

Organization: **Town of Agawam, Massachusetts**

PERMIT YEAR 12: 2015 ANNUAL REPORT

NPDES PERMIT # MAR 041 001

Reporting Period: May 2014– April 2015

MA DEP Transmittal X265668

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, 2015**

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 12 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 12 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, community events, classroom education, local cable access bulletins, community website news and events, newspaper press releases and informational pamphlets. Messages included watershed education, the proper disposal of HHW and prescription drugs, transitioning from chemicals to organic land care, composting, rain barrel benefits, and proper disposal of cigarette butts.

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 in public participation at its annual Household Hazardous Waste collection, Rain Barrel distribution, National Drug Take Back Day, river clean-up, and public workshops.

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.

Due to the current economic situation, the proposed Stormwater Utility fee that was mentioned in the Year 7 Annual Report has been delayed. The Town is hopeful that eventually this fee will be approved so that the funding will help assist in MS4 maintenance projects, promote Low Impact Development and give support to educational activities throughout Town.

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. Street sweeping, HHW collection, used motor oil collection and mercury waste collection continue to take place as funding is available. In addition, the town continues use organic lawn care practices on a previously transitioned athletic field.

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 12 Activities

The town continues to use posters available through the “Think Blue MA” Campaign at the Town Hall and DPW Municipal Annex. This year the town chose to continue displaying the Think Blue Cigarette Butt poster, encouraging the proper disposal of cigarette butts.

In addition, the DPW purchased and mounted a 72” x 48” Bulletin Board in the DWP conference room. The Bulletin will be used to display stormwater related topics and news relevant to home owners, businesses, developers, industrial properties, and municipal employees. This location was chosen due to the number of meeting that take place in this area between all groups listed above. The current bulletin highlights stormwater related activities that have taken place throughout the town during permit year 12.

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 EducationOriginal 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 12 Activities

During permit year 12, the DPW again coordinated the "Watershed On Wheels" to visit the Agawam Middle School. Thirteen 5th grade classrooms were introduced to the CT River Watershed through an Immersion Trailer; highlighting habitats, ecosystems and food chains, lessons on the CT River Watershed using a Watershed Table, and a Biological Artifacts center; exploring the behavioral and structural adaptation of animals that live along the CT River Watershed.

In addition, the DPW provided each student (600) at the Middle School with "Ground Water-Protecting our supplies" booklets. Teachers and students read the pamphlet and discussed what Stormwater is, how they can protect ground water, and how to conserve water.

See Appendix 1B

Best Management Practice Assessment / Proposed Change

No proposed changes to this BMP

Possible Future Activities

It is anticipated that the DPW will continue to coordinate the WOW Express to visit the Middle School students each school year as the WOW Express is 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 12 Activities

During permit year 12 the Town of Agawam posted the following information to help viewers learn more about stormwater management, healthy habits, and community activities.

- Earth Day Event, Department of Public Works
- River Clean-up, WRWS
- Robinson State Park Day, Friends of Robinson State Park
- Household Hazardous Waste Collection, Department of Public Works
- National Drug Take Back Day, Health Department
- Prescription Drug Drop off – Agawam Police Department
- Rain Barrel Sale, Department of Public Works
- Water Conservation Challenge – Mayors Department
- Composting – Agawam Garden Club
- Community Clean-up – Department of Public Works

See Appendix 1E Newspaper Press Releases for detailed information

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 12 Activities

During permit year 12 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.

- Earth Day Event, Department of Public Works
- River Clean-up, WRWS
- Robinson State Park Day, Friends of Robinson State Park
- Household Hazardous Waste Collection, Department of Public Works
- National Drug Take Back Day, Health Department
- Prescription Drug Drop off – Agawam Police Department
- Rain Barrel Sale, Department of Public Works
- Water Conservation Challenge – Mayors Department
- Composting – Agawam Garden Club
- Community Clean-up – Department of Public Works

See Appendix 1E Newspaper Press Releases for detailed information

The town website was also updated to include a link to the Greenscapes program (www.greenscapes.org) as well as the Soak up the Rain campaign (www.pvpc.org/soakuptherain/)

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.

In February of 2014 the town released its newly redesigned website. The DPW is currently working with the IT department to help integrate photos of community projects related to stormwater management into an online photo gallery on the town website.

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 12 Activities

During permit year 12, the following press releases were sent and published in local newspapers.

- Earth Day Event, Department of Public Works
- River Clean-up, WRWS
- Robinson State Park Day, Friends of Robinson State Park
- Household Hazardous Waste Collection, Department of Public Works
- National Drug Take Back Day, Health Department
- Prescription Drug Drop off – Agawam Police Department
- Rain Barrel Sale, Department of Public Works
- Water Conservation Challenge – Mayors Department
- Composting – Agawam Garden Club
- Community Clean-up – Department of Public Works

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 13.

1F Informational Pamphlets

Original 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 12 Activities

In June 2014, the town distributed approximately 12,500 Aqua Almanacs to all businesses and dwelling units in Agawam. Included in the water report was a Cross-Connection Control and Backflow Prevention insert.

See Appendix 1F

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 12 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 12.

Best Management Practice Assessment / Proposed Change

No changes at this time.

Possible Future Activities

Agawam's First Annual "Agawam Clean" community clean-up will take place in May 2015. The DPW will continue to encourage and support local volunteers as they become available.

See Appendix 2A

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 12 Activities

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

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 12 Activities

No volunteers during permit year 12. 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 Committee

Original 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 12 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 is currently participating in the following projects:

- Continued to collaborate with the Greenscapes Program
- Began research toward developing outreach on bacterial contamination in stormwater; survey to be created and distributed during the summer 2015
- Continued to devote time to promoting the "Pioneer Valley Soak up the Rain" campaign through workshops, the website, designing rain garden signs for future use, and grants.

See Appendix 2D

Best Management Practice Assessment / Proposed Change

No proposed changes

Future Activities

Activities are pending future General Permit Requirements.

2E Community OutreachOriginal 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 12 Activities

During Permit Year 12, the DPW has offered the following programs to residents in town.

- Household Hazardous Waste Day; 206 Residents attended
- River Clean-up
- Drug Take Back Day – 57.8 cubic feet of sharps
12 cubic feet of medication
- Rain Barrel Sale - 12 Barrels Sold
- Trash Talk Workshop – 17 participants
- Stormwater Booklet – 600 Students
- Agawam Garden Club – 40 Participants
- Childrens Library – 60 students

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.

J

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 12 Activities

GIS based mapping of the Town's existing stormwater drainage system is estimated to be complete. Tighe & Bond has updated the GIS map drainage information with new residential subdivisions that were constructed in Year 9. They have also inspected and photographed 95% of all known drainage outfalls and have linked that information directly to the Town GIS mapping system.

In past years, Tighe & Bond has been responsible for updating the GIS maps with new information. In year 9, Tighe & Bond turned over control of the GIS database to the Town of Agawam. The Town is now responsible for updating the maps as new work is completed and more complex investigations occur.

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.

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. In the future, if the budget allows, the DPW is considering obtaining tablets that would have access to the GIS database for use in the field.

3B Non-Stormwater Discharge OrdinanceOriginal 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 12 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.

Best Management Practice Assessment / Proposed Change

This ordinance has been enforced during permit year 12. 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.

The DPW has previously proposed a stormwater utility fee for all residents and private sites in Town due to the increased costs resulting from both the maintenance of the municipal stormwater system and continued compliance with the NPDES and the Six Minimum Control Measures in the MS4 General Permit. The Town continues to research, discuss and propose the opportunity to implement the 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.

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 12 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 12, the Town of Agawam has investigated and resolved illicit discharges in the following locations: (UPDATE)

- Valley Street: An existing sewer overflow from Valley Street Sewer Pump Station that was thought to be previously abandoned was discovered and subsequently abandoned and blocked.
- Christopher Lane: The DPW was made aware of a damaged drain outfall pipe by the resident of #111 Christopher Lane. The pipe had broken causing a sinkhole in the resident's backyard. Also, the flow from the outfall was causing dangerous erosion within the stream bed. The DPW replaced the broken pipe and installed a riprap plunge pool at the outlet invert.

- **Barney Street:** A detention basin on Barney Street is divided on the property line of two residents. It was brought to the attention of the DPW that one resident had covered their half of the detention basin with a black fabric, inhibiting proper vegetation growth. The resident was instructed by the DPW to remove the fabric and reseed the slope on their property.
- **Cooley Street:** A resident of Cooley Street reported an oil spill in the street. The DPW investigated the claim and observed an oily film trickling from the driveway of one of the resident's neighbors. The DPW sent a letter to the owner of the property where the oil was coming from instructing them to remove the source of the spill.
- **Reed Street:** A resident of Reed Street reported an oil spill coming from their neighbor's driveway. The DPW investigated the claim and although no oil was seen, there was a dark stain on the neighbor's driveway leading into the street and towards a Town-owned catch basin. The DPW sent a letter to the owner of the property where the oil was coming from instructing them to remove the source of the oil.
- **North West Street:** In the summer of 2014, there was a water break at the Provin Mountain Reservoir – operated by the Springfield Water and Sewer Commission (SWSC) – located at the top of a mountain adjacent to North West Street. Water from the break caused a mudslide that forced sediment to flow across North West Street blocking the road and spilling sediment into a stream near #964 North West Street. The DPW worked with the Agawam Conservation Commission to insure the SWSC cleaned the sediment from the street and repaired all damage and erosion caused to the stream.
- **North West Street:** A solid waste disposal truck broke down near #926 North Street and began to leak hydraulic fluid down the street into the driveway of #942 North West Street. As per proper procedure, the waste disposal company contacted their cleaning crew, the MA Department of Environmental Protection and the Agawam DPW and Fire Department. The majority of the spill was contained within the driveway of 3942 North West Street. No contamination was observed within the Town storm sewer system or a nearby stream.

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 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 has had 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

In order to meet the NDPES 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 pH, Chlorine, Copper, Phenols, and Detergents. 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 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.

3D Inform Employees, Businesses, and PublicOriginal 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 12 Activities

In June 2014, the town distributed approximately 12,500 Aqua Almanacs to all businesses and dwelling units in Agawam. Included in the water report was a Cross-Connection Control and Backflow Prevention insert.

See Appendix 1F

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 12 Activities

During year 4, the DPW purchased a video camera system which has been used to investigate the condition of several drainage pipes. Video inspections are used to determine: if there are any illicit connections, the condition of the drainage pipe, and to assist in mapping of the Town's drainage system. During Year 11, a new camera was purchased to replace the old one which was breaking down frequently.

Best Management Practice Assessment / Proposed Change

The DPW continues to use its video camera to assist in Illicit Discharge detections and other related drainage and sanitary sewer investigations. If it is necessary, when an illicit discharge is discovered under BMP #3B in larger diameter pipes, the DPW may need to contract out the use of a more advanced video camera system.

Possible Future Activities

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 SystemsOriginal 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 12 Activities

The Health Department maintains records on all inspections involving septic systems. The Health Department has forwarded a list of all failed systems from 2013 to the DPW. Septic System locations and their failures from 2003-2012 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 12 Activities

No volunteers during permit year 12.

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 12 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

This ordinance may be revised in the future to help clarify and improve the requirements pending the soon to be updated General Permit Requirements. The ordinance will continue to be used and enforced.

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 12 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

The ordinance may be revised in order to clarify and improve the requirements pending the rewritten General Permit Requirements.

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 12 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

This ordinance may be revised in the future to help clarify and improve the rules and regulations pending the future rewritten General Permit Requirements. The ordinance will continue to be used and enforced.

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 12 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

This ordinance will continue to be enforced and may be revised to help clarify and improve requirements as needed pending the rewritten General Permit Requirements.

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 12 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

Shortly after the adoption of the new Ordinance, the Town began permit activities. If necessary, the DPW may make minor modifications to the ordinance in the future pending the soon to be updated General Permit Requirements.

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 12 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.

During permit year 6, the DPW proposed a stormwater utility fee for all residents and private sites in Town due to the increased costs resulting from both the maintenance of the municipal stormwater system and continued compliance with the NPDES and the Six Minimum Control Measures in the MS4 General Permit. The Town continues to research, discuss and propose the opportunity to implement the 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, expanding the Illicit Discharge Program and educational purposes.

A copy of the 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).

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 12 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.

The DPW was able to purchase a Boom Flail Mower using Chapter 90 funding. This mower is sometimes used to mow vegetation in detention ponds.

Best Management Practice Assessment / Proposed Change

Any changes to BMP are pending the soon to be updated General Permit Requirements.

Possible Future Activities

Future activities are pending the soon to be updated General Permit Requirements.

6B Training of Municipal EmployeesOriginal 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 12 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.

The Town Engineer, Assistant Town Engineer and Environmental Projects Coordinator all attended a workshop "Understanding Stormwater Regulations and Impacts on Western Massachusetts Municipalities" workshop sponsored by Tighe & Bond, Inc.

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.

6C Catch Basin Cleaning ProgramOriginal 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 12 Activities

The town continues to use the previously developed catch basin cleaning priority area location list to determine where to focus their catch basin cleaning efforts. These priority areas are based on the locations in town, which have significant hills and a

history of clogging. During Permit Year 12, approximately 66+ catch basins were repaired and/or cleaned to improve the performance of their function.

See Appendix 6C

Best Management Practice Assessment / Proposed Change

The town will continue to utilize funds, if available, for annual cleaning of catch basins within priority areas.

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

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.

The DPW anticipates creating a catch basin cleaning door hanger that will notify home owners and businesses when catch basins were cleaned in their neighborhood. The door hanger will include best management practices for homeowners and businesses to help keep our catch basins clean of pollutants and obstructions. - INC

6D Street Sweeping

Original 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 12 Activities

During permit year 12, the DPW completed street sweeping in the following areas:

- 70 curb miles of roadway between April 1, 2014 – April 1, 2015
- 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

Any changes are pending the soon to be updated General Permit Requirements.

6E Pest Control / Landscaping and Lawn Care

Original 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 12 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 use of organic practices where appropriate.

During permit year 10, 3.2 acres of lacrosse field at School Street Park transitioned from chemicals to organic lawn care under the TUR grant. The town will continue to use organic land care practices on this portion of land.

Transitioning from Chemicals to Organic at the High School Athletic Field did not take place as anticipated as the field will be redesigned to include turf.

Best Management Practice Assessment / Proposed Change

DPW will continue to maintain Lacrosse field with organic lawn care practices and products.

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 / MSGPOriginal 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 12 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.

See Appendix 6F

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 RecyclingOriginal 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 12 Activities

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

In 2014, 2,650 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 12 Activities

The Town hosted its annual Household Hazardous Waste Collection day in the fall of 2014. 206 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 purchased three safety storage cabinets in 2012. The cabinets continue to be used to properly store illegally dumped items dropped along the roadsides as well as chemicals from residents moving prior to HHW Day.

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 12 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 12

Educational Displays

STORMWATER MATTERS



Appendix 1B

Year 12

Classroom Education

Ground Water

—Protecting our supplies

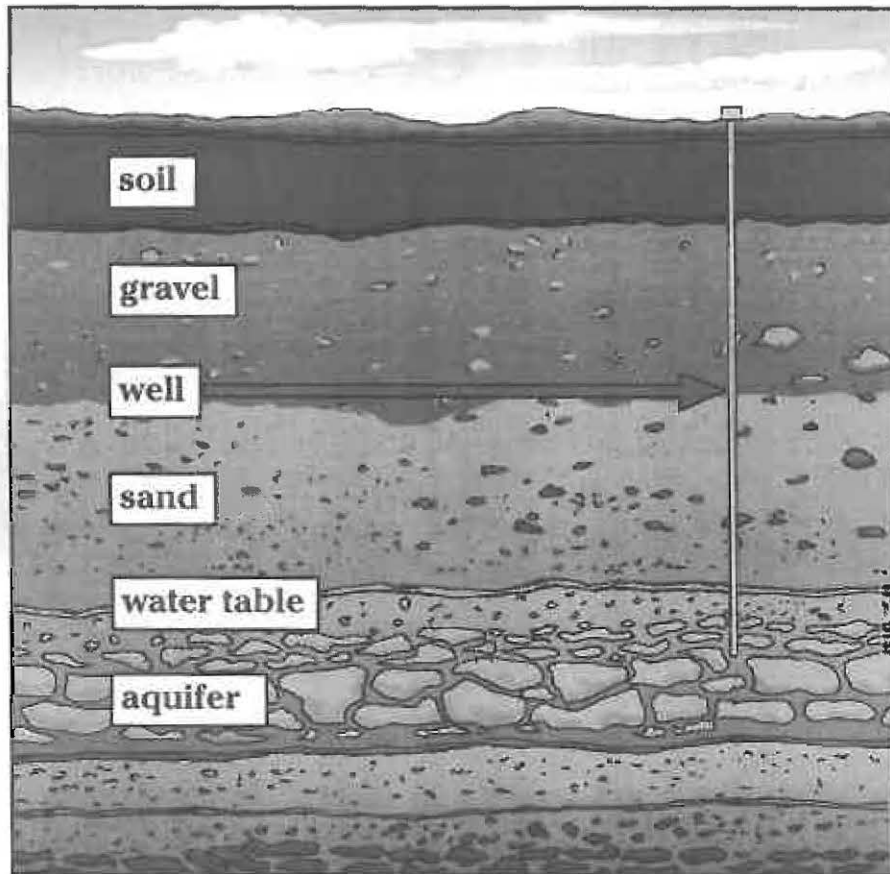


What is ground water?

It's water that lies beneath the earth's surface.

Ground water is stored in aquifers.

These are underground rock formations, caverns, and beds of sand and gravel. Water is pumped out of them by wells.



We rely on ground water.

It's the source for many public water utilities and private wells. In fact, about half of our nation's drinking water comes from ground water.

Protecting ground water is everyone's business.

It's the only way to ensure clean, plentiful ground water—a key to our health and way of life!

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Ground water is part of the water (hydrologic) cycle

—nature's system for renewing water supplies. This includes:

Condensation

Water vapor cools and turns into tiny water droplets. These attach to one another and form clouds.

Precipitation

When the clouds get too heavy, the water falls back to the earth as rain, snow, sleet or hail.

Evaporation

The sun heats surface water. This changes to water vapor and rises into the air.

Infiltration

Some water sinks into the ground and is stored in aquifers.

Surface runoff

Some water runs across the earth into lakes, rivers, reservoirs, etc.

The water table

resembles a boundary. Below it, the pores and cracks in the earth are saturated (filled with ground water). Above it, they are not.

Ground water is a fragile resource.

It can be:

Easily polluted

Our activities on land can pollute ground water. For example, improper handling or disposal of chemicals and wastes can harm it.

Very slow moving

Ground water usually moves slowly through soil and rock. So, pollutants that get into ground water are not quickly flushed out or diluted.

Difficult to monitor

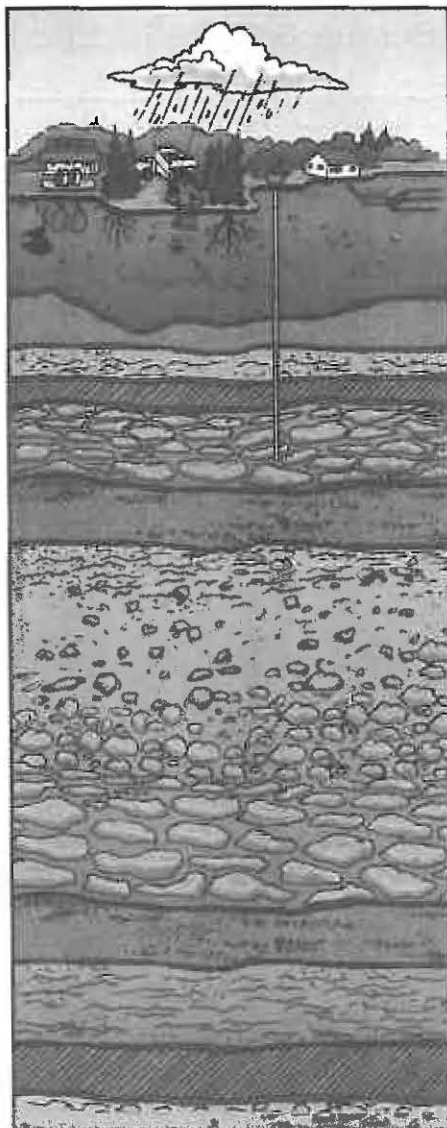
Pollution of ground water may not be noticed until it reaches a well. By this time, pollution may be widespread.

Hard to clean

Once ground water becomes polluted, it's difficult and expensive to clean. In some cases, cleaning may be impossible.

Slow to recharge

Water can be pumped out of an aquifer faster than it is naturally refilled.



Overuse and pollution put our ground water supplies at risk.

Threats to ground water

come from many sources. They include:

Home septic systems

A faulty system can allow harmful viruses and bacteria to get into ground water.

Household hazardous wastes

For example, chemicals poured on the ground or down the drain or toilet can:

- pollute ground water
- damage septic systems.

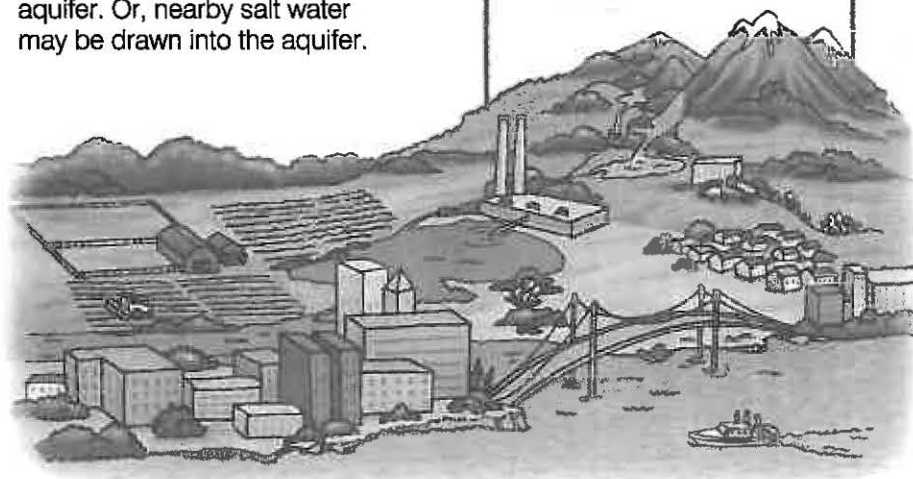
Overuse of water

If the water table gets too low, polluted water from surface sources may be drawn into the aquifer. Or, nearby salt water may be drawn into the aquifer.

Possible sources of pollution in the community

include:

- landfills
- industrial wastes
- underground storage tanks
- agricultural chemicals and wastes
- road salt
- polluted surface water.



You can help protect ground water—and your health—from these dangers.

You can make a difference at home and in your community.

Protect water.

- Limit use of household and garden chemicals.
- Never pour chemicals or paint down the sink or storm drain, or on the ground.
- Bring all hazardous wastes (such as motor oil) to a hazardous waste collection center.



Maintain your septic system.

Have the system checked and the tank pumped as recommended by a licensed professional.

Get involved with community efforts to protect and conserve water.

Conserve water.

- Repair all household leaks.
- Use water-saving shower heads, faucets, toilets and appliances.
- Wash only full loads of clothes or dishes.
- Turn off the water while brushing teeth or shaving.
- Take shorter showers.



Help keep ground water pure and flowing.

Work with your neighbors and local officials to:

Learn about ground water

in your area. Learn where your ground water comes to the surface (discharge areas) and where your aquifer refills (recharge areas).

Identify possible hazards to your ground water supplies.

Develop plans

to protect sensitive lands, such as discharge and recharge areas. Get involved with community programs for safe disposal of hazardous waste.



Join the effort to ensure a reliable water supply for years to come!



For more information

about caring for your septic system, and about local efforts to protect ground water, contact:

- your water utility or well contractor
- your local or state water department
- the Environmental Protection Agency Safe Drinking Water Hotline at 1-800-426-4791.

Appendix 1E

Year 12

Newspaper Press Releases

'Green Day at the Park' set for April 26

AGAWAM – The town will celebrate Earth Day in partnership with the Agawam Little League at Opening Day at the Little League Complex at 85 School St. on Saturday, April 26, from 11 a.m. to 2 p.m.

There will be a variety of local vendors that will provide adults and children with information and activities that showcase green practices in gardening, energy saving tips, recycling, organic lawn care and more.

The following vendors will be participating:

Forest Park Zoo on the Go! Noon – 1 p.m. Stop by and learn about a variety of animals, their special adaptations, habitats, behaviors, diets and status in the wild.

Thousand Crane Art Studio: Owners Stan and Sheila Coly believe art should be accessible to everyone. Stop by the Thousand Crane Art Studio Booth to observe the amazing art work of local students. Face-painting available; donations welcome.

Department of Public Works: Learn how to home compost by picking up a free kitchen scrap bucket.

ADOG: Agawam Dog Owners Group's mission is to create a fenced-in, off-leash dog park where well-behaved canine citizens can exercise in a clean, safe environment without endangering or annoying people, property, and wildlife. If you are looking for more information about the future Off-Leash Recreational Area, visit the ADOG table. Some ADOG merchandise will also be available for purchase.

Community Preservation Act (CPA): The CPA helps communities control development by preserving open space and historic sites as well as encouraging affordable housing and creating recreational opportunities. Funds are independent of town budget and all project ideas are publicly driven and debated.

Covanta Springfield: Located on approximately five acres of land along the Connecticut River in Agawam, this energy-from-waste facility burns solid waste generated from residential and commercial operations throughout Western Massachusetts, producing energy which is sold to Northeast Utilities. Stop by the Covanta booth and test your knowledge about recycling and learn about the 4R's.

Friends of Robinson State Park: The Friends of Robinson State Park is a group dedicated to the preservation of our natural resources everywhere. Their mission is the protection and promotion of Robinson State Park, the state park in Agawam which provides for passive recreation and serves as a natural buffer for the Westfield River that forms the northern border of the park. The group encourages all area residents and visitors to visit and enjoy this natural park, an oasis in our heavily developed area.

GFWC Agawam Junior Women's Club: The GFWC Agawam Junior Women's Club is a community service organization, committed to the betterment of our community through special projects supporting the arts,

natural resources, education, healthy lifestyles, international causes and civic involvement. Stop by to learn what you can reduce, reuse and recycle. Give an example of items you reuse and get a free reusable drawstring bag.

Pioneer Valley Planning Commission: Representing the Connecticut River Stormwater Committee, the PVPC is helping communities meet NPDES Phase II Stormwater requirements while informing the public about stormwater related issues affecting the Connecticut River and its major tributaries, the Westfield and Chicopee Rivers. Homeowners can learn about residential stormwater management practices, such as transitioning from chemical to organic lawn care products.

Relay for Life of Agawam: At Relay For Life events, communities come together to honor cancer survivors, remember loved ones lost, and fight back against a disease that has already taken too much. Relay For Life teams camp out overnight and take turns walking or running around a track or path at a local high school, park, or fairground. Learn how you can register as an individual or team to participate in the Agawam Relay for Life event.

Republic Services: Servicing Agawam for over 10 years, Republic Services provides trash, recycling, yard waste and bulk services for the residents of Agawam. In addition, Republic Services supports local events such as the town's annual Household

Hazardous Waste Day, school recycling programs and Earth Day. Play a recycling game to win a prize!

SolarCity: SolarCity is a national leader in clean energy services, making clean energy available to homeowners, businesses, schools, non-profits and government organizations at a lower cost than they pay for energy generated by burning fossil fuels like coal, oil and natural gas. Visit the SolarCity booth to find a satellite of your home to determine the solar potential of your roof.

United Water: United Water provides the maintenance and operation of 13 water and waste water pump stations throughout the Town of Agawam.

Western Massachusetts Electric Company: Western Massachusetts Electric Company, commonly known as WMECo, is a main distributor of electricity in western Massachusetts, serving more than 200,000 customers. Now is the time to learn about programs and promotions WMECo has to help home owners and businesses save energy and money.

Western Mass. Master Gardeners Association: The WMMGA is a nonprofit organization dedicated to the educational mission of promoting good and sustainable gardening practices. Have WMMGA test your soil's pH level to improve your soil's nutritional balance for a donation of \$1. For more detailed information, visit <http://wmmga.org>

River cleanup volunteers add beauty to spring

AGAWAM – Spring is a wonderful time to celebrate the beautiful natural heritage of our region and an even better time to step in and clean it up. The Westfield River Watershed Association (WRWA) is so fortunate to have the help of hard-working volunteers who pitch in each year and help clear away trash from the watershed.

On Sunday, April 27, twenty-one volunteers, including five Westfield State University students and members of the Agawam Conservation Commission, gathered at Pyachon Point for their cleanup assignments. These river-loving citizens hauled out 40 bags of trash, four tires, two computer monitors, two large pieces of Styrofoam, one tarp, one soggy blanket and a junction box.

In Westfield on the previous Saturday, 38 citizens showed up in the rain to help haul out debris from various locations along the river, including more than 20 volunteers from Lane Construction. Lane workers have been helping with the river cleanups for several years, and they even bring coffee for everyone.

They were joined by 10 dedicated students from Westfield State University and eight other caring residents who all got wet and muddy and still maintained good cheer and

energy as they cared for their river. From the cleanup sites in Westfield, Russell and Huntington, the volunteers retrieved 69 bags of trash, a large teddy bear, 22 tires, a female mannequin torso, a half television, as well as wood, metal and large plastic pieces.

WRWA will sponsor its fall river cleanup on Saturday, Sept. 27, from 9 a.m. to 1 p.m. WRWA provides work gloves and trash bags and tracks the amount of trash the volunteers pick up, pooling its numbers with other groups within the larger Connecticut River watershed. In 2013, more than 45 tons of trash was removed from the river and watershed lands within the Connecticut River watershed stretching from Vermont to Long Island Sound. The Westfield River flows into the Connecticut River, making it an important part of that larger watershed.

If you would like to receive email notices about the fall Westfield River cleanup and other WRWA events, send a note to westfieldriver1764@gmail.com with your name and town, and we'll add you to the notification list.

For more information about WRWA and its events, visit www.westfieldriver.org.



May 22, 2014
Agawam Advertiser

WESTFIELD, AGAWAM

River cleanup scheduled

By DAN GLAUN

dglau@masslive.com

The Westfield River Watershed Association will be leading a cleanup effort on Saturday, with volunteers spending their mornings picking up trash on the riverfront.

The bi-annual cleanup is important for preserving the environmental and recreational value of the Westfield River, which is an illegal dumping site for waste ranging from tires to televisions, said orga-

nizer Sheryl Becker.

"Our goal is to remove as much trash as possible, especially bulk trash," Becker said. "We also educate people. It's a real eye-opener for many people, seeing all the garbage all over the riverfront."

Volunteers will meet at 9 a.m. at sites in Agawam and Westfield. Cleanup shifts are typically finished by 1 p.m., according to a news release.

The event both has a tangible impact on pollution and

raises awareness of the river's importance, said Becker.

"Many people don't appreciate it and don't even realize how crucial it is to protect this land," she said. "They see it as a dump ground."

The watershed association will provide trash bags and gloves. Those interested in volunteering in Westfield can contact Mark Damon at (413) 572 9991. Volunteers in Agawam can contact Sheryl Becker at (413) 374 1921.

Sold. Republican April 22, 2015



Volunteers bag debris along the banks of the Westfield River.

Robinson State Park Day set for June 21

FEEDING HILLS – The Annual Robinson State Park Day is scheduled for Saturday, June 21. Every year on the third Saturday of June, the Friends of Robinson State Park group plans the event, which is co-sponsored by the Department of Conservation and Recreation. This year, the focus is on walks, with a variety appropriate for all ages.

8 a.m.: Bird Identification Walk, led by members of the Allen Bird Club. Bring binoculars and meet at the Trestle Pavilion. This is a chance to hear and see the many birds that make the park their home. The walk is suitable for amateur as well as experienced birders.

10 a.m.: A five-mile hike, easy to moderate, will be led by members of the Wilbraham Hiking Club. Meet at the Trestle Pavilion. Poles, hiking boots, water, snack and bug spray are recommended. This is a chance to experience many of the trails in the Western section of the park, often with river views. There will be opportunities for participants to leave the hike before the full five miles if that is desired.

10 a.m. to 2 p.m.: Ongoing: "Big Tree" walks, will be led by Matt Largess, longtime friend of the park and arborist from Rhode Island. He may also lead a walk through the recovering tornado damage. Meet at the Trestle Pavilion. These short walks are especially appropriate for children. Departure times will be flexible to accommodate participants.

A special nature walk and possible scavenger hunt for children between the Trestle Pavilion and Robinson Pond is in the planning stages. Student volunteers from Agawam High School will lead the walk.

10 a.m. to 2 p.m.: Ongoing: Nancy Bobskill, environmental science teacher at Agawam High School, and Rod Parlee of the Bolton, Conn., Conservation Commission, will conduct and explain rapid stream assessments. Participants will help collect samples from various streams and examine them for water purity. Meet at the Trestle Pavilion and bring rubber boots. Anyone wishing to participate can respond to the Friends Group email at robinsonfriends@comcast.net for more information.

1 p.m.: Nature walk, led by Charlie Spencer, longtime supporter of the park and experienced expert plant specialist for Stanley Park in Westfield. He will guide a comfortable walk along a particularly beautiful and peaceful stream in the park. Information will be available at the Trestle Pavilion. The meeting place will be in the parking lot adjacent to the picnic area/canoe launch.

Noon to 3 p.m.: Westfield River Canoe Cruise. The Westfield River Watershed Association will conduct its annual Canoe Cruise from the center of Westfield, down the Westfield River, to Robinson State Park. Participants must provide their own kayaks or canoes. Meet at the twin bridges on Elm Street in downtown Westfield.

The Robinson Swimming Pond will be open for swimming and exploring. Members of the Friends Group will be available at the Trestle Pavilion with photo displays and maps to answer questions and help attendees learn more about the park.

There is a standard \$5 entry fee for each vehicle that enters through the front gate at 462 North St., Feeding Hills.

Hazardous Waste Collection set for Sept. 6

The Agawam Department of Public Works will hold its annual Household Hazardous Waste Collection Day Saturday, Sept. 6 at the DPW Annex, 1000 Suffield St., from 9 a.m. to noon.

This program offers residents a safe, economical way to dispose of household items that are flammable, reactive, corrosive or toxic. Solvents, pesticides, caustic cleaners, and oil based paints are some examples of the different types of items that will be accepted.

For a complete list of acceptable materials, visit www.agawam.ma.us.

This event is free to Agawam residents, but pre-registration is required. Appointments may be scheduled by calling the DPW at 821-0600 ext. 0 or 821-0624.

Drug Take Back Day set for Sept. 27

National Drug Take Back Day is scheduled for Saturday, Sept. 27 at Agawam Town Hall, 36 Main St., from 10 a.m. to 2 p.m. The purpose of this free collection day is to allow residents to dispose of old medications, drugs and syringes safely, with no questions asked.

Used needles, syringes and lancets will be collected in approved sharps containers only.

Puncture-proof laundry bottles will not be accepted. Items not accepted include chemo drugs, IV bags as well as liquids of any type.

This event is sponsored by the Drug Enforcement Administration, Agawam Health Department, Agawam Police Department, Agawam MRC and the Agawam mayor's office.

Volunteers needed for river clean-up

To the editor:

The Westfield River forms the northern border of Robinson State Park. The Friends of Robinson State Park are grateful to the Westfield River Watershed Association for all they do to protect, promote and advocate for the river so we can all enjoy it.

For those of you who might be able to spare some time this coming weekend, volunteers are needed for the annual Westfield River Cleanup, Sept. 27 and Sept. 28.

Volunteers of all ages are welcome, but children must be supervised by an adult. For schedule and information on how to help, contact Mark Damon for Westfield area sites at (413) 572-9991 or email mjdamon@verizon.net or contact Sheryl Becker for Agawam area sites at (413) 374-1921 or email sherlearth69@gmail.com.

The Friends of
Robinson State Park

Rx disposal box



Agawam Police now provide a safe alternative for disposing of unwanted prescription medications. Anyone may visit the police headquarters at any time and dispose of prescription medications, patches or ointments, over-the-counter medications, vitamins, sample medications, and pet medications in the green Medical Disposal Box in the front lobby at 681 Springfield St., Feeding Hills. Certain products, such as hydrogen peroxide, inhalers, aerosol cans, syringes, needles, thermometers and medications from businesses or clinics, are not acceptable. A full list of restrictions is printed on the inside of the box. **APR 2015**

Town pledges to conserve water

By Gregory A. Scibelli
gscibelli@turley.com

Are you ready to take the water conservation pledge? People throughout Agawam have been, and as of early Wednesday morning, the town was in 16th place in the fourth annual National Mayors' Challenge for Water Conservation.

While there are numerous towns throughout the western part of the country participating in the contest, Agawam is one of just two municipalities in Massachusetts that has decided to get involved. Boston is the other one.

"I think it is extremely important that we be educated about our water and that we make an effort to conserve water whenever we can," said Agawam Mayor Richard Cohen.

Many of the cities leading the challenge are in California, which is facing drought conditions, but Cohen said the pledge is in some ways just as relevant to Massachusetts.

"This is not just a contest to pledge to conserve water," the mayor said. "It is also about pledging to be responsible, like not harming our water and putting contaminants in it."

Cohen said recently a drug take-back box was installed in the lobby of the Agawam Police Department. It allows residents to drop off unused medications that otherwise might be dumped down the drain in the toilet or sink. The federal Environmental Protection Agency is now advising people that flushing medications and other chemicals can harm the water.

Tracy DeMaio, the solid waste and stormwater coordinator in the Department of Public Works, says Agawam

residents have been conscientious over the years when it comes to both areas.

"We have a lot of people that have worked to conserve water through the use of rain barrels and other tools that we have offered people, like controls for the kitchen faucets," said DeMaio. "Taking this pledge and being educated is just another tool for us to work at keeping our water clean."

Agawam actually helps provide water to Springfield through Provm Mountain. Agawam has some of the cleanest and purest water in the region, and DeMaio believes that is a great reason for the town to participate in a friendly competition.

"It's a lot of fun to try and see how we can measure up to towns and cities throughout the region," said DeMaio.

To take the pledge is very easy. Simply visit www.my-waterpledge.com and sign up with an email address or Facebook page. Pledge signers will be asked to enter some basic information.

"It's very easy to do and we hope more people will take part throughout the month," said DeMaio.

The mayor has been encouraging students and town and school employees to also take the pledge and set an example for all residents.

Between April 13 and 15, the town jumped from 20th to 16th place in a competition with other cities and towns across the country with populations between 5,000 and 29,999. When Cohen took the pledge a week earlier, Agawam was placed 77th.

"I'm very proud of our current standing and that people are taking this pledge," said Cohen.

The pledge will be available for the remainder of the month.

Town rolling out rain barrel sale

The town of Agawam will be selling rain barrels again this spring. According to the DPW Environmental Project Coordinator Tracy DeMaio, "Rain barrels have become very popular in Agawam. More and more residents are using them, making water conservation a way of life in their homes, while also helping to reduce the impacts of storm water run off on Agawam's wetlands, rivers, and streams."

A rain barrel collects rain water from the roof and stores it for use during dry weather to water house plants or outside gardens. Collecting water in a rain barrel takes pressure off the water supply and stormwater management systems. Using the rainwater on gardens helps to replenish groundwater and benefits the water supply. Collected rainfall is especially valuable during droughts or dry conditions. It contains more nutrients and less salts than tap water, which is good for plants.

The rain barrels are made from 55-gallon recycled food grade barrels in a terra cotta color. The barrel's screened intake port keeps mosquitoes, insects, and debris out. The lid can be removed for easy cleaning and for storing hoses inside the barrel during the winter. The solid brass threaded spigot can be connected to a regular hose or soaker hose. The overflow connector and tubing can be used to direct water away from the foundation or to join multiple barrels for additional storage capacity.

The town is taking orders with payment through Friday, April 10, and has scheduled a rain barrel pick-up day on Saturday, April 18, at the Department of Public Works, 1000 Suffield St., from 9:30 to 10:30 a.m. The cost is \$60 per barrel. To order, send or drop off payment and order form to the DPW. Make checks payable to "Jack Miller." Order forms are available at www.agawam.ma.us or at the DPW.

by DeMaio, Tracy

Garden Club to host DPW representative

The Agawam Garden Club will meet Tuesday, April 14, at 7 p.m. at the Agawam Senior Center, 954 Main St. Guest speaker will be Tracy DeMaio from the Agawam Department of Public Works. She will talk on the town's composting efforts and will be available to answer questions on maintaining gardens around town.

In addition, Joan Perez will speak on community-supported agriculture gardens, specifically Calabrese Gardens. A compost bin will be raffled off.

Members and non-members are welcome.

Town to hold cleanup day in May

By Michael J. Ballway
mballway@turkey.com

Finally, there's someone who can do something about the litter on that street, the pile of trash in that vacant lot, the empty bottles and cups strewn around that park.

You.

The Department of Public Works is declaring May 2 to be "Agawam Clean" day in the town, and asking citizens to organize groups to tackle litter in any section of town where they find it — whether on streets, sidewalks, schoolyards, fields, parks, parking lots or neglected property. Tracy DeMaio,

who coordinates solid waste removal for the DPW, is leading the effort.

"It can be any space, if there's a volunteer out there that really has an area they want to target," she said. "If it's an eyesore to them, it's an eyesore to someone else."

Mayor Richard Cohen credited DeMaio with coming up with the "very exciting" idea of a volunteer cleanup day after seeing months worth of litter recently exposed by the melting snow.

So far, said DeMaio, a Girl Scout troop has expressed interest in participating. The town posted a call for volunteers on its website this week, and

retired Agawam High School science teacher Nancy Bobskill, who runs the Helga's Zero Waste Movement blog (helgazerowasteblogspot.com) has been drumming up support among her readers, DeMaio said.

After assembling a team and finding a space to clean, DeMaio asks litter busters to call the DPW at 413-821-0624 and claim the spot. A map of claimed territories will be posted at agawam-ma.us.

Groups can clean their territory at any time, although the DPW is suggesting 9 a.m. to noon on Saturday, May 2. Groups are invited to take "be-

CLEANUP 1 page 6



413-786-7747

• Fax: 413-786-8457

• Facebook: F Agawam



Cigarette butts, bottles and papers litter a patch of grass under the power lines off Cooper Street. TURKEY PUBLICATIONS PHOTO BY MICHAEL J. BALLWAY

CLEANUP ■ from page 1

fore and after photos and share them with the DPW.

During this inaugural year, the DPW is asking cleaning teams to bag the litter they pick up and include it in their members' weekly trash pickups. In some other towns with similar cleanup days, the DPW provides trash bags, gloves and pickup on the day of the event, DeMaio said. Agawam is considering that for future years.

She said she hopes Agawam Clean will become an annual event every spring. She could not recall any town-sponsored event like this in Agawam in the past, though she noted that the DPW has provided some assistance to Connecticut and Westfield

river watershed associations, and scouting groups in their cleanup efforts, and the town Beautification Committee has organized cleanups of its own.

No bulk items or construction waste should be included in trash bags to be picked up, DeMaio said. Any group finding such items should contact the DPW.

In addition to being visually unappealing, litter represents a hazard for wildlife and waterways. During rain storms, trash left on the street could wash into storm drains, which empty directly into the brooks and streams that feed the Westfield and Connecticut rivers.

Appendix 1F

Year 12

Informational Pamphlets

Cross-Connection Control and Backflow Prevention Program

Agawam Water Department • (413) 821-0600

Protection of the Public Water Supply is very important and a vital component is proper backflow prevention and cross-connection control. Cross-connections are potential sources of backflow and is something that we need to prevent because of the potential negative effects to public health and safety. If water backflows into the public water system, the system could become contaminated. Therefore, we urge you to implement proper cross-connection controls.

The Agawam Water Department is required by Massachusetts Regulations (310 CMR 22.22) to have a cross-connection control program to prevent backflow. As part of this program, members of the Department survey properties (largely non-residential) to look for potential cross-connections and require proper backflow prevention devices when a need is determined. Backflow prevention devices (BPD) are tested by the Department at a minimum of an annual basis or greater depending on the BFD and hazard to which the BFD protects.

The Agawam Water Department requires notification of the installation, repair, replacement, relocation, and removal of backflow prevention devices and approval needs to be granted before work can proceed. Please contact the Dept. Superintendent Water/Sewer, John Decker at (413) 821-0600 x8627 or the Plumbing Inspector, Michael Day at (413) 821-0600 x8636. Work on backflow prevention devices may require a plumbing permit, please contact the Plumbing Inspector to verify the need.

Cross-connection: means any actual or potential physical connection or arrangement between a pipe conveying potable water from a public water system and any non-potable water supply, piping arrangement or equipment including, but not limited to, waste pipe, soil pipe, sewer, drain, other unapproved sources.

Cross-connections can be found at heating and ventilation equipment, fire suppression systems, factory or plant equipment, irrigation systems, hose spigots, utility sinks, chemical processing facilities, etc.... Cross-connections hazards such as these can be prevented through the installation of a backflow prevention devices.

Backflow: means the flow of water or other liquids, mixtures or substances into the distribution pipes of a potable water supply from any source other than the intended source; either by Backsiphonage or Backpressure.

Backsiphonage: is when there is a decrease in the water distribution system pressure, for example a water main break, firefighting (use of fire hydrants) or other high demand uses. When this happens, water from your building's plumbing may backflow into the public system.

Backpressure: is when the water pressure in a building's plumbing is increased above the pressure in the public water system, say by a pump in a factory; if this happens, the water in the building's plumbing can be forced back into the public water system.

Simple steps to take around your home and yard to avoid cross-connections and backflow:

- Install hose bib vacuum breakers on all exterior spigots. These are available at hardware stores and plumbing supply houses
- Toilets should be equipped with a ballcock with an integral anti-siphon valve. **
- Boilers should be equipped with approved backflow preventers and expansion tank(s) to prevent backflow of boiler water (which may be treated with chemicals).**
- Install and maintain an approved (by Agawam Water Dept.) backflow device on your irrigation system. Please register the device with the Agawam Water Dept.. **
- All sinks, tubs and tanks should have a proper air gap to prevent backsiphonage. Typically 1-inch or more (as required by plumbing code) between bottom of the faucet/spout and rim or edge. **

**** Work may be required to be done by a MA Licensed Plumber and a Plumbing Permit may need to be issued, contact the Plumbing Inspector for more information.**

Informational Links:

MassDEP Cross Connection Control Program Regulations: <http://www.mass.gov/dep/water/ccdefreg.pdf>

US-EPA Cross Connection Control Manual: <http://www.epa.gov/ogwdw/pdfs/crossconnection/crossconnection.pdf>

Foundation for Cross-Connection Control and Hydraulic Research: <http://www.usc.edu/dept/fccchr/intro.html>

USC Cross-Connections Study: http://www.watts.com/pages/learnAbout/usc_study.asp?catId=1160

Appendix 2A

Year 12

Adopt-a-Road

Agawam Events

5/2/2015 - Community Clean-up

First Annual Town-Wide Community Clean-Up: Help keep Agawam Clean!

Saturday, May 2nd 9am - noon

Many of Agawam's streets, vacant lots and parks are in need of a "spring cleaning" after this harsh winter. This debris is harmful to pets and wildlife and may enter storm drains and flow directly into our streams, rivers and finally into the ocean contributing to ocean garbage patches.

Help keep Agawam clean!

Join the **Agawam Clean** initiative between residents, businesses, volunteer groups, and the Department of Public Works to clean, repair, and maintain our streets, parks, schoolyards, sidewalks, athletic fields and parking lots.

Here's how you can help!

- Pick an area that is littered and register your clean-up area with the DPW at 821-0624
- Organize a small group to help clean your area
- Place all litter in trash bags and place out with your weekly trash pick up. Absolutely **NO** bulk or construction waste.
- Clean up areas will be tracked and highlighted on the town website.

Our mission is to partner with citizens, businesses, volunteer groups, and local government to sustain a cleaner and more beautiful community.

Appendix 2D

Year 12

Watershed Committee

**Connecticut River Stormwater Committee
Annual Report
January 1, 2014 to March 31, 2015**

The Connecticut River Stormwater Committee

The Connecticut River Stormwater Committee is an intergovernmental compact of 13 municipalities organized to collaborate on education and outreach about stormwater impacts on the Connecticut River. Facilitated and staffed by the Pioneer Valley Planning Commission, committee work helps NPDES MS4 regulated member communities meet stormwater education and outreach permit requirements. Based on the Memorandum of Agreement under which the committee was formed in 2008, work also helps member communities with related bylaws/ordinances and other compliance measures. Member communities are shown in Table 1 below. The City of Northampton joined the committee in this past year.

Table 1: Connecticut River Stormwater Committee Member Communities

Member Community	Committee Representative and Department
Agawam	Tracey DeMaio, Department of Public Works
Chicopee	Joe Kietner, Department of Public Works
Easthampton	Jim Gracia, Department of Public Works
Granby	Dave Derosiers, Highway Department
Holyoke	Matthew Sokop, Department of Public Works
Longmeadow	Yem Lip, Department of Public Works
Ludlow	JT Gaucher, Department of Public Works
Northampton	Doug McDonald, Department of Public Works
Southwick	Richard Grannells, Department of Public Works
South Hadley	Jim Reidy, Department of Public Works
Springfield	Kevin Chaffee, Conservation Commission
West Springfield	Jim Lyons, Department of Public Works
Westfield	Casey Berube, Department of Public Works

Education and Outreach over the Past Year

To challenge individual behaviors that negatively impact the health of the Connecticut River, the Stormwater Committee continued to use a variety of strategies over the past year. The bulk of work has been focused on promoting green infrastructure stormwater management practices, though the Committee continued its collaboration with the Greenscapes program and began to respond to forthcoming requirements with some initial research toward developing outreach on bacterial contamination in stormwater.

The following is a summary of the work of the Connecticut River Stormwater Committee during the 2014 reporting year. This includes part of the 2014 calendar year as well because the Committee is transitioning from a calendar year reporting timeline to make these reports better line up with permit timelines:

Continued collaboration with the Greenscapes Program www.Greenscapes.org

The committee continues to participate in Greenscapes coalition to advance the Greenscapes program. The program's website and publications promote understanding about the connection between better lawn and garden care practices and reduced impacts on water resources and human and environmental health. On the coalition's website, there are clear instruction and links to resources about how to make these important changes in practice. Links to this website are on all member community stormwater web pages.

Initiated research to develop effective messaging on bacterial contamination

The committee defined goals and objectives relative to the forthcoming stormwater permit and other regulatory requirements and local needs. Beginning with the goals and objectives relative to bacteria, the committee began its effort to develop effective messaging with the creation of a survey that will be distributed in spring-summer 2015 to pet owners. The survey will collect information about this target audience and help to define messaging going forward that is aimed at helping to reduce bacterial contamination in the Connecticut River. At the same time, the survey itself should elevate awareness about practices and the possibility of making changes to practices that promote improved water quality.

Promoted "Soak up the Rain" stormwater education campaign

The Connecticut River Stormwater Committee continued to devote time to developing and promoting 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 — involved several outreach efforts for the Connecticut River this year.

- ***Demonstration workshops and event tabling for homeowners and businesses***

September 20, Central High School Springfield - Led by staff from PVPC and the Regenerative Design Group, this workshop described the nature of stormwater impacts on the Connecticut River and covered a range of techniques appropriate for residential and commercial sites, including rain barrels and cisterns, porous pavers, rain gutter downspout diversion, and rain gardens. In a post-workshop evaluation, the event's 18 participants gave the event high marks. Promoting the workshop entailed reaching out to: Springfield's neighborhood associations, Western Massachusetts Master Gardener Association, Ecological Landscape Alliance, local public libraries, and notice placements with area newspapers and social media resources. This was the second of two half-day workshops supported with \$7,000 in funding from EPA. (See program flyer next page.)



Soak up the Rain: Benefits for Your Home and Business

*Save Money • Beautify Your Landscape •
Prevent Pollution • Reduce Flooding*

Demonstration Workshop for Homeowners and Businesses

Saturday, September 20, 8:30 am – 1 pm
Central High School, 1840 Roosevelt Ave., Springfield, MA

Come learn how to better manage rainfall at your home or business at a demonstration workshop. Presenters include Landscape Architect Thomas Benjamin, Ecological Designer Keith Zaltzberg, and Stormwater Specialist Patty Gambarini. The workshop will cover a range of techniques appropriate for residential and commercial sites, including:

rain gardens • cisterns • rain barrels • drywells •
porous pavers • rain gutter downspout diversion

The workshop is part of "Soak up the Rain Pioneer Valley," a campaign to encourage and showcase the use of green infrastructure stormwater management practices around the region. It is brought to you by the Pioneer Valley Planning Commission and Connecticut River Stormwater Committee under contract with U.S. Environmental Protection Agency, Region 1.

Registration is required by September 16th to Patty Gambarini at pgambarini@pvp.org or (413) 781-6045. Visit soakuptherain.pvp.org to see the workshop agenda and learn more about green infrastructure stormwater management practices in the Pioneer Valley.



*Cistern - Center Pope Elementary
School, Easthampton*



Rain garden - Northampton Vt

(photo courtesy Thomas Benjamin)

Flyer that was widely distributed for Soak up the Rain program in September 2014.

November 8, Holyoke Public Library, Holyoke – PVPC joined the Enchanted Circle Theater and other organizations for a stormwater education and advocacy event that included the unveiling of stormdrain art created by students. PVPC's table at the event highlighted ways to Soak up the Rain on residential properties with an interactive model showing the differences between impermeable and permeable surfaces in a typical neighborhood. The model will be further developed for future events.

March 21, Western Massachusetts Master Gardener Symposium, Frontier Regional High School, Deerfield – Invited to this event to talk about Soak up the Rain strategies for around the home and garden, PVPC gave a slide-show presentation that covered drainage analysis of a property, soil evaluation techniques, and several strategies to improve stormwater management, including rain gutter downspout diversions, trees, rain barrels and cisterns, rain gardens, and porous paving. While the event was held in Deerfield, a show of hands in the workshop revealed that all but one participant was from Hampshire or Hampden County, where the stormwater committee is active. The presentation is posted on the Pioneer Valley Soak up the Rain website and will be adapted for use at other events in stormwater committee communities.

- ***Design of Soak up the Rain porous paving and rain garden signs***

PVPC completed its work with EPA in September 2014 to develop sign templates for use at rain garden and porous paving stormwater locations. This work was supported with \$3,000 in funding from EPA. The designs for the signs have since been revised based on feedback from workshop participants and stormwater committee members to be more legible and more instructive about how a system functions. Each of the signs have two different sides to them, giving property owners the option to display a message that connotes pride in having such a facility or a more involved message that describes what the system does. Signs are currently being fabricated for use at residential, business, and municipal sites throughout the region. *See sign design on next page.*

- ***Pioneer Valley Soak up the Rain website*** ***www.pvpc.org/soakuptherain/***

The Pioneer Valley Soak up the Rain website 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. Links to this website are on all member community stormwater web pages.

Keep our rivers clean



**soak up
the rain**

Rain garden

Connecticut River Stormwater Committee
soakuptherain.pvpc.org

Rain garden



**soak up
the rain**

This garden is designed to let rainfall or snowmelt soak into the ground...

- reducing flooding
- replenishing groundwater drinking sources; and
- eliminating flows that carry pollutants to nearby rivers

Connecticut River Stormwater Committee
soakuptherain.pvpc.org

Rain garden signs – both sides

Keep our rivers clean



**soak up
the rain**

Porous paving

Connecticut River Stormwater Committee
soakuptherain.pvpc.org

Porous paving



**soak up
the rain**

This paving is designed to let rainfall or snowmelt soak into the ground...

- reducing flooding
- replenishing groundwater drinking sources; and
- eliminating flows that carry pollutants to nearby rivers

Connecticut River Stormwater Committee
soakuptherain.pvpc.org

Porous paving signs – both sides

Rain gardens design and installation project

PVPC is working with Springfield officials and a hired consultant, the Regenerative Design Group, to design and build up to 10 rain gardens in the City. To date, 3 sites have been selected where the equivalent of 5 gardens will be constructed. These sites include the Springfield Museums, Gardening the Community's new site on Walnut and James Street, and a private residence in the northern part of the City. A hands-on training session has been scheduled to teach people how to construct rain gardens, using the Springfield Museums site. From these trainees a corps of volunteers will be deployed to work with the consultant and PVPC in building the other gardens in the City. This work is made possible through a settlement agreement reached by Clean Water Action. It is hoped that based on the materials, contracts,

and know-how developed through this work in Springfield, that the project can be easily duplicated in other stormwater committee member communities for the future.

Green infrastructure workshop and vendor's fair

A survey from last year's stormwater workshop events identified two of the more significant barriers to greater use of green infrastructure stormwater management as being the need for better understanding of:

1. Proper design, construction, and oversight of green infrastructure stormwater management facilities; and
2. Where to acquire materials needed for building green infrastructure facilities

As such, PVPC partnered with EPA region 1, EPA Office of Research and Development (ORD), and the University of Massachusetts Water Resources Research Center to co-hold a workshop entitled "Nuts & Bolts of Green Infrastructure Design and Construction for Developers, Designers, Contractors, and Municipal Officials." Held on March 17, 2014, at Holyoke Community College's Kittredge Center, the day-long event drew 47 participants, including 15 engineers, 10 planners, 6 architects and designers, and 6 regulatory officials. This number does not include the 17 vendors or 10 workshop organizers also in attendance. Morning sessions included:

- Design and construction considerations and process on green infrastructure BMPs, a session led by Engineer Richard Claytor of Horsley Witten Group
- The nitty gritty of design and construction on three green infrastructure projects
 - Streetside Bioretention in a Downtown (*Douglas Clark, P.E., City of Pittsfield and Jon Dietrich, Fuss & O'Neill*)
 - Porous Paving and Bioretention on a University Campus (*Edward Marshall, ASLA, Stephen Stimson Associates*)
 - Gravel Wetlands in a Municipal Park (*Michael F. Clark, Polaris Consultants LLC*)

The afternoon involved a fair with vendors and contractors representing the range of materials and services used for stormwater green infrastructure projects. Participants were divided into groups to "speed date" with the vendors, a technique used to promote learning about the full breadth of New England's network of materials, resources, and contractors involved in green infrastructure.



Mike Clark from Polaris Consulting talks about the details of design and construction of a gravel wetlands he built at a park in Leominster, Massachusetts.



Sounding the drums was the signal for “speed daters” to proceed to the next vendor. This method gave workshop participants the opportunity to spend 5 minutes with each vendor, but also get to every vendor to learn about the full breadth of New England’s network of materials, resources, and contractors involved in green infrastructure

Stormwater financing workshop

The Pioneer Valley Planning Commission (PVPC) collaborated with EPA-New England staff to develop and present a one-day workshop on funding municipal stormwater management programs. Work in developing and presenting the workshop was supported with \$6,000 in funding from EPA. The workshop, held on September 24, 2014 at Holyoke Community College's Kittredge Center, drew 36 participants, representing 11 municipalities from throughout the region. Participants included 9 "decision makers" (DPW directors, city councilors, selectboard member), 2 private consultants, with the balance representing municipal public works and engineering staff.

The morning program was designed with municipal decision makers in mind and included:

- Annie Kitchell, Senior Planner for the Horsley Witten Group, who described stormwater management requirements and realistic funding options
- Richard Niles of AMEC who described stormwater utilities and provided pointers for moving forward
- Four municipal officials - City of Westfield DPW Superintendent David Billips; Northampton Chair of Board of Public Works Terry Culhane; Portland City Councilor Edward Suslovic; and City of Chicopee DPW Project Supervisor Tom Hamel—who all provided good information about their personal experiences with stormwater funding from their municipalities.

The afternoon program went into more detail with a program to suit interested decision makers, as well as providing more "how to" information for stormwater managers. The program included:

- Carri Hulet, Senior Associate with The Consensus Building Institute, talked about the importance of community engagement and how to design and implement a collaborative process
- Virginia Roach, Vice President of CDM Smith, and Jim Laurila, Northampton City Engineer, drew from Northampton's recent experience in developing a stormwater utility to talk about how to evaluate your community's stormwater management funding needs
- All workshop presenters, plus the addition of City of Westfield Deputy DPW Superintendent Casey Berube, then came together as a panel for a conversation about making the case for stormwater program funding

Pioneer Valley Green Infrastructure Plan and Toolkit

Working with an advisory committee that included members from six stormwater committee municipalities, PVPC finalized the "Pioneer Valley Green Infrastructure Plan: Promoting Clean Water, Greening our Streets and Neighborhoods." The plan is meant to assist communities in the region as they continue the journey toward a more environmentally sustainable stormwater management program. The plan identifies the three existing infrastructures

(stormwater, combined sewers, and roads) where green infrastructure might best be integrated; describes useful criteria for mapping potential green infrastructure facility locations; explores important opportunities and challenges; and proposes workable strategies for local and regional actions that will help to address polluted stormwater flows and meet forthcoming stormwater permit requirements. An executive summary of the plan has been widely distributed throughout the region. A companion toolkit for the plan includes fact sheets on 16 pertinent topics, including best management practices, model regulations and policies, and financing. The plan and toolkit were part of a larger regional sustainability initiative funded through a Sustainable Communities Initiative grant from the U.S. Department of Housing and Urban Development.

Grants

Community Innovation Challenge Grant

PVPC prepared and submitted a grant for the Massachusetts Community Innovation Grant program, requesting \$193,000 to develop three stormwater permit compliance tools and to help several communities explore establishment of local stormwater utilities. Chief elected officials from all 13 Connecticut River Stormwater Committee member communities signed on to the application. Unfortunately, the grant program was eliminated by the governor as part of mid-year cuts to close a \$329 million state budget deficit.

State and Private Forestry FY15 Northeastern Area Landscape Scale Restoration Program

PVPC has received a \$239,000 grant award to coordinate a project to implement tree planting as part of a green infrastructure stormwater management approach. Funded under the State and Private Forestry FY15 Northeastern Area Landscape Scale Restoration Program, the project involves the municipalities of Chicopee, Holyoke, and Springfield, the Executive Office of Energy and Environmental Affairs, and a number of local grassroots organizations. The project includes: outreach and education to better inform local residents about the stormwater benefits of trees in streetscapes; development of green street design templates for use by public works departments in street construction projects; engineering design for tree box filter installations at nine locations; installation of 1,220 trees in street reconstruction projects; and development of a stormwater street tree model ordinance.

Appendix 3F

Year 12

Failing Septic Systems

FAILED & NEW SEPTIC SYSTEMS
FROM 1/1/2014 - 12/31/14
Agawam Health Department

03/27/14	Debra Desmond 1438 Main Street Agawam, MA 01001	new construction
04/15/14	Robert Fraska 21 Spruce Circle Feeding Hills, MA 01030	repair
04/29/14	Peter White 50 Muriel Lane Feeding Hills, MA 01030	repair
07/08/14	John Cooley 772 Southwest Street Feeding Hills, MA 01030	repair
07/09/14	George Mulry 16 Tanglewood Lane Feeding Hills, MA 01030	repair
07/18/14	Beniamino Tucci 15 Mardale Avenue Agawam, MA 01001	repair
07/18/14	Beniamino Tucci 37 Nile Avenue Agawam, MA 01001	repair
04/23/14	Paul Mahoney 13 Kathy Terrace Feeding Hills, MA 01030	repair
8/20/14	Bill Boyd 33 Woodcock Court Feeding Hills, MA 01030	repair

FAILED & NEW SEPTIC SYSTEMS
FROM 1/1/2014 - 12/31/14
Agawam Health Department

8/27/14	Beniamino Tucci 15 Mardale Avenue Agawam, MA 01001	repair
8/27/14	Beniamino Tucci 37 Nile Avenue Agawam, MA 01001	repair
9/04/14	F. Brian Liebel 60 James Street Feeding Hills, MA 01030	repair
9/11/14	Georgette Jean 256 Maynard Street Feeding Hills, MA 01030	repair
9/26/14	David Lyman 66 Stony Hill Road Agawam, MA 01001	repair
10/16/14	Lee Messenger 604 South West Street Feeding Hills, MA 01030	repair

Appendix 6B

Year 12

Training of Municipal Employees

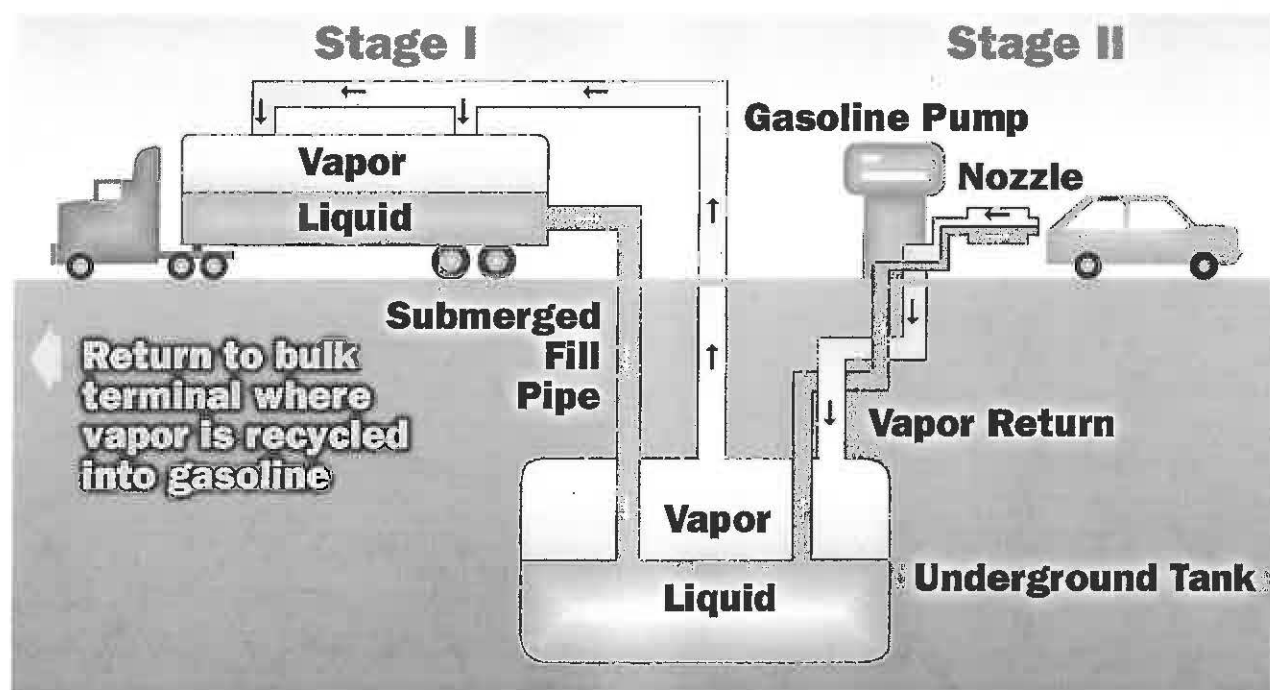
Weekly Inspection Guidance
For Stage II Vapor Recovery
Gasoline Dispensing Facilities

Balance Systems

Balance System, CARB Order G-70-52-AM
Balance System Aboveground Tank CARB Orders

Massachusetts Department of Environmental Protection (MassDEP)
Bureau of Waste Prevention

July 2009



Graphic Courtesy of Texas Commission on Environmental Quality

1.0 Balance Stage II System Training

How a Balance Stage II System Controls Gasoline Vapors

To prevent gasoline fumes from being emitted to the air during refueling, a "Balance" Stage II system relies on the vacuum created between two tanks in a closed system when liquid is dispensed from one tank to the other i.e., when the gasoline is dispensed from the facility's fuel storage tank to the vehicle's gas tank.

Or, described another way, in a vehicle's empty gas tank, air/gasoline vapors fill the space in the tank not filled by gasoline. As gasoline is dispensed from the facility to the vehicle, the air/gasoline vapors in the vehicle tank are pulled back to the facility's storage tank by the vacuum created by the falling level of gasoline in the facility's storage tank being replaced with the air/gasoline vapors from the vehicle tank.

Training for Correct Balance System Installation, Operation and Maintenance

Stage II System owner/operators and their employees who perform required weekly visual inspections of the Stage II system must be trained in the correct installation, operation, and maintenance of their Stage II system. Required training can be completed by reviewing the terms and conditions of system's CARB Executive Order, Approval Letters, and the system guidance materials presented in this document.

Stage II Training Log – Requirements (see Stage II Training Log on page 28)
Upon completing Stage II System training, a log of all current persons trained to perform weekly Stage II inspections must be maintained on site at the Stage II facility. The log must include the following: the date training completed, the person's printed name and signature.

CARB Executive Orders and Approval Letters

CARB Executive Orders contain the terms and conditions by which a Stage II system is correctly installed, operated, and maintained, as well as specific components (nozzles, hoses, fittings, etc) approved for use with the installed Stage II system. CARB issues Approval Letters to update existing Executive Orders or to certify new or redesigned Stage II components for use with particular Executive Orders.

Please Note: Under the MassDEP Stage II regulation, CARB Executive Orders and Approval Letters are enforceable documents and Stage II systems must be installed, operated and maintained in accordance with the terms and conditions of each system's currently applicable CARB Executive Order and Approval Letters.

Identifying Your Stage II System's CARB Executive Order Number

The CARB Executive Order number for your Stage II system can be obtained from the following sources:

- Your facility's currently applicable Stage II Compliance Certification Form;
- Your Stage II Compliance Testing Company; or
- The MassDEP Stage II Program (617-556-1035)

Obtaining a Copy of Currently Applicable CARB Executive Order and Approval Letters

Copies of your Stage II system's currently applicable CARB Executive Order and Approval Letters can be obtained from the CARB Web Page:

Stage II Training Log

[illegible]

**Environmental Health and Safety Education
Westfield, Massachusetts**

This is to certify that

Michael F. Albro, P.E.

has successfully completed the course:

**Understanding Stormwater Regulations and Impacts on
Western Massachusetts Municipalities**

November 5, 2014

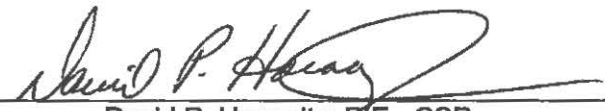
Date

Tracy J. Adamski & Emily J. Scerbo

Instructor Name

07

Certification Number



David P. Horowitz, P.E., CSP
Program Administrator

Tighe&Bond, Inc.

53 Southampton Road, Westfield, Massachusetts 01085

**Environmental Health and Safety Education
Westfield, Massachusetts**

This is to certify that

Michelle Chase

has successfully completed the course:

**Understanding Stormwater Regulations and Impacts on
Western Massachusetts Municipalities**

November 5, 2014

Date

Tracy J. Adamski & Emily J. Scerbo

Instructor Name

08

Certification Number



David P. Horowitz, P.E., CSP
Program Administrator

Tighe&Bond, Inc.

53 Southampton Road, Westfield, Massachusetts 01085

**Environmental Health and Safety Education
Westfield, Massachusetts**

This is to certify that

Tracy DeMaio

has successfully completed the course:

**Understanding Stormwater Regulations and Impacts on
Western Massachusetts Municipalities**

November 5, 2014

Date

Tracy J. Adamski & Emily J. Scerbo

Instructor Name

09

Certification Number



David P. Horowitz, P.E., CSP
Program Administrator

Tighe&Bond, Inc.

53 Southampton Road, Westfield, Massachusetts 01085

COMMONWEALTH OF MASSACHUSETTS

Department of Agricultural Resources



PESTICIDE CERTIFICATION/LICENSE

MATTHEW J CARRINGTON

79 JOSEPH AVENUE

WESTFIELD

MA 01085-0000

Document Type

Applicator License

L

Date of Issue

12/10/2014

License Number

33222

Expiration Date

12/31/2015

Category/Subcategory

"000"

Matthew J Carrington
Sign Here

COMMONWEALTH OF MASSACHUSETTS

Department of Agricultural Resources



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Matthew J Carrington
Sign Here

Appendix 6C

Year 12

Catch Basin Cleaning Program

Drainage repair 2014

3/20/14 partners rest.---basin repair
4/29/14 53 rugby rd===basin repair
juniper rge. At north st. ext--basin re
4/28/14 95 springfield st.---basin repair
4/18/14 suffield st. at motor lodge---basin repair
north st. at deep gutter
4/17/14 97 columbia dr.--- basin repair
4/17/14 wilson st. at spfld st. ---basin repair
4/16/14 131 anthony st.---basin repair
4/14/14 36 brookside dr.---basin repair
4/14/14 karen lynn cir.---vac basins
4/10/14 980 suffield st.-basin repair
4/11/14 503 springfield st.---basin repair
4/9/14 ramah cir.---basin repair
harvey johnson dr. basin repair
4/8/14 overlook at sunset---basin repair
5/6/14 179 forest hill rd.---basin repair
moore st in patch---basin repair
5/12/14 105 meadow st---basin repair
5/13/14 suffield at mill st.---basin repair
5/14/14 28 spencer st.---basin repair
5/16/14 elm st by mill st.---basin repair
5/19/14 47 wilber terr. ---basin repair
5/21/14 28 garden st.---basin repair
5/23/14 clark school---basin repair
6/4/14 20 maynard st.---basin repair
6/10/14 cecil+brien st---vac basins
6/6/14 22 vernon st---vac basins
502 meadow st---vac basins
6/11/14 50 halliday dr.---basin repair

40 pleasant run ct.---basin repair
6/13/14 19 faymore ave---basin repair
29 fernwood--basin repair
6/16/14 meadow st at casios---basin repair
6/13/14 doane ave.---vac basins
6/18/2014 22 kensington st---basin repair
6/26/14 231 northwestfield st---basin repair
6/30/14 30 norris st.---basin repair
7/17/14 80 brookline ave-basin repair
7/3/14 134 anthont st.---basin repair
8/28/14 adams at main st.---basin repair
8/26/14 northwest st.---vac basins
8/27/14 964 northwest st.---repair basin
9/8/14 83 highland st---basin repair
9/9/14 maple st by saret ford---basin repair
10/3/14 poplar st. at freedom credit bank---basin
10/12/14 1104-1114 north st ---basin repair
10/11/14 robinson school---basin repair
10/22/14 75 fox farm
57 fernwood---basin repair
10/23/14 737 north st.--- basin repair
10/25/14 262 northwestfield st ---basin repair
10/29/14 102 liswell dr.---basin repair
10/30/14 987 suffield st---basin repair
10/26/14 61 pineview cir. ---basin repair
11/15/14 21 south st. --basin repair
10/27/14 11 reed st. ---basin repair
virgina st---basin repair
10/30/14 188 mallard cir---basin repair
11/10/14 127 james st---vac basins
263 suffield st ---vac basins
11/7/14 32 keller dr.---basin repair
11/6/14 doane ave---vac basins
11/5/14 259 colemore st---basin repair
123 cherry st---basin repair
12/2/14 walnut st. vac basins

Appendix 6F

Year 12

Stormwater Pollution Prevention Plan / MSGP



Tighe & Bond

Agawam Department of Public Works
Agawam, Massachusetts

Spill Prevention, Control, and Countermeasures Plan

Prepared For:

**Agawam DPW
1000 Suffield Street.
Agawam, MA**

October 2014

Letter of Approval and Certification

Tighe & Bond

Management Approval

I have the authority to commit the necessary resources to implement this Spill Prevention, Control and Countermeasures (SPCC) Plan.

SPCC Plan Coordinator

Name: Christopher J. Golba

Title: Superintendent DPW

Signature: *Chris Golba*

Date: 10-22-14

Primary Emergency Contact:

Name: Mark Jopson

Title: Vehicle Maintenance Supervisor

Signature: *Mark Jopson*

Date: 10-22-2014

Secondary Emergency Contact:

Name: Steve Bonesteel

Title: Highway & Grounds Deputy Superintendent

Signature: *Stephen Bonesteel*

Date: 10-22-14

Certification

I hereby certify under penalty of law that I am familiar with 40 CFR 112; I or my agent has visited and examined the facility; the Plan was prepared in accordance with good engineering practice, including consideration of applicable industry standards, and with the requirements of 40 CFR 112; procedures for required inspections and testing have been established; and the plan is adequate for the facility once the recommendations outlined in Section 8.0 of this plan have been implemented.

Name: Thomas C. Couture

Firm: Tighe & Bond, Inc.

State/Number: Massachusetts/27553

Date: 10/15/2014



