annually for all staff.
			_	was received regarding a sump pump	
				discharge and DPW addressed the	Continue outfall inspections for
				issue.	potential illicit discharges.

BMP ID#	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 8	Planned Activities – Next Permit Term
ID3	Prohibit illicit discharges	DPW/BoH	Establish regulatory mechanisms to prohibit by 4/06	As discussed in the Year 6 annual report, the Illicit Discharge Bylaw (Article XLVII of the General Bylaws)	No further action needed.
Revised	Develop a Local Illicit Discharge Prohibition		Spring 2008	was adopted at the May 2008 Annual Town Meeting.	
			The Town amended the Bylaw at the October 25, 2011 Special Town Meeting to revise language related to enforcement.		
ID4	Cost of illicit discharges	DPW	Plan for removal options	No illicit discharges were found.	
Revised	Illicit Discharge Removal Options				
ID5	Eliminate illicit discharges	DPW	Show # of re-routed connections	No illicit discharges were found during this permit year.	Remove illicit discharges as they are identified.
Revised			Illicit discharges removed within 1 year of discovery		

ID6	Public Education for Illicit Discharges	SWSC & DPW	Distribute education materials at least	The "Stormwater Information" webpage under the DPW home page	Promote the use of the Stormwater Hotline to report illicit discharges in
Revised			annually	continued to include information	an educational brochure distributed to
Revised				related to illegal dumping, associated impacts to waterways, and the	residents, at public events, and public places.
				Stormwater Hotline.	places.
				Information targeting a variety of types	
				of illicit discharges is presented in the various education materials discussed	
				under BMP PE1.	

4. Construction Site Stormwater Runoff Control

BMP ID#	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 8	Planned Activities – Next Permit Term
CRC1	Establish water quality benchmarks	DPW	Develop score sheet and do Rd 1 of testing	As discussed in the Year 6 annual report, the Stormwater Bylaw (Article	See BMP CRC4.
Revised	Select Existing Water Quality Criteria		Water quality criteria selected	XLVII of the General Bylaws) was adopted at the May 2008 Annual Town Meeting. This Bylaw included criteria/requirements to address water quality.	
				The Town amended the Bylaw at the October 25, 2011 Special Town Meeting to revise language related to exempt activities and enforcement.	
CRC2	Site Inspection Criteria	DPW	Develop site inspection criteria by 5/05	Water, Sewer, and Highway Departments conduct inspections on all of their projects using the standardized	Continue to inspect all sites, review the inspection form and update as necessary.
Revised			Standardized inspection form	inspection form. The Town's consultant conducted numerous inspections for subdivision and land development projects.	Develop a central location for inspection forms and maintain a log of issues and corrective actions taken.
CRC3	Staff training re site inspections	DPW	Train all applicable staff by 5/06	The Highway Superintendent attended a training session titled "Erosion Control	Update training annually for all staff using existing curriculum, through
Revised			Training program & record of staff trained	and Stormwater Management for Construction Site Supervisors" on June 24, 2010.	joint training sessions or outside resources.
CRC4	Tighten regulatory controls	DPW/ConsCom	Review existing regs and propose updates as needed by 5/06	The Planning Board reviewed draft regulations to be implemented under the Stormwater Bylaw.	Finalize and implement the draft regulations through the Planning Board.
Revised	Develop Requirements for Sites >1 acre		Spring 2008		
CRC5	Maximum compliance	DPW	Achieve overall compliance	Erosion and sediment control issues were identified and addressed by the	Continue to inspect and address erosion and sediment control issues
Revised	Erosion & Sediment Control Compliance		Record of inspections & follow-up actions	appropriate Town Department. DPW continued to evaluate best practices to track erosion and sediment control activities performed by the Town.	and record corrective actions.

BMP	BMP Description	Responsible	Measurable Goal(s)	Progress on Goal(s) -	Planned Activities –
ID#		Dept./Person		Permit Year 8	Next Permit Term
		Name			
CRC6	Construction Waste	DPW/Building	# of inspections in	Inspections at on-going construction	Continued to coordinate inspections
	Mgt	Dept.	2006	sites were completed and construction	with BMPs CRC2 and CRC5 and
Revised			Record of inspections	waste was controlled as needed. DPW	record corrective actions.
			& follow-up actions	evaluated methods to track erosion and	
				sediment control issues.	
	Establish a Procedure	SWSC/DPW	# of issues reported,	No calls were received related to	Continue to log calls and address
CRC7	for the Receipt of		record of enforcement	construction sites. Typically the	construction site erosion issues.
	Information Submitted		actions	Conservation Commission receives	
	by the Public			calls regarding sites subject to the	
Revised				Wetlands Protection Act. The Town	
				responded to erosion issues at a	
				subdivision site that drains to Bennetts	
				Brook and a site along Willow Road.	

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

BMP	BMP Description	Responsible	Measurable Goal(s)	Progress on Goal(s) -	Planned Activities –
ID#		Dept./Person		Permit Year 8	Next Permit Term
		Name			
RC1	ID BMPs	DPW/ConsCom	Review existing regs	As discussed in the Year 6 annual	Finalize and implement the draft
		/Planning Board	and draft new as	report, the Stormwater Bylaw was	regulations through the Planning
			needed by 12/05	adopted at the May 2008 Annual Town	Board.
Revised	Incorporate BMP		Fall 2007	Meeting. This Bylaw included	
	Design Criteria			criteria/requirements to address BMP	
				design. The Planning Board reviewed	
				draft regulations to be implemented	
				under the Stormwater Bylaw.	
RC2	Acceptance of new	DPW/ConsCom	Codify new by 5/06	As discussed in the Year 6 annual	See BMP RC1.
	regs/bylaws as needed	/Planning Board		report, the Stormwater Bylaw (Article	
Revised	Develop Requirements		Spring 2008	XLVII of the General Bylaws) was	
	for Sites >1 acre			adopted at the May 2008 Annual Town	
				Meeting. The Town amended the	
				Bylaw at the October 25, 2011 Special	
				Town Meeting to revise language	
				related to exempt activities and	
				enforcement.	

BMP	BMP Description	Responsible	Measurable Goal(s)	Progress on Goal(s) -	Planned Activities –		
ID#		Dept./Person		Permit Year 8	Next Permit Term		
		Name					
RC3	Construction Waste Mgt	This BMP was removed from this section and added to Section 4, under BMP CRC6 to be consistent with the requirements					
Revised		101 Construction 8	for construction site management.				
RC4	Evaluate Water Quality	DPW	Round 2 of testing	As discussed in the Year 6 annual	See BMP RC1.		
				report, the Stormwater Bylaw was			
Revised	Select Existing Water		Water quality criteria	adopted at the May 2008 Annual Town			
	Quality Criteria		selected	Meeting. This Bylaw included			
				criteria/requirements to address water			
				quality.			

6. Pollution Prevention and Good Housekeeping in Municipal Operations

BMP ID#	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 8	Planned Activities – Next Permit Term
GH1 Revised	Survey facilities and existing practices, etc	DPW	Do self survey	Municipal industrial facilities were inspected for pollution prevention practices. Hazardous wastes and materials were contained and stored indoors to avoid stormwater contact. The Sewer Dept. inspected and maintained the o/w separator located within the DPW yard for the vehicle wash system and found it good operating condition. A contractor removed and disposed of approximately 580 tons of catch basin cleanings and street sweepings from the DPW stock yard.	Continue existing pollution prevention practices at municipal facilities and update based on the results of activities discussed under BMP GH6. Continue to utilize Contractor to remove catch basin cleanings and street sweepings from DPW stock yard. Continue to inspect and maintain oil/water separator using the inspection form.
GH2 Revised	Develop training manual	DPW	Create manual by 12/04	An inspection curriculum was previously developed and served as a reference for DPW staff. SPCC, SWPPP and Environment Operation Procedures manuals are in use.	Update the current manuals for pollution prevention and good housekeeping activities based on the results of plan updates discussed under BMP GH6.

BMP ID#	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 8	Planned Activities – Next Permit Term
GH3 Revised	Train Employees	DPW	Train ALL staff by 5/05 Incorporate new training topics	DPW staff viewed the video "After the Storm" on two occasions and discussed pollution prevention activities. As discussed under BMP CRC3, the Highway Superintendent attended a training session titled "Erosion Control and Stormwater Management for Construction Site Supervisors" on June 24, 2010.	Update training program based on the updated plans under BMP GH6. Show and review the "After the Storm" video as a part of the pollution prevention and good housekeeping training program.
GH4 Revised	Implement maintenance schedule	DPW	Implement veh and facilities maintenance schedule by 5/06	DPW vehicles were maintained to minimize fluid leaks.	Ensure maintenance schedules are followed to minimize potential stormwater impacts. Incorporate proper maintenance procedures into the employee training program (BMP GH3).
GH5 Revised	Evaluate Program	DPW	ID of facilities with controls in place by 5/07 Fall 2007	DPW reviewed the need to update existing facility planning and training documents, as discussed in this report.	Re-evaluate municipal facilities and operations and develop/implement BMPs as needed. Continue to evaluate funding sources for program implementation.

GH6	Municipal Facility Plans	DPW	Compliance with SWPPP & SPCC Plans	The Town hired a consultant to update the SWPPP for the Wastewater Treatment Facility and the SPCC Plan	Ensure compliance with the updated facility plans at the Wastewater Treatment Plant and DPW Facility.
Revised				for the DPW Facility. Draft updated plans for each facility were developed in April 2011 and will be completed in May 2011. These plans assist with pollution prevention at these facilities.	

7. BMPs for Meeting Total Maximum Daily Load (TMDL) Waste Load Allocations (WLA) << if applicable>>

BMP	BMP Description	Responsible	Measurable Goal(s)	Progress on Goal(s) -	Planned Activities –
ID#		Dept./Person		Permit Year 8	Next Permit Term
		Name		(Reliance on non-municipal partners	
				indicated, if any)	
7.1	TMDL study	Department of		The next steps for developing a water	Review the Phase II Permit once
		Defense;		quality strategy are pending the	finalized and develop an
	[NRWA	[reissuance of the Phase II Permit.	implementation strategy under the
Revised	Evaluate TMDL	SWSC/DPW	Review Memo and		new permit and the Town's SWMP.
	Studies & Status of		Recommended Next		
	Town BMPs to Address		Steps		The Town anticipates that the
	Impaired Waters				strategy will consider the goals of the
	_				draft TMDL*, available resources,
					actions currently being undertaken by
					Ayer, and actions by others.

^{*}A draft phosphorus TMDL study is available for the Nashua River, which drains the majority of Ayer.

Part IV. Summary of Information Collected and Analyzed

The Town has nearly completed the town-wide drainage system map, including outfall locations. Previous mapping efforts resulted in approximately 800 structures and 80 outfalls show on the drainage map.

Legal/Regulatory

	In Place Prior to	Under		
	Phase II	Review	Drafted	Adopted
Regulatory Mechanism Status (indicate with "X")				
■ Illicit Discharge Detection & Elimination				X
■ Erosion & Sediment Control				X
Post-Development Stormwater Management				X
Accompanying Regulation Status (indicate with "X")			<u> </u>	
 Illicit Discharge Detection & Elimination 			X	
■ Erosion & Sediment Control			X	
Post-Development Stormwater Management			X	

Mapping and Illicit Discharges

Outfall mapping complete	(%)	100%
Estimated or actual number of outfalls	(#)	80
System-Wide mapping complete	(%)	95%
Mapping method(s)		
■ Paper/Mylar	(%)	95%
■ CADD	(%)	90%
• GIS	(%)	
Outfalls inspected/screened	(# or %)	0
Illicit discharges identified	(#)	0
Illicit connections removed	(#)	
	(est. gpd)	
% of population on sewer	(%)	97%
% of population on septic systems	(%)	3%

Construction

Number of construction starts (>1-acre)	(#)	None
Estimated percentage of construction starts adequately regulated for erosion and sediment control	(%)	N/A
Site inspections completed	(# or %)	100%
Tickets/Stop work orders issued	(# or %)	0
Fines collected	(# and \$)	0
Complaints/concerns received from public	(#)	2

Post-Development Stormwater Management

Estimated percentage of development/redevelopment projects adequately regulated for post-	(%)	100%
construction stormwater control		
Site inspections completed	(# or %)	100%
Estimated volume of stormwater recharged	(gpy)	TBD

Operations and Maintenance

Average frequency of catch basin cleaning (non-commercial/non-arterial streets)	(times/yr)	1/yr
Average frequency of catch basin cleaning (commercial/arterial or other critical streets)	(times/yr)	1/yr
Total number of structures cleaned	(#)	800
Storm drain cleaned	(LF or mi.)	
Qty. of cleanings /debris removed from storm sewer infrastructure	(lbs. or tons)	200-300 tons
Disposal or use of cleanings (landfill, POTW, compost, recycle for sand, beneficial use, etc.)		Removed by
		outside
		Contractor
Cost of cleanings disposal	(\$)	29.50 / ton

Average frequency of street sweeping (non-commercial/non-arterial streets)	(times/yr)	1/yr
Average frequency of street sweeping (commercial/arterial or other critical streets)	(times/yr)	7/yr
Qty. of sand/debris collected by sweeping	(lbs. or tons)	200-300 tons
Disposal of sweepings (landfill, POTW, compost, beneficial use, etc.)	(location)	Store, then
		dispose of
Cost of sweepings disposal	(\$)	29.50 / ton
Vacuum street sweepers purchased/leased	(#)	N/A
Vacuum street sweepers specified in contracts	(y/n)	N/A

Reduction in application on public land of: ("N/A" = never used; "100%" = elimination)		
 Fertilizers 	(lbs. or %)	N/A
 Herbicides 	(lbs. or %)	N/A
 Pesticides 	(lbs. or %)	N/A

Anti-/De-Icing products and ratios	% NaCl	Ice-Ban
	% CaCl ₂	(MgCl ₂)
	% MgCl ₂	added to salt
	% CMA	stockpile,
	% Kac	sand
	% KCl	eliminated*
	% Sand	
Pre-wetting techniques utilized	(y/n)	N
Manual control spreaders used	(y/n)	Y
Automatic or Zero-velocity spreaders used	(y/n)	N
Estimated net reduction in typical year salt application	(lbs. or %)	Unknown*
Salt pile(s) covered in storage shed(s)	(y/n)	Y
Storage shed(s) in design or under construction	(y/n)	N

^{*}The Ayer DPW continued the use of Ice-Ban and salt without sand to improve the effectiveness of salt treatments without an increase in the salt application rate. This mixture reduces the financial and environmental impacts of sand application and removal (i.e., street sweeping & catch basin cleaning).