

Organization: **Town of Agawam, Massachusetts**

PERMIT YEAR 14: 2017 ANNUAL REPORT

NPDES PERMIT # MAR 041 001

Reporting Period: May 2016– April 2017

MA DEP Transmittal X274792

NPDES Phase II Small MS4 General Permit Annual Report

Part 1. General Information

Contact Person: **Chris Golba**

Title: **Superintendent
Department of Public Works**

Telephone Number: **413-821-0623**

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: 

Name: Richard A Cohen

Title: Mayor

Date: April 27, 2017

Part 2. Introduction

The following is the Town of Agawam Massachusetts Annual Report as required by the EPA NPDES Phase II Small MS4 General Permit Regulations. This report is for Year 14 of the existing five year permit cycle. This report includes a self-assessment review of compliance with the permit conditions, an assessment of the appropriateness of the selected BMPs, an assessment of the progress towards achieving the measurable goals, a summary of results of any information that has been collected and analyzed, a discussion of activities for the next reporting cycle, a discussion of any changes in identified BMPs or measurable goals, and reference to any reliance on another entity for achieving any measurable goal.

RELIANCE ON OTHER ENTITIES

INTER-CONNECTED MS4s - The Town of Agawam has interconnected MS4s within its boundaries as follows: Massachusetts Highway Department controls certain State numbered routes, Massachusetts Department of Environmental Management controls Robinson State Park on the Westfield River, the Springfield Water and Sewer Commission controls the Bondi's Island Regional Treatment Facility on the Connecticut and Westfield Rivers, and the City of Springfield owns and operates the Bondi's Island Landfill on the Westfield River. Each of these facilities have drainage systems which are separate from or interconnect to the Town of Agawam's drainage system but are under control and operation by entities other than the Town of Agawam.

VOLUNTEERS – Several of the permit conditions within the minimum control measure for public participation relies on the interest and participation of volunteers.

SELF-ASSESSMENT

During permit year 14 of the EPA NPDES Phase II Small MS4 General Permit, the Town of Agawam continued to work to improve the quality of stormwater runoff using the six Minimum Control Best Management Practices as a guideline as well as the anticipated future permit requirement changes.

Public Education and Outreach continued to be implemented year round. Activities included educational displays, local cable access bulletins, community website news and events, newspaper press releases and informational pamphlets. Messages included watershed education, water conservation, protecting our groundwater, proper pet waste disposal, "FOG" fats, oils and grease, and HHW disposal.

Public Involvement and Participation activities continue to depend on volunteers and funding. The CT River Watershed and Westfield River Watershed have been very instrumental in

recruiting volunteers and helping the Town of Agawam keep the area along the CT River clean. In addition, the town was successful with public participation at its annual Household Hazardous Waste collection, river clean-up, proper disposal of sharps at the Health Department and pet waste survey participation.

The Town has continued to update the GIS mapping of the stormwater system and resolve reported illicit discharge issues through the Illicit Discharge Detection and Elimination program. The DPW (with the help of the Conservation Commission) continued to perform diligent inspections of construction sites and ensured that the Town's Construction Runoff Ordinance has been properly adhered to. Due to a lack of funding and manpower, the Town has had difficulty inspecting existing drainage outfalls and detention ponds for illicit discharges and any necessary maintenance. In 2011 under contract for the Town, Tighe & Bond inspected and confirmed the locations of all existing drainage outfalls and performed illicit discharge testing. Tighe & Bond completed this work with the assistance of the Agawam Engineering Division. All outfalls that were able to be located were inspected, photographed and linked to our GIS database.

In year 9, the Town reported about the progress of the South West Area Sewer expansion project, designed to help eliminate the use of septic systems in the area which have a history of failing. Due to budget constraints, that project has been postponed indefinitely. In response to this, the DPW/Engineering Division will closely monitor the storm drainage system in the southwest area of town for any potential illicit discharges. If an illicit discharge is reported, the DPW will take steps to immediately correct the problem.

In permit year 13, the DPW, in conjunction with the Pioneer Valley Planning Commission, applied and was approved for a 319 Nonpoint Source Pollution Grant. This grant will allow the Town of Agawam to study the possibility of establishing a stormwater utility similar to other communities in the area. The work will include identifying major needs and costs for the municipal stormwater program and evaluating billing, unit, rate and other financial considerations. In permit year 14, a local advisory task force, comprised of Town employees, businesses and residents, has been formed to research the major needs, priorities, and costs for Agawam's municipal stormwater management program and to evaluate the feasibility of establishing a stormwater utility or fee to fund the future program. The task force is scheduled for its first meeting on April 26th.

In anticipation of the release of the final version of the updated NPDES Phase II Small MS4 General Permit for Massachusetts, the Town of Agawam has begun the process of purchasing new equipment in order to comply with the regulations projected to be included within the permit based on our review of previous draft versions. The town now has in stock water quality test kits for detecting ammonia, pH, temperature, nitrates, chlorine and detergents within stormwater discharges.

In permit year 13, the Town purchased a new RapidView portable camera inspection system from C.N. Wood Co. Inc. This camera system, which includes a camera mounted on a tractor that can be operated via a portable control module, will allow the Town to perform

inspections of the storm sewer system utilizing DPW personnel rather than contracting the service out. In this manner, the DPW will be able to find defects within drainage pipes and structures, locate illicit connections, and inspect stormwater outfalls more efficiently and at a much lower cost.

Good Housekeeping and Pollution Prevention practices continue to be a priority throughout the town. Employees continue to be educated on best management practices for municipal operations. Organic lawn care practices, street sweeping, catch basin cleaning and repairs, HHW collection, used motor oil collection, mercury waste collection, prescription drug drop off and sharps collections continue to take place as funding is available.

The Town of Agawam believes it has made a good effort in better educating residents, businesses and town employees and implementing best management practices that would help reduce negative impacts on stormwater runoff that would affect our water supplies.

PART 3. STORMWATER MANAGEMENT PROGRAM**MINIMUM CONTROL BEST MANAGEMENT PRACTICES****SECTION 1 – Public Education and Outreach****1A Educational Displays**Original BMP Description:

The Town will post one educational display per year in the Municipal Buildings. Displays will contain information on stormwater related issues and may be obtained from an applicable governmental or other public agency, purchased from a distributor, or created by students working on projects under BMP #1B. The Department of Public Works (DPW) will have responsibility for this BMP, which will be utilized in Years 1 through 5.

Year 14 Activities

The town continues to use posters available through the “Think Blue MA” Campaign at the Town Hall and DPW Municipal Annex. Due to the continued findings of pet waste bags within the storm drains and the number of complaints about waste not being picked up, the town chose to continue displaying the Think Blue Pet Waste poster in the Animal Control Officers office, encouraging the proper disposal of pet waste.

The DPW continues to have available a community literature area. At this time, residents have available to them the following literature at the DPW:

- 13 Ways to Conserve Water at Home
- Water – Every drop counts
- Ground Water – Protecting our supplies
- “FOG” Fats, Oils and Grease
- Disposal of Household Chemicals and sustaining the water supply – NEW!

The DPW continues to use the conference room bulletin board to display stormwater related topics and news relevant to home owners, businesses, developers, industrial properties, and municipal employees. Due to the number of citizens expressing a concern about the disposal of cigarette butts on the streets, the DPW has posted the “Think Blue MA” poster, encouraging the proper disposal of cigarette butts.

See Appendix 1A

Best Management Practice Assessment / Proposed Changes

Goal has been met. No changes proposed at this time.

Possible Future Activities

As necessary, the town will continue to educate the community on stormwater related topics using municipal buildings and businesses as a means to distribute the materials.

1B Classroom Education

Original BMP Description:

The Town will continue the science curriculum and encourage stormwater educational topics to be included in the curriculum for Grades 4 through 8. At minimum, the curriculum will include one presentation given to the students about stormwater related topics. The School Department will be responsible for this BMP, which will be implemented in Years 1 through 5.

Revised BMP Description:

The Agawam Public Schools will use the recommended teaching lessons from the state MCAS standards in grades K – 10 to increase awareness about stormwater related topics. The DPW will continue to support programs within the schools as funding is available as well as continue to seek volunteers for stormwater projects throughout the community.

Year 14 Activities

The DPW continued to offer an Enviroscope Watershed Model for use at any of the elementary and middle school locations. All schools were notified of the availability of the watershed model for classroom use.

Best Management Practice Assessment / Proposed Change

No proposed changes to this BMP

Possible Future Activities

It is anticipated that the DPW will coordinate the Watershed on Wheels "WOW" Express to visit the Middle School students in the fall of 2017, if the program continues to be available.

1C Local Cable AccessOriginal BMP Description:

The Town will post two informational bulletins per year on the local cable access channel. Bulletins will contain information on stormwater related issues and associated community activities. The DPW will have responsibility for this BMP, which will be utilized in Years 1 through 5.

Year 14 Activities

During permit year 14 the Town of Agawam posted the following information to help viewers learn more about stormwater management, healthy habits, and community activities.

- River Clean-up, WRWS
- Household Hazardous Waste Collection, Department of Public Works

Best Management Practice Assessment / Proposed Change

No proposed changes to this BMP.

Possible Future Activities

The town will continue to post educational bulletins and community activities as they arise.

1D Community WebsiteOriginal BMP Description:

The Town will post stormwater educational information on the community website two times per year. The website will include a link to DEP's website and updates annually or as needed. The DPW will be responsible for this BMP, which will be implemented in Year 1 and updated in Years 2 through 5.

Year 14 Activities

During permit year 14 the Town of Agawam updated the Events section of the town website to include the following information to help viewers learn more about stormwater management, healthy habits, and community activities.

- River Clean-up, WRWS
- Household Hazardous Waste Collection, Department of Public Works

The DPW continues to make available a link to an electronic version of the current stormwater report.

The Stormwater page was updated to include a link to the EPA Soak up the Rain Campaign Website.

Best Management Practice Assessment / Proposed Change

No proposed changes to this BMP

Future Activities

The DPW will continue to update the website as necessary as to keep the general public informed of stormwater issues and environmental events.

1E Newspaper Press Releases

Original BMP Description:

The Town will send out two press releases per year to the local newspaper. Press releases will contain information on stormwater related issues and community activities. The DPW will have responsibility for this, which will be utilized in Years 1 through 5.

Year 14 Activities

During permit year 14, the following press releases were sent and published in local newspapers.

- River Clean-up, WRWS
- Household Hazardous Waste Collection, Department of Public Works
- Stormwater Task Force

See Appendix 1E

Best Management Practice Assessment / Proposed Change

No proposed changes

Possible Future Activities

Town will continue to send out press releases to local newspapers throughout permit year 15.

1F Informational PamphletsOriginal BMP Description:

The Town will distribute one informational pamphlet or notice per year to every household Town-wide. The pamphlet or notice will likely be included with the mailing of the Consumer Confidence Report on water quality. Pamphlets will contain information on stormwater related issues and may be obtained from an applicable governmental or other public agency, purchased from a distributor, or possibly created by student's project under BMP #1B. The DPW will have responsibility for this BMP, which will be utilized in Years 1, 3, and 5.

Year 14 Activities

In June 2016, the town distributed approximately 12,500 Aqua Almanacs to all businesses and dwelling units in Agawam. The Town again included a "FOG", Fat's Oils and Grease flyer, providing best management practices for both home owners and food service establishments.

Best Management Practice Assessment / Proposed Change

No proposed changes.

Possible Future Activities

Pending future General Permit Requirements

MINIMUM CONTROL BEST MANAGEMENT PRACTICES**SECTION 2 - PUBLIC INVOLVMENT AND PARTICIPATION****2A Adopt-a-Road**Original BMP Description:

The Town will continue to support neighborhood cleanup days by providing trash-bags and subsequent collection for voluntary roadside cleanups. The town will document locations targeted during each permit year as well as communication with potential volunteers. The Department of Public Works (DPW) will be responsible for this BMP, which will be implemented in Years 1 through 5.

Year 14 Activities

Through the continued efforts of the CT River Watershed Association and the Westfield River Watershed Association, areas along the CT River were cleaned during permit year 14.

See Appendix 2A

Best Management Practice Assessment / Proposed Change

No changes at this time.

Possible Future Activities

Agawam will continue to promote "Agawam Clean" community clean-ups during the month of May. The DPW will continue to encourage and support local volunteers as they become available.

2B Attitude SurveysOriginal BMP Description:

The Town will include a questionnaire with stormwater related questions with the mailing of the water bills. The questionnaire will be used to measure community awareness of stormwater issues and the success of the Public Education and Public Involvement components of the Stormwater Management Plan. The DPW will have responsibility for this BMP, which will be utilized in Years 2 and 5.

Year 14 Activities

Attitude surveys were distributed as an insert of the Consumer Confidence Report / Aqua Almanac in permit year 2, 5 and 9.

The town participated in the distribution of paper surveys through the efforts of the Animal Control Officer. Residents who licensed their dogs were given a Survey Monkey website link. Upon completion of the survey they could receive a free gift from the Animal Control Officer. Final participation numbers are not yet available.

See appendix 2B

Best Management Practice Assessment / Proposed Change

Any changes pending future General Permit Requirements

Future Activities

Additional surveys pending future General Permit Requirements

2C Catch Basin Marking

Original BMP Description:

The Town will support and supervise volunteer groups to mark catch basins with stormdrain markers. The DPW will supply guidance to volunteer groups regarding the installation of stormdrain markers, directions to locations, and all necessary materials. The Town's goal is to identify and mark 200 catch basins per year depending on volunteer participation. The DPW/volunteer groups will be responsible for this BMP, which will be implemented in Years 1 through 5.

Year 14 Activities

No volunteers during permit year 14. The DPW Subdivision and Site Plan construction standards have been updated so as to require that all newly constructed catch basins be properly marked as part of the site plan and subdivision approval process.

Best Management Practice Assessment / Proposed Change

No Change at this time.

Possible Future Activities

DPW will continue to recruit and support local volunteers in marking catch basins.

2D Watershed CommitteeOriginal BMP Description:

The Town of Agawam will coordinate stormwater activities with the Westfield River Watershed Association (WRWA) within Year 1 and will participate in Years 2 through 5. The Conservation Commission will be responsible for Agawam's participation in the WRWA.

Revised BMP Description:

The Town of Agawam will partner with the Westfield River Watershed Association and Connecticut River Watershed Association as able; to coordinate stormwater related activities and public outreach within the watersheds.

Year 14 Activities

The WRWA continues to be an active partner in helping the Town of Agawam keep the riverbanks clean. In addition to Westfield River Clean-ups, the WRWA coordinates the Source to Sea Cleanup along the CT River, seeking volunteers and DPW staff to assist in the clean-up.

As an active member of the Connecticut River Watershed Stormwater Subcommittee, the town of Agawam actively participated following projects:

- Outreach to dog owners on pet waste disposal practices
- Promoted Soak up the Rain stormwater education campaign
- Currently developing a neighborhood door hanger highlighting stormwater work
- Continued committee education on the new permit requirements
- Committee planning on an effective stormwater education messaging plan for the next 5 years

See Appendix 2D

Best Management Practice Assessment / Proposed Change

No proposed changes

Future Activities

Activities are pending future General Permit Requirements.

2E Community Outreach**Original BMP Description:**

The Town will attempt to track the community participation level based on community outreach programs provided by the Town. The DPW will have responsibility for this BMP, which will be utilized in Years 2-5.

Revised BMP Description:

The Energy Commission, Beautification Committee, Conservation Commission, Planning and Community Development, and Department of Public Works will attempt to distribute informational flyers at local community events; as well as sponsor educational programs as funding becomes available. Flyers and programs will contain information on stormwater related issues as pertinent to the town. All parties will make every effort to track the community participation level based on community outreach programs provided by the town.

Year 14 Activities

During Permit Year 14, the DPW offered the following programs to residents in town.

- Household Hazardous Waste Day; 223 Residents attended
- River Clean-up
- Drug Take Back at PD
- Sharp Collection Program, Health Dept. - 68.7 cu ft of sharps collected
- FOG Flyers – Every Household and Business in Agawam

Best Management Practice Assessment / Proposed Change

The town will continue to offer programs to residents and businesses as funding is available. In addition, the town will track program participation to the best of their ability.

Future Activities

Future activities are pending the rewritten General Permit Requirements.

Minimum Control Best Management Practices

Section 3 – ILLICIT DISCHARGE DETECTION AND ELIMINATION

3A Mapping Stormwater Outfalls

Original BMP Description:

A Stormwater Outfall Map is to be developed showing the municipal stormwater outfall pipes greater than 12-inches diameter. Existing information and reports from previous investigations are to be compiled in Year 1. Approximately 25% of the outfalls are to be field inspected each year for Years 2 through 5. Inspectors will catalogue the size, pipe material and condition of each, the receiving water-body, and visual observation of the discharge and immediate downstream channel. The Department of Public Works (DPW) will be responsible for this BMP.

Year 14 Activities

GIS based mapping of the Town's existing stormwater drainage system is estimated to be complete. The Town of Agawam has updated the GIS map drainage information with new residential subdivisions that were constructed in Year 13.

The mapping shows locations of all catch basins, drain manholes, drainage pipes, outflows, detention basins, and road culverts. The GIS maps are often utilized for stormwater related investigations including searching for cross connections and tracing the sources of illicit discharges. Both the DPW foremen and the Engineering Division have a hard copy set of the Town's most current drainage plans on file for quick access in the field. Also, a workstation within the DPW has been set up for the exclusive use of GIS related activities for quick and easy data access in the office. This GIS mapping is available to the public online via the Town of Agawam's website. This includes all the drainage mapping data.

Through the efforts of the Pioneer Valley Planning Commission, the Town of Agawam has collaborated with several other communities in order to purchase an integrated mapping and data collection system that will help fulfill the requirements of the updated NPDES Phase II Small MS4 General Permit. Even though the infrastructure of the Agawam storm sewer system has been mapped, the collection system will assist the DPW in scheduling the cleaning and repair of drainage structures, prioritizing problem catchments, tracking illicit discharges and recording the results of outfall inspections. The Town and other participating communities received help from the PVPC to research, analyze and identify a suitable collection system via a District Local Technical Assistance Grant. Participating communities have provided a 5% in-kind match in the form of time spent on the project by staff or volunteers. The PVPC is finalizing the contract with the chosen vendor. The Town will have full use of the purchased software in Year 15.

Best Management Practice Assessment / Proposed Change

The GIS mapping of all drainage structures within the Town is complete. The details described in this requirement have been gathered during the mapping process. As the DPW continues to perform complex drainage system investigations, the condition of known drainage outfalls will be reevaluated.

Possible Future Activities

The GIS drainage mapping project is an ongoing activity. Maps are updated as new construction is completed and new information about existing drainage is discovered in the field. The Town will continue to work with Tighe & Bond as a consultant to improve and add to the GIS maps. The Town is looking into purchasing tablets to allow employees to access GIS data in the field.

3B Non-Stormwater Discharge Ordinance**Original BMP Description:**

The Town intends to adopt an ordinance or other regulatory mechanism to prohibit non-stormwater discharges into the MS4 system. The Town will evaluate existing regulations in Year 1, prepare a draft ordinance in Year 2, and propose the new ordinance for adoption in Year 3. Pending adoption, the ordinance will be enforced in Years 3 through 5. The DPW will have responsibility for this BMP.

Year 14 Activities

As noted in permit year 4, the current Water and Sewer Ordinance has been revised to reflect the Federally Mandated Requirements prohibiting non-stormwater discharges into the MS4 system. The revised ordinance was approved by the City Council on May 15, 2006. The approved ordinance is currently being used and enforced.

In permit year 13 the Town had been awarded a 319 Nonpoint Source Pollution Grant. This grant will allow the Town of Agawam to study the possibility of establishing a new stormwater utility fee for all properties in Town. In permit year 14, a local advisory task force, comprised of Town employees, businesses and residents, has been formed to research the major needs, priorities, and costs for Agawam's municipal stormwater management program and to evaluate the feasibility of establishing a stormwater utility or fee to fund the future program. The task force is scheduled for its first meeting on April 26th. It is anticipated the group will meet 6 times over the course of the project, in addition to two public meetings. It is anticipated that the advisory group will provide a final update to the City Council and Mayor with their findings.

See Appendix 3B

Best Management Practice Assessment / Proposed Change

This ordinance has been enforced during permit year 14. Any discovered illicit connections to the stormwater system are eliminated as soon as possible.

Possible Future Activities

The DPW will continue to educate the community regarding the ordinance as well as enforce the ordinance regulations regarding non-stormwater discharges into the MS4 System. The DPW may propose some revisions to the ordinance that will expand on the Federally Mandated Requirements and clarify the wording in a few sections. Any future revisions are pending future rewritten General Permit Requirements.

3C Develop Illicit Discharge PlanOriginal BMP Description:

The Town will develop an Illicit Discharge Plan to include procedures for identifying, locating, removing illicit discharges as well as documenting actions and evaluating impacts. The Town will evaluate existing procedures in Year 2. The Town will prepare a draft plan and propose the plan for adoption in Year 3. Pending adoption, the plan will be implemented in Years 3 through 5. The DPW will be responsible for this BMP.

Year 14 Activities

As part of the development of the Non-Stormwater Discharge Ordinance, existing illicit discharge practices were evaluated. Existing activities involve the investigation and removal of illicit discharges or dumping if the DPW is made aware of an issue based upon resident complaints or observation by DPW or Town personnel. Removal of illicit discharges has been based upon existing authority by the DPW to do so. GIS drainage mapping continues to be updated as new construction and complex investigations are performed. As the mapping continues, the detailed evaluation of which areas to focus on for investigations will proceed.

The DPW has incorporated the Town's existing sanitary sewer system into the GIS maps. Having this information alongside the stormwater drainage system will allow the DPW to more accurately determine the areas most likely to have illicit discharges. The DPW will continue to update the sanitary sewer information as new construction occurs within the Town.

A copy of the Town's Illicit Discharge Detection and Elimination (IDDE) Plan can be found in Appendix 3C of the 2008 Annual Report.

An Illicit Discharge Investigation Report form is used as a method of notification and documentation by the DPW when Non-Stormwater Discharges are observed at a site that is in violation of Town Code. Copies of these reports are available at the DPW.

In Year 14, the Town of Agawam has investigated and resolved illicit discharges in the following locations:

- North West Street: A developer is constructing a single family house at #775 North West Street. New loam and seed have not yet been applied to the disturbed areas. During a storm event, the DPW observed sediment flowing from the construction site into North West Street and into a nearby catch basin. This illicit discharge was caused by the failure of the silt fence erected by the developer and the lack of a properly installed construction entrance, as per Town of Agawam Standards. The Agawam Code Enforcement Officer was informed of this situation.
- Birch Hill Road: A developer is constructing a single family house at #96 Birch Hill Road. New loam and seed have not yet been applied to the disturbed areas. During a storm event, the DPW observed sediment flowing from the construction site into Birch Hill Road and into a nearby catch basin. This illicit discharge was caused by an improperly installed silt fence. Also, the silt fence was not installed along the entire limit of work, allowing sediment to flow around the silt fence and into the street. The Agawam Code Enforcement Officer was informed of this situation.
- Doane Avenue: In Year 13, the DPW installed an infiltration system within the cul-de-sac island of Doane Avenue in order to alleviate severe flooding observed during storm events, especially during the winter months. This system consists of two leaching chambers connected by a perforated pipe. Overflow from the existing leaching catch basins in the road flow into the infiltration system, reducing flooding while also removing pollutants picked up in the street by storm runoff. The DPW has been monitoring this site to insure the installed system operates as designed. As of Year 14, the DPW has received no flooding complains from Doane Avenue residents.

A list of existing detention basins within the Town has been created. This list will be updated as new construction is completed. The Engineering Department is conducting inspections of the detention basins to prevent and eliminate illicit discharges by confirming the basins are working properly and are being maintained as per Town stormwater regulations. If it is observed that a detention basin has not been maintained, the owner of the property where the basin is located is notified and instructed to repair the basin to the satisfaction of the Town.

Tighe & Bond has inspected 95% of the known drainage outfalls in town in Year 9. During inspections, pictures were taken of each outfall and its condition was noted on an Outfall Reconnaissance Inventory Sheet along with obvious signs of any illicit discharges including noticeable odors, outflow color and turbidity, and any observed floatables.

Best Management Practice Assessment / Proposed Change

In Year 7, a program was started by the Engineering Department to inspect all mapped outfall pipes over the next four years. In Year 9, Tighe & Bond inspected 95% of the known drainage outfalls. According to the proposed new General Permit regulations, 25% of the existing outfalls must be inspected and tested each year. Due to a lack of funding and manpower, the Town may have difficulty in meeting this requirement. The DPW will make every effort to improve its performance in this BMP by setting up a detailed list of outfalls that need inspecting. All inspection results will be documented on an Outfall Reconnaissance Inventory Sheet and recorded within the GIS maps. Future Activities

The Town of Agawam has recently discovered that the roof drains from the Roberta G. Doering Middle School currently flow into the town sanitary sewer system. The DPW will be making plans to correct this as soon as possible by either redirecting the roof runoff to the storm sewer system or by installing an infiltration BMP.

In order to meet the ND PES General Permit regulations, the Town hired Tighe & Bond to assist with the necessary inspection, as described above. The Town will continue to perform inspections as time and budget allows. In future inspections, if signs of an illicit discharge are discovered, a sample will be taken from the outfall and tested in-house for the pollutants indicated within the Massachusetts Phase II Small MS4 General Permit, at a minimum. A list of outfalls that need maintenance will be created. These outfalls will be repaired and illicit discharge connections will be investigated as the Town's budget allows. The Town is currently seeking to hire more Engineers and DPW Crew Workers in order to comply with the increased inspection requirements of the new General Permit.

The Town shall continue inspecting detention basins and outfalls as the available budget and manpower allows. Town owned detention basins will be given priority. The DPW will be responsible if any repairs to the basins are deemed necessary. Inspections will also be conducted at detention basins on private property. The property owners will continue to be responsible for the mowing of the detention basins whereas the DPW will repair any drainage structures, pipes and outfalls, etc. Assistance can be given at the discretion of the DPW.

The DPW is aware of several areas in town that experience severe flooding even during small storm events that will require an upgrade to the existing drainage systems.

- The drainage system in Arnold Street flows to an underground infiltration system that is too small and has become clogged with sediment over time. The DPW plans to remove this system and install a new system consisting of open-bottom infiltration chambers.
- Two catch basins on Meadow Avenue near the intersection of Joseph Street flow into a pipe that travels parallel to the property line of the Regency Apartments and discharges behind said property. These catch basins have been unable to handle the stormwater runoff in this area and often cause Meadow Street to become impassible. The DPW will be using its new portable camera system to investigate the drainage system in this area to determine the best course of action that will fix this flooding problem.
- The DPW had previously installed a dry well at the apartment building located at #98 North Alhambra Circle which has a history of flooding within their yard and parking lot. The dry well is no longer adequate to handle the amount of runoff that becomes trapped in that location. The DPW will be looking into possible methods to remove the flooding from that area including connecting to an existing swale on the property or extending the existing drainage system within North Alhambra Circle.

3D Inform Employees, Businesses, and Public

Original BMP Description:

Municipal employees, businesses and the public will be informed regarding the illicit discharge plan and the non-stormwater ordinance. Elements of the public education program will include publicity for this BMP. The DPW will be responsible for this BMP, which will be implemented in Years 3 through 5.

Year 14 Activities

In June 2016, the town distributed approximately 12,500 Aqua Almanacs to all businesses and dwelling units in Agawam. Included in the water report was a "FOG", Fat's Oils and Grease flyer, providing best management practices for both home owners and food service establishments.

Best Management Practice Assessment / Proposed Change

No proposed changes.

Possible Future Activities

Additional future activities will be adjusted pending the rewritten General Permit Requirements.

3E Video InspectionOriginal BMP Description:

The DPW will contract for the use of a video camera to inspect storm drain pipes as practicable to follow up on illicit discharges discovered during activities under BMP #3B. The DPW will be responsible for this BMP, which will continue for permit Years 3 through 5.

Year 14 Activities

The Town has purchased a new portable video camera inspection system with a remote controlled tractor which will be used to investigate the condition of Town-owned drainage pipes and outfalls. Video inspections are used to determine: if there are any illicit connections, if any pipes or outfalls have fallen into disrepair and to assist in mapping of the Town's drainage system. Employees in both the Engineering Division and the Sewer Department have received training on the use of the new camera system.

Best Management Practice Assessment / Proposed Change

The DPW continues to use its current pushrod video camera system to assist in Illicit Discharge detections and other related drainage and sanitary sewer investigations. However, the pushrod camera is only suitable for inspecting small diameter pipes and outfalls. The new remote controlled camera system will be able to travel through the larger diameter pipes and outfalls within the Town drainage system. The Town will continue to use the pushrod camera for small pipes and laterals. If it is necessary, the DPW can contract out the use of a professional video camera system as it has done in the past.

Possible Future Activities

The DPW plans to use its new portable camera system to investigate several stormwater issues throughout the town including the condition of drainage pipes suspected to be in disrepair and finding outfall locations that could not be previously verified in the field.

The DPW continues to discuss the opportunity to implement a new stormwater fee for all properties in Town. The monies acquired by this fee will be used to help offset the costs of maintaining the Town's drainage system and the Illicit Discharge Program

including video inspections. If the new stormwater fee is implemented, the Town would have extra funding available to do more video inspections by either the Town's camera and crews or via a private company.

3F Failing Septic Systems

Original BMP Description:

The Board of Health (BOH) currently keeps records of septic system failures that are used to identify problem areas. The BOH will report failures to the DPW for inclusion in GIS mapping in Year 3. The BOH will be responsible for this BMP, which will continue for Years 1 through 5.

Year 14 Activities

The Health Department maintains records on all inspections involving septic systems. The Health Department has forwarded a list of all failed systems from 2016 to the DPW. Septic System locations and their failures from 2003-2016 have been incorporated into the GIS mapping project.

See Appendix 3F

Best Management Practice Assessment / Proposed Change

Due to budget constraints, the Southwest Area Sewer project has been postponed indefinitely. This project was to include South Westfield Street, Pine Street, parts of Barry Street and the subdivisions off of these streets and 2 pump stations. Once the new sewer was constructed, the areas that were experiencing septic system failures would have been able to connect to the Town sewer system. Since septic systems will still be in use in this area, the DPW/Engineering Division will closely monitor the storm drainage system in the southwest area of town for any potential illicit discharges. If an illicit discharge is reported, the DPW will take steps to immediately correct the problem.

Future Activities

The DPW plans to further analyze septic system failures using the data that has been input into the GIS database. This information will help the Town prioritize future sewer proposals and also help residents understand where problematic areas in town are located. Analyzing septic information in GIS will also help to determine which areas of town should be classified as a high risk of illicit discharge.

3G CATCH BASIN MARKINGOriginal BMP Description:

The Town will support and supervise volunteer groups to mark catch basins with stormdrain markers. The DPW will supply guidance to volunteer groups regarding the installation of stormdrain markers, directions to locations, and all necessary materials. The Town's goal is to identify and mark 200 catch basins per year depending on volunteer participation. The DPW/volunteer groups will be responsible for this BMP, which will be implemented in Years 1 through 5.

Year 14 Activities

No volunteers during permit year 14.

Best Management Practice Assessment / Proposed Change

No Change at this time.

Possible Future Activities

DPW will continue to recruit and support local volunteers in marking catch basins.

The subdivision and site plan construction standards have been updated so as to require that all newly constructed catch basins be properly marked as part of the site plan and subdivision approval process.

Minimum Control Best Management Practices**SECTION 4 - CONSTRUCTION SITE RUNOFF CONTROL****4A Construction Runoff Ordinance**Original BMP Description:

The Town has adopted a Construction Runoff Ordinance which requires sediment and erosion control at construction projects with over one acre in total disturbance. The Town has evaluated existing regulations (including Zoning, Subdivision, and Wetlands regulations) in Year 1, prepared a draft ordinance in Year 2, and proposed the new ordinance for adoption in Year 3. Pending adoption, the ordinance was enforced in Years 3 through 5. The DPW, Planning Department, and Building Inspector have responsibility for this BMP.

Year 14 Activities

The current Water and Sewer Ordinance has been revised to reflect the Federally Mandated Requirements requiring sediment and erosion control at construction projects with over one acre in total disturbance. The revised edition was approved by City Council on May 15, 2006. Enforcement of the new ordinance began shortly after this approval. A new Stormwater Permit Application was created and implemented during Year 4. The ordinance and permit application continues to be used and enforced.

Best Management Practice Assessment / Proposed Change

The Agawam Engineering Division continues to work with developers to identify and address possible problematic areas before stormwater runoff issues occur. As a result, Year 11 had very few construction runoff issues in Town.

Possible Future Activities

In permit year 14, the DPW, in conjunction with the Pioneer Valley Planning Commission, applied and was approved for a Efficiency and Regionalization grant for the purpose of reviewing and updating current Town ordinances, including the Construction Runoff Ordinance. In permit year 15, the PVPC will be reviewing ordinances from nine municipalities, including Agawam, and recommending changes that will help the Town comply with the new MS4 General Permit.

The Town continues to research, discuss and propose the opportunity to implement a new Stormwater Fee for all properties in Town. The monies acquired by this fee will be used to help offset the costs of maintaining the Town's drainage system, implementing the Illicit Discharge Program and educational purposes. Also, the new

stormwater fee rules will include special incentives for private sites: to implement low impact development procedures, to reduce peak stormwater runoff rates through detention or infiltration, and to improve existing TSS removal rates.

The Town may also look into implementing a system that includes the possibility of fining developers, builders, etc. if BMPs are not properly installed and maintained resulting in erosion and sediment runoff from the construction sites.

4B Construction Plan Review

Original BMP Description:

Under the Construction Runoff Ordinance (or other regulatory mechanism), applicants with projects with disturbance over one acre will be required to submit sediment and erosion control plans for Town review and approval. Until a new ordinance is adopted (anticipated in Year 3), the Town will continue to review construction plans in accordance with existing regulations. Pending adoption, plans will be reviewed per the new ordinance in Years 3 through 5. The DPW, Planning Department, and Building Inspector have responsibility for this BMP.

Year 14 Activities

All construction sites within the jurisdiction of the Rivers Act and the Wetland Protection Act must submit plans to the Conservation Commission for review of proposed erosion and sediment control measures. These sites are inspected and overseen by the Conservation Commission with the assistance of the DPW.

All new subdivision submittals are required to include construction phase erosion and sediment control measures within the construction plan set. This includes both short-term and long term BMPs for the site.

The developers of all new subdivisions are required to submit the project's EPA NOI for construction activities, and give a courtesy copy of the SWPPP to the DPW.

DPW works with the Conservation Commission, developers, and property owners to reduce the chances of erosion control problems before they occur and alleviate any issues as soon as they arise.

An ordinance addressing erosion and sediment control was adopted by the City Council in May of 2006 and is currently being implemented by the DPW.

Best Management Practice Assessment / Proposed Change

No Change is proposed.

Possible Future Activities

As described in Section 4A, the PVPC will be assisting the Town with reviewing and updating Town ordinances, including the Construction Runoff Ordinance. Any changes made to the ordinance will be incorporated into our Construction Plan Review procedure.

4C Inspection / ReportingOriginal BMP Description:

Under the Construction Runoff Ordinance (or other regulatory mechanism), projects with disturbance over one acre will be required to have regular inspection of sediment and erosion controls and reporting of construction activities. Until a new ordinance is adopted (anticipated in Year 3), the Town will continue to require inspection and reporting in accordance with existing regulations. Pending adoption, construction inspection and reporting will be enforced in Years 3 through 5. The DPW, Planning Department, and Building Inspector have responsibility for this BMP.

Year 14 Activities

As documented in permit year 4, ordinance changes had been adopted by the City Council as of May 5, 2006.

The DPW and Conservation Commission continue to work together inspecting and enforcing the Wetland Protection Act on projects within the appropriate jurisdiction.

Best Management Practice Assessment / Proposed Change

No Change is proposed.

Possible Future Activities

As described in Section 4A, the PVPC will be assisting the Town with reviewing and updating Town ordinances, including the Construction Runoff Ordinance. Any changes made to the ordinance will be incorporated into our construction inspection and reporting procedure.

MINIMUM CONTROL BEST MANAGEMENT PRACTICES**SECTION 5 POST CONSTRUCTION STORMWATER MANAGEMENT****5A Post Construction Runoff Ordinance**Original BMP Description:

The Town intends to adopt an ordinance or other regulatory mechanism to address post construction runoff from projects with over one acre in total disturbance. The Town will evaluate existing regulations (including Zoning, Subdivision, and Wetlands regulations) in Year 1, prepare a draft ordinance in Year 2, and propose the new ordinance for adoption in Year 3. Pending adoption, the ordinance will be enforced in Years 3 through 5. The DPW, Planning Department, and Building Inspector have responsibility for this BMP.

Year 14 Activities

The current Water and Sewer Ordinance has been revised to reflect regulatory mechanisms to address post construction runoff from projects with over one acre in total disturbance. The revised edition was adopted by the City Council as of May 5, 2006.

The Conservation Commission through the Wetland Protection Act continues to regulate activities within and near wetland resource areas. The DPW continues to regulate all other stormwater activities that are connected to the Town's MS4.

Best Management Practice Assessment / Proposed Change

No Change is proposed.

Possible Future Activities

In permit year 14, the DPW, in conjunction with the Pioneer Valley Planning Commission, applied and was approved for a Efficiency and Regionalization grant for the purpose of reviewing and updating current Town ordinances, including the Water and Sewer Ordinance. In permit year 15, the PVPC will be reviewing ordinances from nine municipalities, including Agawam, and recommending changes that will help the Town comply with the new MS4 General Permit.

5B Site Plan ReviewOriginal BMP Description:

Under the Post Construction Runoff Ordinance (or other regulatory mechanism), applicants with projects with disturbance over one acre will be required to submit stormwater control plans for Town review and approval. Until a new ordinance is adopted (anticipated in Year 3), the Town will continue to review new development and redevelopment plans in accordance with existing regulations. Pending adoption, plans will be reviewed per the new ordinance in Years 3 through 5. The DPW, Conservation Commission, Planning Department, and Building Inspector have responsibility for this BMP.

Year 14 Activities

New stormwater regulations were approved and adopted by the City Council in May of 2006. This ordinance has been implemented by the DPW and continues to be used during the site plan and subdivision review and inspection process. The Conservation Commission through the Wetland Protection Act continues to regulate activities within and near wetland resource areas. The DPW continues to regulate all other stormwater activities that are connected to the Town's MS4.

Best Management Practice Assessment / Proposed Change

No Change is proposed.

Possible Future Activities

As described in Section 5A, the PVPC will be assisting the Town with reviewing and updating Town ordinances, including the Subdivision of Land Ordinance and Water and Sewers Ordinance. Any changes made to the ordinance will be incorporated into our Site Plan Review procedure.

The DPW is planning to incorporate Complete Street policies into its ordinances and Site Plan Review process in order to promote more developments with pedestrian and bicycle friendly accommodations, such as bike lanes and shared-use paths. The DPW will also put emphasis on the inclusion of green infrastructure, such as road diets and stormwater infiltration, in new construction projects.

5C Stormwater System Maintenance PlanOriginal BMP Description:

Under the Post Construction Runoff Ordinance (or other regulatory mechanism), projects with disturbance over one acre will be required to include a program outlining enhanced procedures for long term operation and maintenance of stormwater facilities. Until a new ordinance is adopted (anticipated in Year 3), the Town will continue to require stormwater facility operation and maintenance in

accordance with existing regulations. Pending adoption, additional operation and maintenance requirements for stormwater facilities to be constructed as part of new development and redevelopment projects will be enforced in Years 3 through 5. The DPW, Planning Department, and Building Inspector have responsibility for this BMP.

Year 14 Activities

As documented during permit year 4, new ordinance requirements including drainage system maintenance of private sites had been adopted by the City Council. All new and redevelopment plans will continue to require maintenance activity schedules as part of the site's Stormwater Permit to the DPW.

Due to a lack of funding and man power, the DPW has had difficulty continuing with its detention pond inspection program. The DPW continues to assist in the maintenance of some privately owned detention ponds in the Town as time and budget allows. However, there are many detention areas throughout town which still require significant repair, including areas identified as needing significant town assistance with maintenance. Three detention ponds have been identified as town owned and continue to be maintained by the DPW.

In Year 6, the DPW had unsuccessfully proposed a stormwater utility fee for all residents and private sites in Town to offset the increased costs resulting from both the maintenance of the municipal stormwater system and continued compliance with the NPDES regulations and the Six Minimum Control Measures in the MS4 General Permit. The Town has been approved for a 319 Nonpoint Source Pollution Grant. This grant will allow the Town of Agawam to study the possibility of establishing a new stormwater utility fee for all properties in Town. A local advisory task force comprised of Town employees and residents will be involved with the research and proposition of the new stormwater fee. The monies acquired by this fee will be used to help offset the costs of complying with the Town's Stormwater System Maintenance Plan.

A copy of the previous utility fee proposal can be located in the Permit Year 6 Report.

Until the utility fee is approved, the DPW will continue to maintain the public stormwater system (including outfalls, publically owned detention ponds, pipes, catch basins, culverts, drain manholes, etc.) as much as the budget will allow. The DPW has provided a list of stormwater maintenance and repair projects completed in Year 11 is included in Appendix 6C.

Best Management Practice Assessment / Proposed Change

No change is proposed, pending the soon to be updated General Permit Requirements.

Possible Future Activities

If the stormwater utility is approved, the DPW would work to improve the overall municipal stormwater system. This would include improving the work needed to meet or exceed the six minimum control measures in the MS4 Permit and any new regulations that may be required. Also, the DPW would then take on the responsibility of ensuring that all drainage detention areas located within town easements are properly maintained and in the originally proposed working condition. (Currently, this responsibility typically falls upon the property owner).

As described in Section 5A, the PVPC will be assisting the Town with reviewing and updating Town ordinances, including the Post Construction Runoff Ordinance. Any changes made to the ordinance will be incorporated into Town's Stormwater System Maintenance Plan.

MINIMUM CONTROL BEST MANAGEMENT PRACTICES**SECTION 6 GOOD HOUSEKEEPING / POLLUTION PREVENTION****6A Municipal Maintenance Activity Program**Original BMP Description:

The Town will develop a program to outline procedures associated with maintenance of open spaces and parks, vehicular fleets, Town-related construction activities, roads, and storm sewer system. The Town will evaluate existing municipal procedures, modify any procedures if needed, and prepare the program plan in Year 1. The Town will continue to monitor compliance and revise policies as necessary in Years 2 through 5. The DPW will have the responsibility for this BMP.

Year 14 Activities

The DPW continues to work closely with the Conservation Commission to ensure that all open spaces, parks, town-related construction activities, roads and storm sewer systems are properly maintained and erosion control BMPs are properly implemented.

In permit year 12, the DPW purchased a Boom Flail Mower using Chapter 90 funding. This mower is sometimes used to mow vegetation in detention ponds.

In permit year 13, the Town Dog Park was opened to the public. Pet waste stations were placed throughout the park and the Dog Park Rules are posted outside the entrance of the park, which includes that dog owners must immediately clean up any dog waste. The Dog Park Association and the Agawam Grounds Department work together to make sure that the park is cleaned of all pet waste twice a week during the times the park is open to the public.

In permit year 14, the DPW awarded a contract to Air Sweep of West Springfield to perform street sweeping from 2017-2019. Also, J.R. Sweeping of Agawam was hired to provide street sweeping services during construction activities, such as road paving and water break repairs. J.R. Sweeping will also perform catch basin cleaning and disposal of collected waste material in 2017.

Best Management Practice Assessment / Proposed Change

Any changes to this BMP are pending the final version of the updated NPDES Phase II Small MS4 General Permit Requirements.

Possible Future Activities

Future activities are pending the final version of the updated NPDES Phase II Small MS4 General Permit Requirements.

6B Training of Municipal Employees**Original BMP Description:**

Municipal employees performing activities under the new Municipal Maintenance Activity Program (BMP #6A) will be informed of new good housekeeping policies and procedures. This will occur pending adoption of the Program in Year 1. DPW employees will also be informed of the Stormwater Pollution Prevention Plan requirements for the DPW and Transfer Station, as applicable. Initial training will be given in Year 2. An Annual Refresher in the form of a seminar or memorandum will be given each year for Years 3 through 5. The DPW has responsibility for this BMP.

Year 14 Activities

Throughout the year, the DPW's work is inspected by both the Engineering Division and the Conservation Commission (when applicable). If any work is unsatisfactory, the DPW is informed of which BMP's need to be implemented for that work and any future projects.

As new employees are hired in the Motor Vehicle Maintenance Department, they are trained and have yearly reviews regarding the weekly inspection of State II Vapor Recovery and Gasoline Dispensing Facilities. There were no new employees during permit year 13.

All employees in the Engineering Division attended the Moving Together Conference held in Boston, MA in September, 2016. The purpose of the conference was to highlight the most current topics concerning pedestrian, bicycle and public transportation. The conference presented an opportunity to network with employees of other municipalities as well as members of the private sector. The Town Engineer and two other employees of the Engineering Division attended a seminar at PVPC on incorporating on-road bicycle networks into road resurfacing projects. The topics discussed at this seminar will help the DPW to achieve its goal of improving non-vehicular traffic and connectivity throughout the Town which includes road diets and incorporating green infrastructure into projects.

Grounds and Maintenance employees renewed pesticide application certification licenses.

See Appendix 6B

Best Management Practice Assessment / Proposed Change

No changes at this time unless required by the soon to be updated General Permit Regulations.

Future Activities

The DPW will continue to educate town employees on Pollution Prevention and Good Housekeeping Practices for Municipal Operations.

The DPW is planning to incorporate Complete Street policies into its ordinances and Site Plan Review process in order to promote more developments with pedestrian and bicycle friendly accommodations, such as bike lanes and shared-use paths. The DPW will also put emphasis on the inclusion of green infrastructure, such as road diets and stormwater infiltration, in new construction projects.

6C Catch Basin Cleaning Program

Original BMP Description:

The Town will develop a program with prioritized areas for catch basins in the urbanized area in Year 1. The Town will continue to monitor compliance and revise policies as necessary in Years 2 through 5. The DPW will have the responsibility for this BMP.

Year 14 Activities

Currently, the DPW does not have the necessary equipment to routinely clean catch basins. In the event of an emergency, DPW workers can manually clean catch basins with hand tools.

Funding was available in permit year 14 to hire the services of an outside company to clean 168+ catch basins. In addition, the DPW made repairs to 27 additional catch basins.

See Appendix 6C

Best Management Practice Assessment / Proposed Change

The town will utilize available funds in order to best comply with the catch basin cleaning requirements of the General Permit. The DPW is constantly updating our list of catch basins to be cleaned. Priority shall be given to catch basins within environmentally sensitive areas and locations with a history of flooding problems.

Possible Future Activities

The DPW will continue to seek dedicated funds for catch basin cleanings in upcoming years. The DPW is working to input the data for catch basin cleaning into GIS so that an updated catch basin cleaning priority area list can be made. J.R. Sweeping will perform catch basin cleaning and disposal of collected waste material in 2017.

6D Street SweepingOriginal BMP Description:

The Town will sweep all streets in the urbanized area once each year. The DPW has the responsibility for this BMP, which will be utilized for Years 1 through 5.

Year 14 Activities

During permit year 14, the DPW completed street sweeping in the following areas:

- 70 curb miles of roadway between April 1, 2015 – April 1, 2016
- Additional sweeping included
 - Water break clean up of soil and salt
 - Street sweeping prior to paving operations

During the winter of 2008-2009, the DPW made an economical and environmental decision to eliminate sand from their roadways and apply "Liquid Magic" to their rock salt. Liquid Magic is non-corrosive, completely biodegradable, and releases far less chlorides into the environment than either plain rock salt or calcium chloride. With the elimination of sand, the DPW has found the streets to be much cleaner in the spring thus helping with the reduction of sweeping needed.

Best Management Practice Assessment / Proposed Change

The town will continue to sweep priority areas as funding is available.

Possible Future Activities

In permit year 14, the DPW awarded a contract to Air Sweep of West Springfield to perform street sweeping from 2017-2019. Also, J.R. Sweeping of Agawam was hired to provide street sweeping services during construction activities, such as road paving and water break repairs. Any additional changes are pending the soon to be updated General Permit Requirements.

6E Pest Control / Landscaping and Lawn CareOriginal BMP Description:

The Town will evaluate the use of toxic chemicals in Year 1 and continue to contract with licensed applicators only in Years 2 through 5. The DPW has the responsibility for this BMP.

Year 14 Activities

The DPW continues to provide maintenance services to Municipal Parks, Golf Course, and Schools. The application of fertilizers and pesticides are under the supervision of licensed pesticide applicator, thus the chemicals are used appropriately and the over-use of chemicals is avoided. The maintenance of the golf course includes the continued use of organic practices where appropriate.

During permit year 10, 3.2 acres of Lacrosse fields at School Street Park transitioned from chemicals to organic lawn care under the TURI grant. In permit year 13 the town expanded this practice to include 4.10 acres of Soccer fields. The DPW continues to use organic lawn care at both field locations. In permit year 14, the DPW expanded organic lawn care practices to include Borgatti Park, an additional 6.34 acres of grassed area.

See Appendix 6E

Best Management Practice Assessment / Proposed Change

DPW will continue to maintain the Golf Course, Lacrosse and Soccer fields with organic lawn care practices and products, with the addition of Borgatti Park this year.

Possible Future Activities

Proposed future activities are pending the rewritten General Permit Requirements and the inclusion of additional town departments.

6F Stormwater Pollution Prevention Plan / MSGP

Original BMP Description:

A Stormwater Pollution Prevention Plan (SWPPP) will be implemented for the DPW facility under the EPA Phase II Stormwater Program Multi-Sector General Permit (MSGP). The DPW has the responsibility of this BMP, which will be utilized for Years 1 through 5.

Year 14 Activities

It is our understanding that as of this report date; the proposed 2013 Multi-Sector General Permit (MSGP) published by EPA has not been finalized. A Spill Prevention Control and Countermeasure Plan (SPCC) has been in-place for the DPW maintenance facility since November 29, 2001. A SPCC Plan was received from the consultants at Tighe & Bond and signed by the DPW Superintendent, in accordance with the requirements of the U.S. EPA Oil Pollution Prevention Regulations (40 CFR Part 112.7). The Town's SPCC Plan describes oil storage at the facility and appropriate procedures, methods and equipment used to control and document oil spills and to prevent spills from reaching surface waters. In addition, the Plan includes recommendations to upgrade the facility in areas where existing oil spill prevention, control and countermeasures are inadequate. The Town's future MSGP compliance program, specifically a stormwater pollution prevention plan, is anticipated to incorporate components of the SPCC Plan. See Appendix 6F of the 2008 Annual NPDES Report for an outline of the SPCC Plan.

In year 12, The DPW renewed its SPCC plan. The Town is currently working to create a stormwater team that would include representatives from each of the municipal buildings.

Best Management Practice Assessment / Proposed Change

The DPW operations procedures have been implemented at the new DPW facility. During the summer/fall of 2008, a new salt/sand storage structure was built at the new facility. All winter operations have since moved to the new facility. The DPW received an updated SPCC plan and environmental audit from Tighe & Bond in Year 5. See Appendix 6F of the 2008 Annual NPDES for documentation.

Future Activities

Modify the SPCC plan as needed pending the soon to be updated General Permit Requirements. The Town is looking into a possible grant funding for the installation of rain gardens and similar stormwater treatments on Town owned parcels. Rain gardens have already been installed in the School Street Park and are proposed for phase 2 of that project which is currently under construction.

6G Used Oil Recycling

Original BMP Description:

The Town currently collects used oil for proper disposal and recycling. The Town will continue to offer Used Oil Recycling year-round in Years 1 through 5. The DPW has the responsibility for this BMP.

Year 14 Activities

The town continues to provide the residents a local drop off location for used motor oil.

In 2016, 2300 gallons of used motor oil were collected at the DPW Town Garage.

Best Management Practice Assessment / Proposed Change

No changes at this time.

Possible Future Activities

The town will continue to provide residents with a drop off location for used motor oil and car batteries at no charge.

6H Hazardous Waste CollectionOriginal BMP Description:

The Town will continue its annual Hazardous Waste Collection Day subject to funding. Every fall, the Town publicizes the collection day through newspaper ads and radio and television ads. The DPW will continue to have the responsibility for this BMP, which will be utilized in Years 1 thru 5.

Year 14 Activities

The Town hosted its annual Household Hazardous Waste Collection day in the fall of 2015. 223 vehicles dropped off Hazardous Waste, rather than disposing of it in the trash or catch basins. In addition to the annual HHW Day, the DPW continues to collect used car batteries, used motor oil and mercury bearing waste by appointment.

The town continues to store illegally dumped items dropped along the roadsides as well as chemicals from residents moving prior to HHW Day in metal safety storage cabinets.

Best Management Practice Assessment / Proposed Change

The town has met it's obligation to provide a HHW event and alternative disposal options to residents.

Possible Future Activities

The town will continue to provide proper disposal options to the residents as funding is available.

MINIMUM CONTROL BEST MANAGEMENT PRACTICES**7A TMDL for the Connecticut River**Original BMP Description:

According to the Massachusetts Year 2002 Integrated List of Waters, Connecticut River is designated as Category 5 “Waters requiring a TMDL”. The targeted pollutants are priority organics, pathogens, and suspended solids. Sources of priority organics may include but are not limited to: road surfaces, inadequate fueling areas or practices, illegal dumping. Sources of pathogens may include but are not limited to: pet waste, winter road maintenance materials, illicit sewer discharges, and failing septic systems. Sources of the suspended solids may include but are not limited to: lawn care products, litter, winter road maintenance materials, erosion from construction activities, and illicit sewer discharges. The Stormwater Management Program includes many BMPs to address reduction of contaminants from these sources under all Six Minimum Control categories. The City will implement these BMPs under the responsible department and timeframes as previously described.

Year 14 Activities

All previously described Best Management Practices address the TMDL of the Connecticut River.

Best Management Practice Assessment / Proposed Change

The Connecticut River has many contributing factors to cause the need for the TMDL designation. Agawam, along with other community's efforts within Massachusetts, will contribute to improvements in this major river's water quality. Agawam participates in the Connecticut River Clean-up Committee's Stormwater subcommittee and the Westfield River Watershed Steering Committee.

Possible Future Activities

The future activities within the Town of Agawam's Stormwater Management Plan will be implemented as funding and other resources will allow.

Appendix

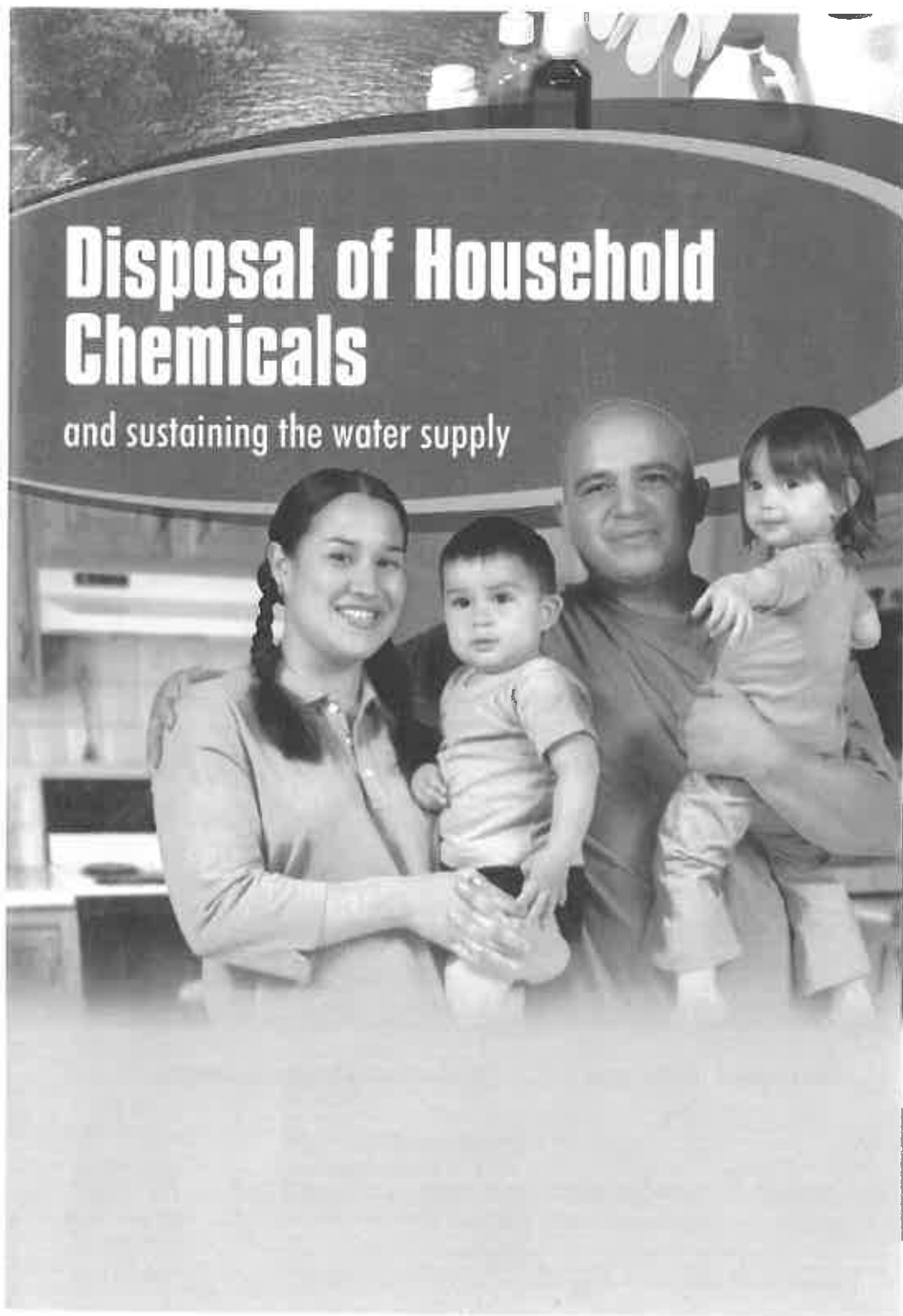
Appendix 1A

Year 14

Educational Displays

Disposal of Household Chemicals

and sustaining the water supply



Appendix 1E

Year 14

Newspaper Press Releases

Task force considers stormwater fees

By Gregory A. Scibelli
gscibelli@turley.com

A task force is looking into how Agawam will pay for costly upgrades to its storm drains.

The town is facing a five-year deadline to comply with new federal regulations to map, test and clean its catchbasins and stormwater conduits. The requirement is an Environmental Protection Agency mandate that applies to all cities and towns, some of which have announced they will have to enact new fees or taxes to fund the work.

Mayor Richard Cohen said Monday that the task force he

appointed is working with a consultant through a grant from the Pioneer Valley Planning Commission to assess the need for a stormwater enterprise fund — to collect fees from property owners with paved surfaces that direct rainwater to the town's storm drains — or consider other funding methods.

The exact amount of money required to comply is not yet known, as the EPA's requirements will be finalized early this year, Public Works Superintendent Christopher Golba said. The increased regulations are expected to be very costly, both in the initial five years and after.

"It will be an ongoing cost to the town," said Golba. "And we need to be able to fund it as we go forward."

Town Engineer Michelle Chase, a member of the task force, said part the reason for the new mandate is that property owners who are supposed maintain areas around catchbasins and retention ponds, for instance, have not kept up with the maintenance, and then these areas fall into disrepair. There are also many culvert crossings and other stormwater outfalls that are in great need of maintenance and repair. The re-

WATER | page 6

MOVING & BOLD



Brianna Gaynor, a junior at Agawam High School, shows off one of the AHS robotics team's creations to Emma Alban, 2, of Feeding Hills, during the Community Fair sponsored by the Agawam Family and Community Program held Saturday at the high school. More photos, page 9. TURLEY PUBLICATIONS PHOTO BY MICHAEL J. BARNHART

WATER | from page 1

quirement to test the water quality at all points where stormwater runoff joins natural waterways, such as rivers and creeks, is intended to reduce pollution in large bodies of water such as the Connecticut River and Long Island Sound.

The full regulations are not being enforced this year, but will be soon. Chase said the task force is hoping to implement a plan in the next 18 to 24 months.

Neighboring Southwick has projected it could cost \$1 million to comply with the regulations. Agawam, a larger community, will likely experience even bigger costs to comply, but Cohen and Golba are not making any estimates at this time.

"We are really not sure exactly how much it will cost," said Cohen. "That is part of what this task force will be working on."

So far, Golba is seeking \$173,000 in the

fiscal 2018 budget to comply with stormwater regulations. Of that amount, \$138,500 is projected to go toward maintenance and pollution prevention measures, Golba said.

"It is another unfunded mandate from the federal government," said Cohen. "I wish the government was helping provide funds for this. President Trump has said that he wants to invest money in infrastructure. We will see if he follows through on that."

Golba's budget proposal for stormwater management includes funds for public participation, education and outreach. It does not propose use of funds for any additional staffing to the DPW.

Cohen's task force also includes two business owners, a pair of residents, representatives from the Water and Engineering departments, and two members of the City Council.



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Taking out the trash



Above: Despite a sign showing a major fine for dumping, trash continues to be an issue at Pynchon Point and along the Connecticut and Westfield rivers.



Right: Volunteer Alyssa Gravel, 16, shows a bag full of trash she collected at Pynchon Point in Agawam during the Westfield River Watershed Association's river cleanup Saturday morning. More photos, page 11. TURLEY PUBLICATIONS PHOTOS BY GREGORY A. SCIBELLI

Appendix 2A

Year 14

Adopt-a-Road



VOLUNTEERS WANTED!

WESTFIELD RIVER CLEANUP

**Sat., April 22 (Westfield) and
Sun., April 23, 2017 (Agawam)**

9:00 a.m. to 1:00 p.m.

***Sponsored by
Westfield River Watershed Association
(www.westfieldriver.org)***

Please meet no later than 9:00 a.m. at one of our meeting sites for orientation and cleanup site assignments. WRWA will provide gloves and supplies.

- **In Westfield, meet at the public parking lot at the end of Meadow St. near the new green bridge.**
- **In Agawam, meet at Pyncheon Point at the South End Bridge Circle, River Road.**

For more information, contact **Mark Damon** for the Westfield sites at 413-977-1577 or mjdamon@verizon.net. For the Agawam site, contact **Sheryl Becker** at 413-374-1921 or sher1earth69@gmail.com.

Appendix 2B

Year 14

Attitude Surveys



Tell us what you see and think about
pet waste in your community!

Take a 4-question survey and get a prize
from your local dog licensing officer.*

Go to:

<https://www.surveymonkey.com/r/2017PVPetWaste>

Thank you!

Connecticut River Stormwater Committee

*Prize varies by city.

Photo credits: top photo: istockphoto.com, dogtrainingsecret.com, thisdogside.co



Appendix 2D

Year 14

Watershed Committee

Connecticut River Stormwater Committee

Annual Report

April 1, 2016 to March 31, 2017

The Connecticut River Stormwater Committee

The Connecticut River Stormwater Committee is an intergovernmental compact, now grown to include 17 municipalities, that is organized to collaborate in meeting NPDES MS4 permit requirements for stormwater education and outreach (Minimum Control Measure #1). Facilitated and staffed by the Pioneer Valley Planning Commission, the Committee also works together to meet other permit compliance activities where appropriate and needed. Member communities are shown in Table 1 below.

Table 1: Connecticut River Stormwater Committee Member Communities

Member Community	Committee Representatives and Departments
Agawam	Tracey DeMaio, Department of Public Works
Belchertown*	Steve Williams, Department of Public Works
Chicopee	Quinn Lonczak, Department of Public Works
East Longmeadow*	Robert Peirent, Department of Public Works
Easthampton	Dan Murphy, Department of Public Works
Granby	Dave Derosiers, Highway Department
Hadley*	Marlo Warner, Department of Public Works
Holyoke	Michael McManus, Department of Public Works
Longmeadow	Mario Mazza, Department of Public Works
Ludlow	Jim Goodreau, Department of Public Works
Northampton	Doug McDonald, Department of Public Works
Southwick	Randall Brown and Richard Grannells, Department of Public Works
South Hadley	Melissa LaBonte, Department of Public Works
Springfield	Kevin Chaffee, Planning/Conservation
West Springfield	Jim Czach, Department of Public Works
Westfield	Casey Berube, Department of Public Works
Wilbraham*	Tonya Basch, Department of Public Works

* Member that joined Committee this year.

Education and Outreach over the Past Year

With the rigors of the new MS4 permit requirements, the Stormwater Committee has been in a transition phase, where it has continued education and outreach under the requirements of the 2003 permit, but is also taking important steps in preparing for forthcoming requirements that begin July 1, 2017. In some cases, the work of preparing for the forthcoming permit has served to provide education and outreach under the 2003 permit.

The narrative below summarizes the work of the Connecticut River Stormwater Committee during the 2016-2017 reporting year, which includes the following:

1. Reached out to dog owners on pet waste disposal practices
2. Expanded understanding about stormwater issues and permit compliance
3. Promoted Soak up the Rain stormwater education campaign
4. Defined program of effective stormwater messaging for the next five-year permit term
5. Continued planning for website education in the Pioneer Valley
6. Collaborated with Massachusetts state-wide coalition of stormwater coalitions
7. Designed and constructed demonstration rain garden at the Renaissance School in Springfield
8. Led project in Chicopee, Ludlow, and Springfield to reduce urban flows into Chicopee River
9. Led urban tree planting project in Chicopee, Holyoke, and Springfield
10. Led project in Holyoke to reduce urban flows into Day Brook

In addition to these public education and outreach activities described in fuller detail below, members of the Stormwater Committee have joined PVPC in other MS4 permit related activities, including:

- Collaborating in understanding new permit requirements through dialogue with MassDEP and U.S. EPA and through use of Committee time to review and dialogue about specific sections of the permit together. These conversations are helping members understand how they might most effectively proceed in permit compliance as individual permittees on certain elements, but also in collaboration with others for important cost savings on other elements.
- Reviewing and updating municipal land use code to comply with new MS4 permit requirements. This is occurring through both fee for service in one community and through a Massachusetts Department of Administration and Finance's Efficiency and Regionalization grant and match from District Local Technical Assistance for another nine communities.
- Preparing for Illicit Discharge Detection and Elimination and Good Housekeeping trainings for municipal staff with funding from the Massachusetts Department of Administration and Finance's Efficiency and Regionalization grant. The trainings, to be conducted this coming year, will be videotaped to enable future trainings to occur as required and needed with new staff.
- Collaborated on defining needs for integrating stormwater system mapping with data collection requirements through funding from the Massachusetts District Local Technical Assistance program. A consultant has been hired to provide this integration so that data collection (outfall screening and sampling, manhole inspections, catch basin cleaning, etc.) can occur easily in the field and then uploaded to reference with geographically specific locations within Arc GIS mapping of the storm system for analysis in defining priority catchments and annual reporting to EPA.

1. Reached out to dog owners on pet waste disposal practices

Based on the bacteria messaging research completed last year, the Committee began this year to finalize an outreach program to dog owners on proper management of pet waste. Work this year focused on working with Town Clerks/Dog Licensing Officers in each member community to distribute a survey with three questions that will enable targeting of the program in each community. This survey is being distributed through Town Clerks/Dog Licensing Officers, starting in January 2017, via a glossy flyer that accompanies dog licenses. The flyer includes a link to the electronic survey and dog owners are incentivized to take the survey with a small prize that promotes better pet waste management practices.



Tell us what you see and think about pet waste in your community!

Take a 4-question survey and get a prize from your local dog licensing officer.*

Go to:

<https://www.surveymonkey.com/r/2017PVPetWaste>

Thank you!

Connecticut River Stormwater Committee

*while supplies last

Prizes (clockwise from top): kc933.com, thedogtrainingsecret.com, thisdogslife.co



Above is an image of the glossy flyer distributed by Town Clerks/Dog Licensing Officers in member communities in issuing dog licenses. It provides a link to the electronic survey and offer of a prize for taking the survey.

At right is an image of the prize offered to those completing the survey.



The survey contains four simple questions:

- In what Town do you license your dog?
- What are specific locations or types of place sin your tonw/city where you notice accumulation of or problems with pet waste? (Town/City Parks-please specify below, along rivers/streams in town- please specify below, along streets and sidewalks- please specify below)
- What do you believe most likely happens to pet waste left on the ground in these problem areas? (decomposes into the ground, washes into streams and rivers, cleaned up by municipal officials/landowners, others)
- Which graphic/message below is most likely to encourage people to pick up their dogs' waste? (rank from 1 to 5, with 1 being most likely)

Once dog licensing is complete in member communities (there is a some variation on procedure and timetable from one municipality to another), survey results will be compiled. These results will help in providing an important base line in measuring the effectiveness of the 5-year education and outreach program to come. The Committee will likely be looking to two metrics: how much change there is in knowledge about what happens to pet waste left on the ground and the degree to which specific known problem pet waste locations within municipalities improve. The program will go hand-in-hand with a

review and update of pet waste ordinances that will be referenced in educational materials during the new permit term.

2. Expanded understanding about stormwater issues and permit compliance

With renewed need for building understanding about stormwater issues and winning support for permit compliance budgets, the Committee undertook three activities this year to promote greater awareness in the region.

Door hanger for use in neighborhoods to highlight stormwater work

When public works or highway crews are out maintaining, fixing, or upgrading the municipal stormwater system, the work typically goes unseen. The only visible evidence to residents and businesses may be some traffic flow inconvenience around a manhole or along a trench. To highlight this "invisible" work, the Committee designed door hangers that can be used when crews are working in a given neighborhood. This idea is borrowed from Chicopee, where the simple act of using doorhangers played a vital role in helping people to understand the value of stormwater work and the need to establish dedicated funding for their program.

					
<u>Town/city name</u> Public Works is in your neighborhood, working to better manage storm flow and keep local waters clean.	Right now, we are working on the following in your neighborhood:				
Did you know? The _____ DPW maintains _____ catchbasins, _____ miles of storm pipe, and _____ to keep stormflow from local properties and roads.	<table border="0"><tr><td> ☐ Catch basin cleaning</td><td> ☐ Street sweeping</td></tr><tr><td> ☐ Storm system upgrade</td><td> ☐ Streetscape/ stormflow upgrade</td></tr></table> Any questions? Please call _____ Learn more at: <u>web page url</u>	 ☐ Catch basin cleaning	 ☐ Street sweeping	 ☐ Storm system upgrade	 ☐ Streetscape/ stormflow upgrade
 ☐ Catch basin cleaning	 ☐ Street sweeping				
 ☐ Storm system upgrade	 ☐ Streetscape/ stormflow upgrade				

Door hangers, image shown above, were designed to be modified for use in each member community to elevate the visibility and increase understanding about stormwater among residents and businesses.

Understanding about stormwater and permit requirements among other local officials

For the Committee, PVPC prepared a powerpoint presentation that outlines the major requirements of the new stormwater permit and the water quality elements specific to the region. PVPC staff presented this material in May to the Valley Development Council, a group of municipal planners in Hampshire and Hampden Counties (as well as representatives of the home builders, real estate and housing communities) that meet quarterly to discuss issues and share ideas on planning and smart growth. The presentation is available to all Stormwater Committee members as they work with colleagues and constituents to move forward on discussions about stormwater issues. MassDEP Stormwater Coordinator Fred Civian has offered his assistance to Committee members in promoting understanding about permit compliance and to date has joined PVPC staff in visiting with municipal officials in Hadley.

3. Promoted "Soak up the Rain" stormwater education campaign

The Connecticut River Stormwater Committee continued to develop and promote the "Pioneer Valley Soak up the Rain" education campaign (a local version of the EPA's New England campaign). The campaign, a call to action for property owners to reduce stormwater runoff through strategies that soak up the rain, involves two outreach efforts for the Connecticut River:

Pioneer Valley Soak up the Rain Website www.pvpc.org/soakuptherain/

The Stormwater Committee continues to maintain the Pioneer Valley Soak up the Rain website, which promotes a range of practices, including tree plantings, rain gardens, permeable pavements, dry wells, and green roofs. An occasional blog that includes photos and video provides examples from the region. Property owners throughout the Pioneer Valley are also invited to submit projects that they know of to feature on the website. A "Cool resources" heading provides connection to the latest information and a "resources" menu item links to a library of informational resources. In the past year, the website had 24,164 hits with 17,115 of these hits resulting in information requests being sent to the user.

Soak up the Rain signs for rain gardens and porous paving projects

Soak up the Rain signs for rain gardens and porous paving continue to be available for municipal use and distribution to residential and commercial property owners to highlight local projects. Sign messages currently focus on "Keeping our Rivers Clean." A variation of the sign design is underway for specific use around local lakes in the region, "Keeping our Lake Clean."

4. Defined program of effective stormwater education messaging for the next five-year permit term

The Committee carefully reviewed all stormwater education and outreach requirements in the forthcoming permit and created a table that it has shared widely within the region and across the state through the state-wide coalition. Drawing on this understanding of requirements and several other resources, including research PVPC conducted last year on stormwater education messaging and a survey of Committee members on specific local issues, PVPC staff prepared a program for effective stormwater education messaging for the next five-year permit term. This plan is currently in draft form and will be finalized by Committee members in the coming months and integrated as appropriate with Notice of Intent and Stormwater Management Program Plans in each member community.

5. Continued planning for website education and outreach for the Pioneer Valley

Given the various websites/pages the Stormwater Committee communities have been using to promote work under the 2003 permit, including Think Blue and Greenscapes, and the expanded education and requirements of the forthcoming permit, PVPC has been working to retool and update web materials. This began with a newly proposed website framework under "Think Blue: Clean Water Begins with You," that attends to the various stormwater issues and audiences under the new permit. It will bring together education and outreach materials together with metrics for understanding the effectiveness of messages and movement away from behavior and practices that negatively impact the health of the Connecticut River. PVPC is currently working with its webmaster to determine how this website can be accommodated under the Commission's current website framework.

6. Collaborated with Massachusetts state-wide coalition of stormwater coalitions

On behalf of the Connecticut River Stormwater Committee, two municipal Committee representatives and PVPC staff have been attending quarterly meetings of the state-wide stormwater coalition to identify and advance efficiencies that could be achieved through state-wide collaboration on certain MS4 permit compliance activities. PVPC staff is also participating in one of the subcommittees organized to give careful examination to education and outreach compliance activities and best possibilities for state-wide collaboration. The state-wide coalition through the Central Massachusetts Regional Planning Commission has a MassDEP grant to develop some tools and resources for permit compliance.

The following three projects, while specific to certain municipalities, are expanding awareness regionally about stormwater. They also serve to build capacity and know-how in planning, design, and construction of better stormwater management practices. Each project has its own outreach and education component.

7. Designed and constructed regional demonstration rain garden at Renaissance School, Springfield

PVPC staff continued work with the Regenerative Design Group to design and construct a 4th regional demonstration rain garden. The new rain garden at the Renaissance School captures flow from a rooftop at the school's entrance. The rain garden soaks up storm flow that previously entered a catch basin tied to a pipe that empties into Abbey



Brook. Abbey Brook is impacted significantly by urban storm flows which enter the brook at high volumes and velocities whenever it rains.

Sited near the main entrance to the Renaissance School, the rain garden is highly visible. Above image shows the rain garden under construction. Image below shows students asking questions of Landscape Architect and rain garden designer Tom Benjamin.



8. Led project in Chicopee, Ludlow, and Springfield to reduce urban flows to the Chicopee River

PVPC staff collaborated with the Connecticut River Watershed Council and the Chicopee River Watershed Association to evaluate the degree to which urban storm flows are contributing to the bacteria impairment in the Chicopee River. A water quality sampling program during the summer of 2016 involved 10 volunteers who collected samples from local tributaries and storm outfalls on the mainstem during 3 dry and 3 wet weather events. Follow up entailed source tracking at locations showing high bacteria during wet weather. Those results are now in turn leading to preliminary stormwater management facility design in two locations, a park plagued by geese in Chicopee and a small mixed use neighborhood in Ludlow.

9. Led urban tree planting project in Chicopee, Holyoke, and Springfield

PVPC is leading an effort to promote urban tree planting in the region's 3 major cities in partnership with the US Forest Service, Massachusetts Executive Office of Energy and Environmental Affairs, the Valley Opportunity Council, Nuestras Raices, ReGreen Springfield, Conway School of Design, Mass DCR, and the Cities of Chicopee, Holyoke, Springfield. Aimed at reducing stormwater flows to combined sewer areas and promoting greater climate resilience, the project involves an integrated community outreach process involving multiple neighborhood workshops and workshops for public works officials.

Once completed, the project will provide the following major deliverables:

- installation of 2,200 trees on local streets and yards
- final engineering design for a green streets in each municipality
- model stormwater tree rebate ordinance

The project is made possible thanks to a \$239,000 grant award to PVPC from the US Forest Service under the State and Private Forestry FY15 Northeastern Area Landscape Scale Restoration Program.

10. Led project in Holyoke to reduce urban flows into Day Brook

Through an EPA Urban Small Waters Grant PVPC is developing a green infrastructure plan for Day Brook in Holyoke, which flows from west to east, remaining above-ground from Anniversary Hill Park and Community Field before being conveyed underground beneath the City and routed through the Waste Water Treatment Plant. During large precipitation events, Day Brook's volume contributes to Combined Sewer Overflows into the Connecticut River.

Conceptual design work of this project will recommend ways to reduce inflow into Day Brook through green infrastructure stormwater facilities. The project also aims to increase awareness of this "secret stream" running unseen through the urban landscape. This fall the project began with an arts and science project at Sullivan School located close to the upper reaches of Day Brook. PVPC's partner in this project, Enchanted Circle Theater Group, led a six-week lesson series that taught third and fifth graders about stormwater and CSOs, and resulted in a mural and walk that relates the story of Day Brook in Holyoke. Both the mural and storywalk will be installed in public parks along the path of Day Brook in the summer. Meanwhile, geology students at Holyoke Community College assisted PVPC in conducting percolation tests at several publicly owned sites along the path of Day Brook to determine whether they would be suitable sites for green infrastructure stormwater installations. The City of Holyoke provided equipment and staff to aid in the perc tests, and also conducted GIS mapping of the Day Brook watershed. Next steps include holding two public workshops in the spring and summer (including unveiling the mural), a family-oriented workshop on stormwater at Beaudoin Village, and later in 2017, the development of the conceptual designs and plans.

Appendix 3B

Year 14

Non-Stormwater Discharge Ordinance



TOWN OF AGAWAM

Department of Public Works

1000 Suffield Street • Agawam MA 01001

Tel (413) 821-0600 • Fax (413) 821-0631

Christopher J. Golba – Superintendent

Dear _____,

It is our pleasure to invite you to be a member of the Citizen Advisory Task Force, which is being formed to explore the possibility of establishing a stormwater utility or fee to fund Agawam's existing and future municipal stormwater management program. The Town of Agawam is working with the Pioneer Valley Planning Commission, who received grant funding from the Massachusetts Department of Environmental Protection (MassDEP) to conduct the "Stormwater System Assessment and Utility/Fee Planning Project".

The project has multiple components, but it is aimed at addressing two fundamental items: 1) identify major needs, priorities, and costs for Agawam's municipal stormwater management program; and 2) evaluate the feasibility of establishing a stormwater utility or fee to fund the future program. You were selected based on recommendations from Town staff and officials and your ability to adequately represent your stakeholder group and its interests. Town staff and officials will also participate in the project.

The purpose of the Citizen Advisory Task Force will be to participate in six 2-hour meetings throughout the course of the project (6-9 months) and provide input on the following project elements: major needs, priorities and costs for stormwater program; parcel and data analysis for stormwater billing units; stormwater funding analysis and rate structure; the draft rate ordinance; and the Funding Report. In addition to the Task Force meetings, the project includes two public meetings to provide an update to the City Council and general public.

We believe it is important for stakeholders to have a voice in this process and hope that you will join us in this endeavor to responsibly manage the infrastructure and natural resources in our community. If you have any questions, please contact Michelle Chase below.

Please notify Michelle regarding your decision before **February 6th, 2017**.

Michelle Chase
Town Engineer
Town of Agawam
(413) 821-0625
mchase@agawam.ma.us

Thank you for your time and we look forward to your participation in the Citizen Advisory Task Force.

Regards,

Christopher J. Golba
Superintendent DPW

Michelle C. Chase, P.E.
Town Engineer

Town of Agawam, MA
Stormwater System Assessment and Utility/Fee Planning Project



Agawam Stormwater Task Force - Meeting #1
April 26, 2017

Agawam Senior Center
Dining Room
654 Main Street
Agawam, MA 01001

Agenda:

- | | |
|-------------------------|--|
| 5:45 p.m. | ARRIVAL AND SIGN IN |
| 6:00 - 6:10 p.m. | WELCOME AND INTRODUCTIONS |
| 6:10 - 6:25 p.m. | CURRENT PROJECT <ul style="list-style-type: none">• Overview, goals, scope and schedule• Roles and responsibilities |
| 6:25 - 6:50 p.m. | MUNICIPAL STORMWATER SYSTEM <ul style="list-style-type: none">• History in Agawam• How it works and mapping• Agawam DPW activities |
| 6:50 - 7:00 p.m. | BREAK |
| 7:00 - 7:35 p.m. | STORMWATER NEEDS <ul style="list-style-type: none">• Infrastructure, water quality and flooding• Regulatory requirements and 2016 EPA permit |
| 7:35 - 7:50 p.m. | PUBLIC EDUCATION AND OUTREACH <ul style="list-style-type: none">• Proposed activities• Focus group and survey feedback |
| 7:50 - 8:00 p.m. | NEXT STEPS |

Town of Agawam, MA
Stormwater System Assessment and Utility/Fee Planning
Tasks and Estimated Timeline

ID	Task Name	Q4 2016			Q1 2017			Q2 2017			Q3 2017			Q4 2017		
		Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	Hire Consulting Firms															
a	Hire Amec Foster Wheeler															
b	Hire graphic artist															
2-1	Identify Major Needs, Priorities and Costs for Stormwater Program															
a	Kick-off meeting to review program needs and priorities															
b	Preliminary program analysis, needs and budget estimates															
c	Meeting #1 with Task Force to review preliminary analysis															
d	Finalize program analysis, priorities and draft Stormwater Program Report															
e	Meeting #2 with Task Force to present findings															
f	Public Meeting #1 to present findings															
3	Recruit and engage broad-based citizen advisory task force															
a	Establish Task Force, issue and follow up on invites															
b	Set up Task Force meeting schedule, secure location															
c	Write up notes from each Task Force meeting (at least 8 meetings)															
d	Draft findings/recommendations, incorporating draft rate ordinance and report on financial considerations prepared by Amec Foster Wheeler															
4	Conduct other public outreach and education															
a	Set up larger public meeting schedule, secure location (2 to 3 meetings)															
b	Prepare and conduct interviews/survey to explore case and write up results															
c	Produce outreach materials based on interviews/survey results															
5-2	Conduct Parcel Analysis and Calculate ERU															
a	Analysis of GIS and assessor's data, ERU/other billing units and billing options															
b	Develop memo on analysis, findings and recommendations															
c	Meeting #3 with Task Force to present findings															
6-3	Define and Evaluate the Financial Elements of the Stormwater Utility															
a	Preliminary rate approach, funding evaluation and outline of policies															
b	Meeting #4 with Task Force to review preliminary analysis															
c	Develop draft funding and policy memorandum															
d	Meeting #5 with Task Force to review funding policies															
e	Develop draft rate ordinance															
f	Meeting #6 with Task Force to present findings and review draft rate ordinance															
g	Public Meeting #2 to present Task Force recommendations and report															
7	Project reporting															
a	Quarterly reporting to MassDEP															
b	Final report (to be prepared well in advance of project end date of 6-30-18)															

☆ = Key Meeting

△ = Final Task Deliverable

Appendix 3F

Year 14

Failing Septic Systems

FAILED & NEW SEPTIC SYSTEMS
FROM 1/1/2016 - 12/31/16
Agawam Health Department

2/05/16	Soil Tech Land Service 70 Bailey Street Agawam, MA 01001	new
3/01/16	Berry Construction/Kozak 694 Barry Street Feeding Hills, MA 01030	repair
4/11/16	Joseph Santore 18 Beech Hill Road Feeding Hills, MA 01030	repair
5/06/16	Eric Wilson 116 Barry Street Feeding Hills, MA 01030	repair
06/06/16	Doreen Prouty 891 S. Westfield Street Feeding Hills, MA 01030	new
06/27/16	Francis Nareau 712 Barry Street Feeding Hills, MA 01030	repair
06/29/16	Alton Grant 935 S. Westfield Street Feeding Hills, MA 01030	repair
9/21/16	Joan & Russell Jenks 430 N. West Street Feeding Hills, MA 01030	repair
9/21/16	R O'Neil/C Gilmore 400 North Street Feeding Hills, MA 01030	repair
10/31/16	Angelica Ochoa 94 White Fox Road Feeding Hills, MA 01030	repair

FAILED & NEW SEPTIC SYSTEMS
FROM 1/1/2016 - 12/31/16
Agawam Health Department

11/04/16	Marty Green Construction 64 Taft Street Feeding Hills, MA 01030	new
12/02/16	Joyce Laviolette 14 Kathy Terrace Feeding Hills, MA 01030	repair
12/06/16	Scott Brown 465 North West Street Feeding Hills, MA 01030	new
12/09/16	Matthew Jones 5 Pheasant Run Circle Feeding Hills, MA 01030	repair
12/20/16	Scott Massoia 23 Carmen Avenue Feeding Hills, MA 01030	new

Appendix 6B

Year 14

Training of Municipal Employees



COML

2017 APPLICATION TO OBTAIN A PESTICIDE CERTIFICATION LICENSE

Pursuant to M. G. L., c.62C.s.49A, I certify under the penalties of perjury that, to my knowledge and belief, I have filed all state tax returns and paid all state taxes required under law

Matthew J. Carrington
YOU MUST SIGN ABOVE

LICENSE

33222

STATUS

R L

PAY THIS AMOUNT

\$100.00

DUE BY

12/01/2016

MATTHEW J CARRINGTON
79 JOSEPH AVENUE
WESTFIELD MA 01085

LICENSE TYPE Commercial - L

CODE CATEGORY (ies)

000

CORE LICENSE

NAME AND ADDRESS OF EMPLOYER ON FILE

TOWN OF AGAWAM (DPW)
36 MAIN STREET
AGAWAM MA 01001

PRINT CHANGES ONLY TO NAME / ADDRESS / TELEPHONE BELOW

Name

MATTHEW J CARRINGTON

Residential Address (Street or P.O. Box)

36 VADNAIS ST Apt #

City/Town State Zip Code

AGAWAM MA 01001

Telephone No. 413 - 575 - 0575

PRINT CHANGES ONLY TO EMPLOYER INFORMATION BELOW

Employer

Street

City/Town State Zip Code

FINANCIAL RESPONSIBILITY ATTESTATION - INSURANCE AGENT COMPLETES ALL INFORMATION REQUIRED

(Please Print) Name of Insurance Company (Not Agent)

Name of Independent Agent and/ or Managing General Agent City/Town State Zip Code Telephone #
(Agent) (Agent) (Agent)

Signature of Independent Agent and/or Managing General Agent Date (MM/DD/YYYY)

My signature indicates that I hereby attest under the pains and penalties of perjury that the person named on this application of the pest control company for which they work has in force an insurance policy which meets or exceeds the standards as set forth in Massachusetts pesticide regulation 333 CMR 10.13 (Regulatory authority M. G. L., c 132B, s. 5 6A, 10).

MAILING INFORMATION

VIA U.S. MAIL

COMMONWEALTH OF MASSACHUSETTS
P.O. BOX 417103
BOSTON, MA 02241-417103

VIA OVERNIGHT MAIL/COURIER SERVICE

Bank of America Lockbox Services
COMMONWEALTH OF MASSACHUSETTS - Lockbox 417103
MA5-527-02-07
2 Morrissey Blvd.
Dorchester, MA 02125

14202-52990

V 111502

198343



COML

2017 APPLICATION TO OBTAIN A PESTICIDE CERTIFICATION LICENSE

Pursuant to M. G. L., c.62C.s.49A, I certify under the penalties of perjury that, to my knowledge and belief, I have filed all state tax returns and paid all state taxes required under law

[Signature]
YOU MUST SIGN ABOVE

JAY L HARVEY
56 WINDING LANE
SPRINGFIELD MA 01118

LICENSE TYPE Commercial - L

CODE	CATEGORY (ies)
000	CORE LICENSE

CURRENT INSURANCE CARRIER

LICENSE

23596

STATUS

R L

PAY THIS AMOUNT

\$100.00

DUE BY

12/01/2016

NAME AND ADDRESS OF EMPLOYER ON FILE

TOWN OF AGAWAM (DPW)
36 MAIN STREET
AGAWAM MA 01001

PRINT CHANGES ONLY TO NAME / ADDRESS / TELEPHONE BELOW

Name

Residential Address (Street or P.O. Box)

Apt #

City/Town

State

Zip Code

Telephone No.

PRINT CHANGES ONLY TO EMPLOYER INFORMATION BELOW

Employer

Street

City/Town

State

Zip Code

FINANCIAL RESPONSIBILITY ATTESTATION - INSURANCE AGENT COMPLETES ALL INFORMATION REQUIRED

(Please Print) Name of Insurance Company (Not Agent)

Name of Independent Agent and/or Managing General Agent

City/Town
(Agent)State
(Agent)Zip Code
(Agent)Telephone #
(Agent)

Signature of Independent Agent and/or Managing General Agent

Date (MM/DD/YYYY)

My signature indicates that I hereby attest under the pains and penalties of perjury that the person named on this application of the pest control company for which they work has in force an insurance policy which meets or exceeds the standards as set forth in Massachusetts pesticide regulation 333 CMR 10.13 (Regulatory authority M. G. L., c. 132B, s. 5 6A, 10).

MAILING INFORMATION**VIA U.S. MAIL**

COMMONWEALTH OF MASSACHUSETTS
P.O. BOX 417103
BOSTON, MA 02241-417103

VIA OVERNIGHT MAIL/COURIER SERVICE

Bank of America Lockbox Services
COMMONWEALTH OF MASSACHUSETTS - Lockbox 417103
MA5-527-02-07
2 Morrissey Blvd.
Dorchester, MA 02125

14202-52990 V III 502

198344

Appendix 6C

Year 14

Catch Basin Cleaning Program

CATCH BASIN CLEANING AND CATCH BASIN WORK 2016-2017

5-18-16 FEDERAL ST. EXT#98 #120

BESSBROOK ST. END OF STREET 2-BASINS

LINE.+SEQUIA DR. 2-BASINS BEGINNING OF ST.

BELVIDERE DR. 2-BASINS AT BEGINNING OF STREET

MONROE+ WILLARD ST. 2-BASINS END OF STREET

SPRINGFIELD ST. HILL 22-BASINS

SUFFIELD ST. FROM MAIN ST. TO ROWLEY ST 18-BASINS

5-19-16 FOREST HILL RD. #143

ROBIN RIDGE DR. AT CUL-DE-SAC 6-BASINS

COOPER+GREENACRE LN. 2-BASINS

MEADOW ST.+FRANK ST. 2-BASINS AT BEGINNING OF STREET.

NORRIS ST. #62 #89

SILVER ST. BY ROSATIS 6-BASINS

BEGLEY ST. ALL ON STREET 8-BASINS

MEMORIAL +POPLAR ST. 2-BASINS

5-20-16 SHERRI LN. ALL OF STREET.

REED ST. 6-BASINS

NORTH ST. EXT. AT N. WEST ST. 4-BASINS

RAYMOND CIR. 10 BASINS

RIDGEVIEW DR. 6-BASINS

5-27-16 NORTH ST. #242 #492

MCKINLEY ST. 10-BASINS

RAMAH CIR. NORTH 6-BASINS

SQUIRE LN. 4-BASINS

5-31-16 EDGEWATER DR. 12-BASINS

GARDEN ST. #28 2-BASINS

SOUTHWICK ST. 2-BASINS AT CROSS RD. PLAZA

HAYES AVE. 2-BASINS

MILL ST. +KENSINGTON 3-BASINS

6-9-16 SOUTH PARK TERR. 6-BASINS

SOUTH BRIDGE CIR. 1ST ONE ON LEFT SIDE

BARNEY ST. + POMROY ST. 2-BASINS

7-5-16 FERNWOOD DR. #50

150 GARDEN ST 2-BASINS

76 OTTAWA ST 2-BASINS

PROVIN MT. DRIVE 4-BASINS

20 STERLING RD. 2-BASINS

8-15-16 24 LISWELL DR-BASIN REPAIR

57 MOORE ST. -BASIN REPAIR

24 LEALAND AVE. -BASIN REPAIR

8-18-16 45 ALTHEA CIR. -BASIN REPAIR

106 KAREN LYNN CIR-BASIN REPAIR

102 CAMPBELL DR.-BASIN REPAIR

8-19-16 60 CRICKETT LN. -BASIN REPAIR

AGAWAM HIGH SCHOOL—BASIN REPAIR

8-22-16 24 CARR AVE-BASIN REPAIR

9-8-16 74 HAMLITON CIR -BASIN REPAIR

10-5-16 26 BUTTERNUT DR.-BASIN REPAIR

10-12-16 600 SUFFIELD ST-BASIN REPAIR

10-15-16 SOUTHWICK ST -BASIN REPAIR

11-7-16 32 BARRY ST -BASIN REPAIR

11-14-16 MCKINLEY AVE. 6-BASINS REPAIRED

11-15-16 266 ROWLEY ST-BASIN REPAIR

11-17-16 26 COYOTE CIR –BASIN REPAIR

11-21-16 16 BRIDGE ST. –BASIN REPAIR

26 HASTINGS ST. –BASIN REPAIR

3-1-17 11 OAK LN.-BASIN REPAIR

3-9-17 24 LANCASTER ST. –BASIN REPAIR

12 HIGH ST.-BASIN REPAIR

Appendix 6E

Year 14

Pest Control / Landscaping and Lawn Care



Borgatti Park

4/25/2017 10:33:57 AM

Scale: 1"=250'

Scale is approximate

The information depicted on this map is for planning purposes only.
It is not adequate for legal boundary definition, regulatory
interpretation, or parcel-level analyses.

6.34 acres

276,202 SF

