

**Town of Agawam
Massachusetts**

**NPDES
Municipal Separated Storm Sewer
System
Phase II Stormwater Permit**

2013 Annual Report

**Due:
May 1, 2013**

**By
Mayor Richard A. Cohen**



Town of Agawam

36 Main Street
Agawam, Massachusetts 01001-1837
413-786-0400

April 24, 2013

Mr. Fred Civian
Massachusetts Department of Environmental Protection
One Winter Street – 5th Floor
Boston, MA 02108

Dear Mr. Civian:

The Town of Agawam is pleased to submit the enclosed Municipal Stormwater Management Program Annual Report for permit year nine in order to comply with the NPDES Stormwater MS4 Permit requirements.

The enclosed information includes documentation of year nine activities, a self assessment, detailed assessments of each BMP, measurable goals, assessment of progress towards achieving the measurable goals, summary of results of any information that has been collected and analyzed, discussion of activities for the next reporting cycle, discussion of changes in identified BMP's, and reference to any reliance on other entities for achieving measurable goals.

Please feel free to contact me with any questions or comments regarding this submittal.

Sincerely,

Richard A. Cohen
Mayor

CC: U.S. Environmental Protection Agency - CIP
Chris Golba, Dept. of Public Works
Michelle Chase, Engineering
Tracy DeMaio, Environmental Project Coordinator



Town of Agawam

36 Main Street
Agawam, Massachusetts 01001-1837
413-786-0400

April 24, 2013

Ms. Glenda Velez
U.S. Environmental Protection Agency-CIP
1 Congress Street, Suite 1100
Boston, MA 02114

RE: Agawam Massachusetts
NPDES Phase II MS4 Permit
Annual Report 2012

Dear Ms. Velez:

The Town of Agawam is pleased to submit the enclosed Municipal Stormwater Management Program Annual Report for permit year nine in order to comply with the NPDES Stormwater MS4 Permit requirements.

The enclosed information includes documentation of year nine activities, a self assessment, detailed assessments of each BMP, measurable goals, assessment of progress towards achieving the measurable goals, summary of results of any information that has been collected and analyzed, discussion of activities for the next reporting cycle, discussion of changes in identified BMP's, and reference to any reliance on other entities for achieving measurable goals.

Please feel free to contact me with any questions or comments regarding this submittal.

Sincerely,

Richard A. Cohen
Mayor

CC: Massachusetts Department of Environmental Protection
Chris Golba, Dept. of Public Works
Michelle Chase, Engineering
Tracy DeMaio, Environmental Project Coordinator



Enter your transmittal number

X255525

Transmittal Number

Your unique Transmittal Number can be accessed online: <http://mass.gov/dep/service/online/trasmfrm.shtml>

Massachusetts Department of Environmental Protection

Transmittal Form for Permit Application and Payment

1. Please type or print. A separate Transmittal Form must be completed for each permit application.

2. Make your check payable to the Commonwealth of Massachusetts and mail it with a copy of this form to: DEP, P.O. Box 4062, Boston, MA 02211.

3. Three copies of this form will be needed.

Copy 1 - the original must accompany your permit application. Copy 2 must accompany your fee payment. Copy 3 should be retained for your records

4. Both fee-paying and exempt applicants must mail a copy of this transmittal form to:

MassDEP
P.O. Box 4062
Boston, MA
02211

* Note:
For BWSC Permits,
enter the LSP.

A. Permit Information

MAR041001

General Permit MS4

1. Permit Code: 7 or 8 character code from permit instructions

2. Name of Permit Category

Annual Report

3. Type of Project or Activity

B. Applicant Information - Firm or Individual

Town of Agawam

1. Name of Firm - Or, if party needing this approval is an individual enter name below:

2. Last Name of Individual

3. First Name of Individual

4. MI

1000 Suffield Street

5. Street Address

Agawam

MA

01001

413-821-0623

6. City/Town

7. State

8. Zip Code

9. Telephone #

10. Ext. #

Chris Golba

dpw@agawam.ma.us

11. Contact Person

12. e-mail address (optional)

C. Facility, Site or Individual Requiring Approval

Town of Agawam

1. Name of Facility, Site Or Individual

2. Street Address

3. City/Town

4. State

5. Zip Code

6. Telephone #

7. Ext. #

8. DEP Facility Number (if Known)

9. Federal I.D. Number (if Known)

10. BWSC Tracking # (if Known)

D. Application Prepared by (if different from Section B)*

1. Name of Firm Or Individual

2. Address

3. City/Town

4. State

5. Zip Code

6. Telephone #

7. Ext. #

8. Contact Person

9. LSP Number (BWSC Permits only)

E. Permit - Project Coordination

1. Is this project subject to MEPA review? ☐ yes ☒ no
If yes, enter the project's EOE file number - assigned when an Environmental Notification Form is submitted to the MEPA unit:

EOEA File Number

F. Amount Due

Special Provisions:

- ☒ Fee Exempt (city, town or municipal housing authority)(state agency if fee is \$100 or less).
There are no fee exemptions for BWSC permits, regardless of applicant status.
- ☐ Hardship Request - payment extensions according to 310 CMR 4.04(3)(c).
- ☐ Alternative Schedule Project (according to 310 CMR 4.05 and 4.10).
- ☐ Homeowner (according to 310 CMR 4.02).

DEP Use Only

Permit No:

Rec'd Date:

Reviewer:

Check Number

Dollar Amount

Date

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-

Organization: **Town of Agawam, Massachusetts**

PERMIT YEAR 10: 2013 ANNUAL REPORT

NPDES PERMIT # MAR 041 001

Reporting Period: May 2012– April 2013

MA DEP Transmittal X255525

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 24, 2013**

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 10 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 10 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 as instructed by MCAS, local cable access bulletins, community website news and events, newspaper press releases and informational pamphlets. Messages included proper fertilization practices, proper pet waste disposal, HHW disposal, water conservation, and prescription drug disposal.

Public Involvement and Participation activities continue to depend on volunteers and funding. The CT River Watershed and Westfield River Watershed have been very instrumental in recruiting volunteers and helping the Town of Agawam keep the area along the CT River clean. In addition the town was successful in public participation at its annual Household Hazardous Waste collection, Rain Barrel distribution, Earth Day Event and National Drug Take Back Day.

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 indeterminately. 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 continued to transition 3.2 acres of athletic fields from chemical lawn care practices to organic lawn care practices.

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 10 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 display the Think Blue Cigarette Butt poster encouraging the proper disposal of cigarette butts.

See Appendix 1A

Best Management Practice Assessment / Proposed Changes

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

Possible Future Activities

As necessary, the town will continue to educate the community on stormwater related topics using municipal buildings and businesses as a means to distribute the materials. In addition, it is anticipated that a display will be created in the DPW Conference Room; where construction, business, team meetings and community meetings take place on a regular basis.

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 10 Activities

Per the Agawam Public School System, water filtration, water pollution, storm drains, and erosion control activities were introduced to grades K – 4 per MCAS standards.

See Appendix 1B

Best Management Practice Assessment / Proposed Change

No proposed changes to this BMP

Possible Future Activities

It is expected that the Fifth Grade Students will participate in the WOW Express program sponsored by The Silvio O. Conte National Fish and Wildlife Refuge. The Wow Express, watershed on wheels, is a traveling exhibit with seven interactive kiosks engaging both students and teachers. Planning and Scheduling between the DPW, schools and Wow Express are currently underway.

See Appendix 1B

1C Local Cable Access

Original 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 10 Activities

During permit year 10 the Town of Agawam posted the following information to help viewers learn more about stormwater management, healthy habits, and community activities.

- Household Hazardous Waste Day Event / Hazardous Waste items list

- Earth Day Event
- National Drug Take Back Day Event

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 Website**Original 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 10 Activities

During permit year 10 the Town of Agawam updated its website to include the following information to help viewers learn more about stormwater management, healthy habits, and community activities.

- Household Hazardous Waste Day Event / Hazardous Waste items list
- Earth Day Event
- National Drug Take Back Day Event
- Health Department Needle Disposal Program

Best Management Practice Assessment / Proposed Change

No proposed changes to this BMP

Future Activities

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

1E Newspaper Press ReleasesOriginal 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 10 Activities

During permit year 10, the following press releases were sent and published in local newspapers.

- Robinson State Park Day
- Household Hazardous Waste Day Event
- Earth Day Event
- National Drug Take Back Day Event
- Needle Disposal Program
- WSWS River Clean Up
- Organic Lawn Care Practices

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 11.

1F Informational PamphletsOriginal BMP Description:

The Town will distribute one informational pamphlet or notice per year to every household Town-wide. The pamphlet or notice will likely be included with the mailing of the Consumer Confidence Report on water quality. Pamphlets will contain information on stormwater related issues and may be obtained from an applicable governmental or other public agency, purchased from a distributor, or

possibly created by student's project under BMP #1B. The DPW will have responsibility for this BMP, which will be utilized in Years 1, 3, and 5.

Year 10 Activities

In June 2012, the town distributed approximately 12,500 Aqua Almanacs to all businesses and dwelling units in Agawam. Included in the water report was a Stormwater Report, educating both residents and business about what NPDES is, why Agawam is involved and what Best Management Practices the town has implemented in our community.

See Appendix 1F

Best Management Practice Assessment / Proposed Change

No proposed changes.

Possible Future Activities

Pending 2013 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 10 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 the month of October.

Best Management Practice Assessment / Proposed Change

No changes at this time.

Possible Future Activities

As volunteers and funding are available, the DPW will continue to support community cleanups. The DPW is currently trying to set up a program with the Hampden County Sherriff's Department to utilize the Community Service Group to assist the town in clean-ups along the Connecticut and Westfield Riverbanks.

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 10 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 2013 General Permit Requirements

Future Activities

Additional surveys pending the 2013 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 10 Activities

No volunteers during permit year 10.

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 are being updated so as to require that all newly constructed catch basins be properly marked as part of the site plan and subdivision approval process.

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 10 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:

- Municipal Park Organic Land Care Transition Project
- Think Blue Display and Educational Booth at Annual Earth Day Event.

See Appendix 2D

Best Management Practice Assessment / Proposed Change

No proposed changes

Future Activities

Activities are pending the rewritten 2013 General Permit Requirements.

Pending EPA grant funding, the Town of Agawam has requested to participate in the EPA's Soak Up the Rain Campaign, piloting a rain garden at one of our Elementary Schools in conjunction with a new driveway improvement project.

2E Community Outreach

Original BMP Description:

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

Revised BMP Description:

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

Year 10 Activities

During Permit Year 10, the DPW has offered the following programs to residents in town.

- Household Hazardous Waste Day, 185 homeowners participated
- Rain Barrel Distribution, 19 barrels sold
- Earth Day Event –over 300 attendees
- 75 Water Conservation Kits Distributed by Conservation Commission at April Earth Day Event
- 100 Pet Waste Bags and Dispensers distributed by Animal Control Officer
- National Drug Take Back Day sponsored by Health Department; Since 2011, over 500 lbs of unused and expired medications collection / Over 40.5 cu.ft. of sharps collected

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 2013 General Permit Requirements.

Minimum Control Best Management Practices

Section 3 – ILLICIT DISCHARGE DETECTION AND ELIMINATION

3A Mapping Stormwater Outfalls

Original BMP Description:

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

Year 10 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. This year, Tighe & Bond has turned over control of the GIS database to the Town of Agawam. The Town will now be 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.

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

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

Year 10 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 9. 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 the rewritten 2012 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 Plan

Original 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 10 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 is in the process of adding the Town's existing sanitary sewer system to 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. It is estimated that this work is approximately 40% complete.

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 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 9, the Town of Agawam has investigated and resolved illicit discharges in the following locations:

- **Garden Street:** A sanitary sewer overflow was discovered in a section of the sewer that runs behind the properties on Garden Street. This sewer had previously been relocated due to the Route 57 project. DPW crews were dispatched to the site. A plug within the sewer main was removed. The ground was washed down and lime was spread.
- **Agawam Housing Authority:** A sanitary sewer overflow was reported on Wright Street. Residents stated that the overflow was discovered on a Saturday, but was not reported to the DPW until the following Tuesday. The DPW had to remove a large snow pile that was blocking access to the wetwell at the

Meadowbrook Pump Station and successfully removed the block from the main line. Bleach was applied to the hard surfaces to disinfect.

- Elm Street: The DPW has received several reports of a white substance flowing from an outfall located adjacent to a stream culvert. DPW staff has performed inspections at this culvert, but no substance was ever witnessed. An industrial building nearby was inspected and it was concluded that the substance was originating from there. The DPW will continue to monitor this outfall.
- High Street: A construction project on High Street was causing sediment from unseeded areas to flow onto High Street and Spring Street creating a potential safety hazard for drivers. The sediment was also entering Town-owned catch basins on both streets. A letter was sent to the contractor requesting that hay bales be installed to control the erosion and that the sediment in High Street and Spring Street be cleaned up.
- Bondi's Island Wastewater Treatment Plant: The DPW received a report of a sewage smell and dirty-looking water flowing into the Westfield River. Site investigations revealed that the sewer line that travels under the river to Bondi's Island was broken. The sewer main was shut off and a new pipe was installed. A new valve also needed to be installed.
- Springfield Street: A construction project on Springfield Street was causing sediment to flow into the gutter line of the road. The owner was notified and told to install silt fence and hay bales around the project area. The owner cleaned also cleaned the sediment from the road.
- River Street: The DPW received reports of a sinkhole forming at the intersection of River Street and Bridge Street. A site inspection indicated that the sinkhole was caused by a crack in the old drain line under River Street. The damaged drain pipe was removed and new reinforced concrete pipe was installed.

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 be responsible for the maintenance and repair of all detention basins on their property. Assistance can be given at the discretion of the DPW.

3D Inform Employees, Businesses, and Public**Original BMP Description:**

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

Year 10 Activities

During permit year 10 the Town Plumbing Inspector continued to distributed a "Food Industry Guide" pamphlet to all restaurants during his regular inspections. In addition, a local condominium was provided with 232 Stormwater Reposts to distribute to their residents due to a high volume of car washing on the property.

See Appendix 3D

Best Management Practice Assessment / Proposed Change

No proposed changes.

Possible Future Activities

Any additional future activities are pending the rewritten 2012 General Permit Requirements.

3E Video Inspection

Original 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 10 Activities

During year 4, the DPW purchased a video camera system which has been used to investigate the condition of several drainage pipes. The DPW has performed several video inspections in town during permit Year 9. The video inspections were used to determine: if there were any illicit connections, the condition of the drainage pipe, and to assist in mapping of the Town's drainage system.

The Town used the video camera system to inspect a drainage culvert on School Street to see if it would have to be replaced prior to the proposed widening of School Street and construction of a new pedestrian and bike path. It was determined that most of the culvert was in acceptable condition and could wait until the project starts. It is anticipated that this project will begin in 2013.

Best Management Practice Assessment / Proposed Change

The DPW continues to use its video camera to assist in Illicit Discharge and other related drainage and sanitary sewer investigations. The camera is in need of replacement due to years of use. The DPW is currently looking into options for replacement. 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 Systems**Original BMP Description:**

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

Year 10 Activities

The Board of Health maintains records on all inspections involving septic systems. The BOH has forwarded a list of all failed systems from 2012 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 10 Activities

No volunteers during permit year 10.

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 are being 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 10 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 9 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 treatment.

The Town should 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 10 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.

A new 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 2012 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 10 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 rewritten 2012 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 10 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 2012 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 10 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 Plan

Original 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 10 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. A complete list of stormwater maintenance and repair projects completed in Year 9 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 will 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 10 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

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.

It is anticipated that the DPW will be purchasing a Boom Flail Mower, using Chapter 90 funding, for municipal use. The boom flail will be useful in helping maintain overgrowth within municipally maintained detention ponds.

See Appendix 6A

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 10 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.

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 Program**Original BMP Description:**

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

Year 10 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 10, approximately 40 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 plans on inputting 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.

6D Street SweepingOriginal BMP Description:

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

Year 10 Activities

During permit year 10, the DPW completed street sweeping in the following areas:

- 70 curb miles of roadway between April 1, 2009 – April 1, 2010
- 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 CareOriginal BMP Description:

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

Year 10 Activities

The DPW provides 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.

The town of Agawam was awarded a TURI (Toxic Use Reduction Initiative) grant in partnership with the Ct River Stormwater Committee in October 2011. The grant is in support of the towns Greenscape program that was awarded in September 2011 – June 2012. The grant is to transition 5 area municipal parks to organic land care programs, the Lacrosse Field the School Street Park in Agawam being one of the five locations.

During permit year 10, the 3.2 acre lacrosse field at School Street Park transitioned from chemicals to organic lawn care. Steps taken to transition the field included:

- Staff training in permit year nine
- Soil Sampling / Testing by UMass of Amherst
- Deep tine aeration
- Over Seeding
- Hi Cal Lime application
- Nematode Grub control
- NS Organic Fertilizer

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 2013 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 10 Activities

It is our understanding that as of this report date; EPA has delayed the Multi-Sector General Permit (MSGP) program for DPW facilities. 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.

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.

6G Used Oil Recycling

Original BMP Description:

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

Year 10 Activities

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

In 2012, 2450 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 Collection

Original 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 10 Activities

The Town hosted its annual Household Hazardous Waste Collection day in the fall of 2012. 121 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 recently purchased three safety storage cabinets. The cabinets will be used to properly store illegally dumped items dropped along the roadsides. Cabinets will be managed by the DPW with scheduled collections from Clean Harbors.

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 10 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 10

Educational Displays

**THINK THESE BUTTS
LOOK GOOD?
SO DO THE BIRDS.**

**THINK AGAIN.
THINK BLUE.**

So good in fact that birds and other animals often die from eating them. Cigarettes are the most littered item in America – 176 million pounds each year. That's enough to fill the seats at Fenway Park 32 times. When carried into storm drains, cigarette butts go directly to our rivers, lakes and ponds.

Help keep our waters blue...put your butt in the trash.

www.ThinkBlueMA.org



Appendix 1B

Year 10

Classroom Education



Town of Agawam
DEPARTMENT OF PUBLIC WORKS
1000 Suffield Street
Agawam, Massachusetts 01001
Tel. 413-821-0600 • Fax 413-821-0631

Agawam Public Schools
NPDES Stormwater Permit
Annual Reporting Form
Final Due Date: April 19th

DPW' 1B Classroom Education

The Agawam Public Schools will refer to the recommended teaching lessons from the state MCAS standard in grades K-10 to help increase awareness about stormwater related topics in their classrooms. The school will submit annual reports regarding their lessons and or presentations. 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.

School: Granger & James Clark

Grade Level: K, 1, 2, 3, 4

Subject Area: Science

MCAS Learning Standard: _____

Goal: Environmental Education Awareness

Activity: K → learned about recycling made recycling posters

grade 1 → played recycling board games

grade 2 → learned about no dumping →

- Please attach any supporting documentation, pictures, scans of projects, etc.
- Return to DPW

in storm drains, made water filter
learned about oil spills

gr. 3 → put on a play about
recycling

wrote persuasive letters
about styrofoam lunch trays

gr 4 → learned about history
of Earth Day

Wrote about Earth Day

Poster

Posters can persuade readers with strong statements, reasons, and visuals.

FEATURES

- Strong opinion statement
- Reasons for the opinion
- Illustration



FOCUSED MINILESSON

Writers, we've done a great job of recycling paper in our class! We know that recycling keeps our Earth healthier. Today I want to create a poster that delivers a powerful message about recycling: Recycling is important!

Watch as I start my poster. I want my message to be big enough that others can see it from a long way away. First, I'll write a statement that expresses my opinion: You should recycle paper.

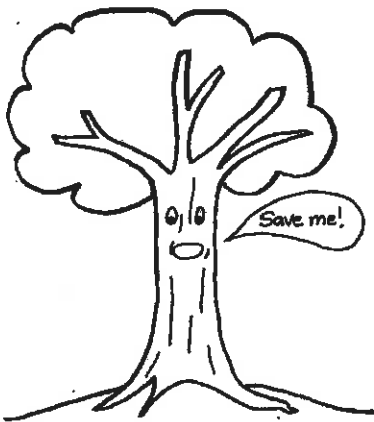
TURN & TALK Partners, evaluate what I wrote. Do you think this would convince people to recycle?

What I wrote gives a message, but I want my readers to be convinced. So, I'm going to make my poster sparkle with interesting words and excitement. I'm rewriting with a great slogan: Don't throw it away. Recycle today! That is much more exciting, and it tells my readers what action I would like them to take. Notice that I wrote this statement in big letters at the top of my poster so that it stands out. Now I need to give at least one reason to support my statement.

TURN & TALK Think with a partner. What could I write to persuade my readers to recycle paper?

Your reasons are fantastic! I don't want to clutter up my poster with too many words, so watch as I write one short reason: Recycling saves trees! I want to draw something, too, to get my message across. Watch as I draw a tree. I'm putting a little speech bubble next to the tree so that it looks as if it's talking. The tree is saying: Save me!

Don't throw it away.
Recycle today!



Recycling saves trees!

After writing: Review the features of a persuasive poster as you capture them on a reference chart for students: *Writers, we've created a powerful poster that persuades. A strong statement introduces the argument, and we supported the argument with reasons. An illustration supports our message, too, making a powerful visual statement.*

WRITING and COACHING

We can all make a difference with persuasive posters that will persuade others to recycle. Let's make a list of things to recycle and some reasons to recycle each of them. Create a list with students.

TURN & TALK *Partners, think together. What can you say that might persuade someone to recycle?*

Now it's time for you to create your own posters. Use exciting language to give your opinion and a reason for it. Then make an illustration that will help convince your readers. Allow students to work with partners to create their posters.

SHARING and REFLECTING



Your posters have such powerful messages! You put a strong opinion on each poster and wrote it in big letters so other people can see it. Then you included a reason. You should be proud of your illustrations, too. They support your messages!

Help children hang their posters where others can see them.

ASSESS THE LEARNING

As you look over students' posters, assess them for understanding of persuasion. Do students include strong statements of opinion? Do they support them with reasons? Provide reteaching as needed.

SELF-ASSESSMENT

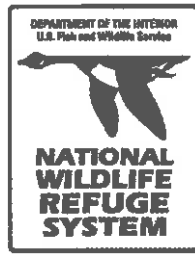
SELF-ASSESSMENT	
Making a Persuasive Poster	
	YES NO
1. Did you start your poster with a strong opinion?	☐ ☐
2. Did you include at least one reason that supports your opinion?	☐ ☐
3. Did you use exciting words and pictures?	☐ ☐

PERSUADE

RESPOND

SUPPORTING AND EXTENDING

- ▶ Ask students to create persuasive posters about their favorite healthy foods. Display the posters in the cafeteria.
- ▶ Have students work together to create persuasive posters about the importance of exercise. Display them in the school gymnasium.
- ▶ Students can create posters about reading—either with the message that reading is important, or with a recommendation of a particular book or author. Display the posters in the school library.



The Silvio O. Conte National Fish and Wildlife Refuge Presents The WoW Express

What is the WoW Express?

The Watershed on Wheels (WoW) Express is a traveling exhibit designed to engage children of all ages in the beauty and wonder of the Silvio O. Conte National Fish and Wildlife Refuge, which comprises the 7.2 million-acre Connecticut River Watershed.



The WoW Express includes three engaging components: a walk-through immersion exhibit featuring the diverse sights and sounds of the watershed; a watershed table showing how rivers form and change; and seven interactive kiosks exploring the cultural, economic, and environmental significance of the Conte Refuge.

Walk-Through Exhibit

The walk-through exhibit is enclosed in a 28-foot trailer wrapped in a colorful mural depicting the wildlife of the Conte Refuge. The immersion trailer simulates a walk in the New England Forest and is designed to introduce people to the diversity of wildlife that may be found within the Refuge- and in their own back yards!

Watershed Table

Our watershed table is a large tray filled with sediment in which we build a river. The colorful plastic acts like sand to create meanders, cut-banks, and point bars. Versatile, this table can be used to show how rivers form from source to sea, or as a tool to introduce vocabulary words about rivers.

Interactive Kiosks

The WoW Express features seven portable four-sided kiosks. Each kiosk employs interactive panels, games, or computer screens to creatively engage children in the topics of biodiversity, wetlands, bald eagles, migratory birds, endangered species, migratory fish, food webs, and invasive species.

Appendix 1E

Year 10

Newspaper Press Releases

Public invited to Robinson State Park Day

AGAWAM - Robinson State Park Day, an annual event to celebrate, appreciate and enjoy this state park with all its many benefits to the surrounding communities, will be held Saturday, June 16. It is sponsored by the Friends of Robinson State Park and the Dept. of Conservation and Recreation (DCR).

This educational and fun event begins when the park opens at 8 a.m. for a bird identification walk, led by John Hutchinson of the Springfield Allen Bird Club. All those planning on attending this event are reminded to bring binoculars as Hutchinson enjoys teaching "new birders" of all ages.

Other events, which are scheduled to begin at 10 a.m., will include the Watershed on Wheels (WOW) Express, a 28-foot walk-through trailer that simulates a walk in the New England forest designed to display for children of all ages, the diversity of wildlife that can be found in the Connecticut River Watershed. The exhibit also includes seven freestanding kiosks and an interactive watershed table. Each kiosk employs interactive panels, games or computer screens to engage participants in the topics of biodiversity, wetlands, bald eagles, migratory birds, endangered species, migratory fish, food webs and invasive species. The watershed table uses push buttons and lights on a model of the Connecticut River Watershed.

Gini Trash, interpreter for the DCR and Burt Freedman of the Environmental Center for our Schools (ECOS in Springfield, will

lead "nature explorations" in Robinson Pond and along the edges of the forest.

Sharon Vasicek, art teacher, will facilitate nature weavings and coloring for elementary-age children. Volunteers will be available to help young children color and identify wildflowers, trees and forest animals.

Matt Largess, arborist, will lead big tree hikes and tour the tornado damage in the park.

Rod Parlee, a member of the Bolton, Conn. Conservation Commission, will demonstrate rapid stream assessments for water quality.

Dave Conley, hike leader from the Appalachian Mountain Club (AMC), Berkshire Chapter will lead a four-mile hike beginning at 10:30 a.m. For information and to register for this longer hike, call Conley at (413) 786-6005.

Events will conclude mid-afternoon. The Westfield River Watershed Association will conduct its annual "Canoe Cruise" starting at noon from the center of Westfield to Robinson State Park. For more information on the Canoe Cruise, visit www.westfieldriver.org/events.html.

The public is invited to any and all events and is encouraged to bring food and water. The standard \$5 per vehicle admission charge will apply. Walkers and bikers are free.

For more information, email rebinsen-friends@comcast.net or call (413) 568-9379.



Turley Publications courtesy photo

The Watershed on Wheels (WOW), a walk-through trailer, will be open to the public at Robinson State Park Day scheduled for June 16.

Hazardous waste collection day set for Sept. 8

AGAWAM - The department of public works will hold its annual Household Hazardous Waste Collection Day Saturday, Sept. 8 at the DPW Annex located at 1000 Suffolk St.

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 the town website at 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. 8811 or 821-0624.

Harm reduction

Residents rid homes of hazardous items

By Mike Lydick

Turley Publications Correspondent

Even before David O'Neill had completely stopped his truck on the plastic sheeting, a squad of men and women in white protective suits swooped around the truck. They pulled items out of the back and quickly whisked them away. Within minutes he was on his way — with his home and the environment a little safer.

O'Neill was among nearly 150 Agawam residents who did some early fall cleaning so they could safely dispose of household hazards — some which had been in their homes for decades — during an annual collection by the Department of Public Works.

"This event was awesome," said O'Neill, who participated this year for the first time. "I don't know how else I would've gotten rid of the oil paints, insecticides, and fluorescent light bulbs I had accumulated during the past 20 years."

Residents filled up their cars and trucks on Sept. 8 and headed to the DPW annex on Suffolk Street. There was a steady stream of vehicles from 9 a.m. to noon, but even though vehicles were lined up to get to the drop off area — where crews waited to retrieve the hazardous material — the wait was only several minutes.

Protecting homeowners and the environment

While there was no charge to drop off items, residents were required to register for an appointment time. Tracy DeMaio, the DPW's environmental project coordinator who oversees the household hazardous waste collection, said scheduling appoint-



Turley Publications photo by Mike Lydick

Wearing protective gear, an employee with Clean Harbors Environmental Services sorts through various household hazardous waste materials dropped off by residents during an annual collection Sept. 8.

ment times helps with traffic control and limits waiting time for residents.

Unlike regular trash generated by homeowners, household hazardous waste — or simply, HHW — must be processed and disposed of differently because it is just that, hazardous. HHW are products used in and around the house that aren't used for any industrial purpose. Examples of HHW include

Please see **HAZARDOUS**, page 8

Residents rid homes of hazards

HAZARDOUS, from page 1

furniture polish, driveway sealer, weed killers, pool chemicals, oil-based paint, and stain/varnishes.

These items must be processed separately — and discarded properly — because they can be harmful to humans and animals, the environment, and to the people handling them.

To help prevent this from occurring, the town's health department started annual HHW collections in the high school parking lot in 1997. The responsibility for the HHW collection later shifted to the DPW, which relocated the collection area to the DPW annex in 2007 to improve traffic flow and control.

Clean Harbors Environmental Services, Inc. of Bristol, Conn. has managed all Agawam HHW collections. It separates, treats, and safely disposes of the collected hazardous waste. During the past three collections, Clean Harbors has removed a total of 17.5 tons of waste that residents dropped off.

Tim Olson, technical service general manager for Clean Harbors, said one of the biggest changes during the past 15 years is that there is now more emphasis on utilizing recycling technologies than in the past. "Especially concerning E-waste, paints and batteries," he said.

Allied Waste/Republic Services of Chicago, the company the town uses to do the weekly residential curbside trash pick-up service, was also involved in the HHW collection. It provided disposal services at no charge to the town.

DeMaio said the town currently budgets \$12,000 for HHW Day and does not receive any subsidies from the state or federal government. She added that since Clean Harbors is on the state contractors list, it's not necessary for the town to bid out the HHW collection each year.

DeMaio said the HHW collection is a popular program that she expects to remain budgeted in coming years. "But I can't schedule the date until I know the budget has been approved. I always try to schedule it in September or October, either before or after

'Best way to get rid of this stuff'



Turley Publications photo by Mike Lydick

Employees with Clean Harbors Environmental Services remove household hazardous waste items from the back of a car at Agawam's annual collection event Sept. 8. The plastic sheeting covers the drop off area to catch any inadvertent spills.

By Mike Lydick

Turley Publications Correspondent

AGAWAM — For many residents, the annual household hazardous waste (HHW) collection helps reduce the amount of leftover products in their homes.

"This is the best way to get rid of this stuff," said Lucille Fedistad as she waited in line with her daughter. "The people collecting it know what to do with it."

Fedistad, who has been coming every year for the past six years, said she

- Ignitable - capable of burning or causing a fire (e.g. flammable or combustible products)
- Corrosive - capable of eating away materials and destroying living tissue when contact occurs (e.g. acids and alkalis)
- Explosive and/or Reactive - capable of causing an explosion or releasing dangerous or poisonous fumes when exposed to air, water or other chemicals
- Toxic - poisons, either immediately or over a long period of exposure time (e.g. pesticides, herbicides, insecticides)

• Explosive and/or Reactive - capable of causing an explosion or releasing dangerous or poisonous fumes when exposed to air, water or other chemicals

• Toxic - poisons, either immediately or over a long period of exposure time (e.g. pesticides, herbicides, insecticides)

DeMaio said more than 2,000 residents have participated in the drop off during the last 10 years. During the past five years the HHW event has averaged 185 homeowners - a decline from the previous five-year average of 250 residents per year.

She attributes the decline to the fact that the event has been consistently offered for



Turley Publications photos by Mike Lydick

Tracy DeMaio, Agawam DPW's solid waste and storm water coordinator, works the check-in area for the annual household hazardous waste collection event.

"We don't want residents dumping this hazardous waste down their drains, into storm drains or streams, or burying it in the ground. It's also shouldn't be put into the weekly trash collection," she added.

DeMaio said items thrown in the trash by one resident could come in contact with something else thrown out by another resident once it's in the back of the waste collection truck. "If there's a chemical reaction between the two, it could cause a serious fire."

And, to make sure there were no threats of potentially dangerous chemical reactions lurking in backseats or cargo areas, a chemist with Clean Harbors inspected all items before residents could pull up to the drop-off area. "This is for the safety of residents as well as for us," said DeMaio.

"We also don't allow residents to get out of their vehicles at the drop off location," she added. "Once the materials are removed from the vehicles, employees from Clean Harbors handle all the waste, eliminating any accidents that could occur if the wrong chemicals were to combine."

DeMaio said there have never been any spills, accidents or injuries during the collection events. "Clean Harbors runs a very smooth and safe operation for the town and its residents."

trying to get 150 or 200 things in the box, not buying and being very careful about what I buy now."

In fact, the U.S. Environmental Protection Agency (EPA) recommends that homeowners reduce purchasing products that contain hazardous ingredients. The EPA said using alternative methods or products - without hazardous ingredients - for some common household needs can reduce the amount of HHW generated by homeowners.

A million tons annually. The EPA estimates that Americans generate 1.6 million tons of HHW per year, with the average home accumulating as much as 100 pounds of HHW in basements, garages, under the sink and in storage closets.

James and Jean Mullen have lived in Agawam for 34 years, but this was the first time they participated in the annual HHW collection. "We brought oil and spray paints, insecticides, old varnish, medicine - pretty much anything we could find," said Jean Mullen.

"We've had this stuff since who knows when," added James Mullen.

Many of the items the Mullens discarded are considered HHW because they contain volatile chemicals that are:

more products. The reuse of hazardous household products is also beneficial because it can save money and reduce the need for generating hazardous substances.

Mark and Paula Sullivan cleaned out their garage and then hauled the hazardous waste to the DPW annex in their SUV. "This is a great thing the town is doing," said Paula Sullivan. It was the first time they had participated in the collection.

"This was a chance for us to clear out 20 years of hazardous materials that we didn't know what to do with but the town does," she added.

Residents appreciate town's services. Betsy Zeffinski was also making her first trip to HHW collection event after cleaning out her garage and basement.

"For me the challenge is to know exactly what to get rid of and how to dispose of it," she said.

A list of items considered household hazardous that can be dropped off at the annual collection is listed on the DPW's website via www.agawam.ma.us. Used motor oil and used car batteries are also considered HHW and can be brought to the DPW garage, Monday - Friday, before 10 a.m. Please see WASTE, page 9

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KraftMaid

8th Annual Opening Day and Green Day at the Park!

***Saturday, April 28th
Agawam Little League Complex***

Little League Event Schedule

- 9:30 am Teams gather in front of Phelps Elementary School
- 10:00 am Parade begins (Phelps School down School Street to the Little League Complex)
- 10:15 am Opening Ceremonies and awards
- 12:00 pm Major League Game, Field #1 (Teams TBA)
- 2:30 pm Coaches Home Run Derby, Field #2 (Teams TBA)

www.agawamlittleleague.com



Inflatables provided by Day and Night Rentals—wristbands will be sold near the concession stand

Dan Decosmo's Slot Car track and train rides

Games 2U—Video Game truck and field entertainment

Forest Park Zoo on the Go—11am—Noon

Food and Drinks will be available

Go Green at the Park! 10am—2pm

Visit one of the following vendors to find out how you can go green!

Friends of the Robinson State Forest

Agawam DPW

Agawam Energy Commission

Agawam Jr. Women's Club

Agawam Garden Club

Republic Services

Covanta Energy

Pioneer Valley Planning Commission

Western MA Gardeners Association



Health department launches safe needle disposal program

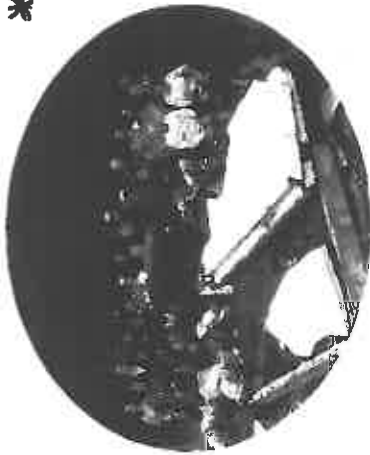
AGAWAM - Effective July 2012, home sharps, as well as unopened packages of hypodermic needles and lancets, cannot be disposed of in solid municipal waste, including household waste, and will be collected and disposed of in accordance with 105 CMR 480.125 B.

The health department reminds all residents that they are not allowed to dispose of unopened, or used syringes, needles and lancets in the household trash, regardless if it is confined to a puncture-proof container or not.

The health department offers a safe al-

ternative for disposing of used needles and syringes. Residents can now purchase a two-quart container for \$8, which includes the cost of the container and disposal when you return the filled container to the health department.

Those who cannot afford to purchase a medical sharps container may substitute a heavy-duty, one-gallon, puncture-proof liquid laundry detergent bottle with a screw-on cap. A \$15 disposal fee will be charged when it is brought to the health department for disposal. For more information or to obtain a sharps container, call 786-0400 ext. 8207.



* Volunteers Needed for Annual Westfield River Cleanup, September 29th

Sponsored by the Westfield River Watershed Association. On Saturday, September 29, volunteers will visit various rivers and streams in the Westfield River watershed to remove trash and debris. This annual cleanup is sponsored by the Westfield River Watershed Association (WRWA). The Westfield River cleanup is part of the annual Connecticut River Source to Sea (www.ctriver.org) cleanup that involves communities from the Canadian Border to Long Island Sound. Mark Damon, WRWA board member and one of the organizers of the 2012 cleanup, noted that it is very heartening to see so many great volunteers turn out to help clean up each year.

Volunteers for the 2012 Westfield River cleanup should gather no later than 9:00 a.m. at one of two meeting points for a brief orientation and their cleanup site assignments. In Westfield, they will meet in the parking lot on Meadow Street near the new bridge. In Agawam, volunteers should gather at the Pynchon Point parking lot near the South End

bridge circle on River Road in Agawam. Clean-up assignments are generally completed by 1:00 pm or earlier. Volunteers of all ages are welcome, but children must be supervised by an adult. Volunteers should bring sturdy gloves, if they have them. The Westfield River Watershed Association will provide trash bags and will arrange pickup of trash and debris recovered at each site. For questions, contact Mark Damon for Westfield area sites at 413-572-9991, midamon@verizon.net or contact Sheryl Becker for Agawam area sites at 413-374-1921, sherleath69@gmail.com. The Westfield River Watershed Association was established in 1953 to protect and improve the natural resources of the watershed, as well as to expand recreational and other land use opportunities for people's enjoyment and for sound ecology. To learn more, visit www.westfieldriver.org. Contact Sheryl Becker, Agawam sites, at 374-1921 or sherleath69@gmail.com or Mark Damon, Westfield sites, at 572-9991 or midamon@verizon.net

Wild & Scenic volunteers worked through Saturdays rain to clear the stunning 62 ft. Keystone Arch Bridge. These invaluable River Stewards amaze and inspire me to continue coordinating and thoroughly enjoying many workdays. Workdays that help maintain the trails and unique places we cherish along the nationally designated Wild & Scenic Westfield River. I Meredith Babcock, Westfield River Wild & Scenic Volunteer coordinator would like to thank all of the many volunteers from past and present Wild & Scenic projects for the gifts they freely give of time, energy and spirit. If you would like to add your name to the list of river stewards please call me at 413 623-2070. If your days of river walking and hauling brush are past we welcome volunteers who bake goodies, hang fliers and help pursue grant funding for larger projects, such as the restoration of the Keystone Arch Bridges. In addition to workdays we offer free trainings that increase our knowledge and commitment to protecting this rare and beautiful watershed and continue developing our "Walkin the Watershed" program where volunteers monitor the river they love. For more information and history of the Wild & Scenic designation visit, <http://www.westfieldriverwildscenic.org/>



Park chosen for sustainable land practice grant

By Debbie Gardner
debbieg@thereminder.com

AGAWAM – Sections of School Street Park are going a little greener this year, thanks to a project funded by the Toxic Use Reduction Institute (TURI) – an organization focusing on the reduction of toxins in the environment that is based at the University of Massachusetts, Lowell.

According to Tracy DeMaio, environmental project coordinator for the Department of Public Works (DPW), Agawam is one of five local communities working with the Pioneer Valley Planning Commission (PVPC) and Safeground Organic Landcare of Northampton to adopt more environmentally friendly land care practices in their municipal parks.

"We saw an opportunity to

participate in a project in Agawam and thought it would be a great opportunity to educate our staff on organic lawn practices," DeMaio said.

Anne Capra, a principal planner at the PVPC who oversees the Connecticut River Stormwater Committee, of which Agawam is a member, said she approached the 11 communities that comprise the Committee about participating in the \$25,000 TURI grant-funded project. The five other communities that elected to participate this year include Holyoke, at the grounds at the Wistariahurst Museum, Ludlow, for land at Memorial and Creative parks, Longmeadow, for Greenwood Park and Northampton, for land at Look Park.

The grant money will be utilized to help the DPW crews that maintain the participating parks transition from the use of synthetic

petrochemical fertilizers and pesticides to using organic practices and materials.

DeMaio said the Agawam DPW considered adopting the new land care practices on a number of different athletic fields or at the playground area at School Street Park. With the help of Bernadette Giblin from Safeground, she said the DPW narrowed the project area down to the lacrosse and baseball fields, both of which have high water tables and close proximity to the Connecticut River, making them potential areas for toxic runoff in storm situations.

"That's a highly visible spot," DeMaio added. "A lot of people from town and from out of town go over to [the fields at] School Street Park."

Giblin said the five DPWs participating in the organic lawn care training have jumped into the

project enthusiastically. In Agawam's case, DeMaio said, transitioning to organic practices began last fall, just before the October, 2011 blizzard.

"Agawam actually expanded the size of [their] project," Giblin said. "They were going to do half of the lacrosse field and now they're doing the whole thing."

Giblin, an accredited organic land care professional who wrote the TURI grant application for the PVPC, said municipal work such as this five-community project allows the public to see firsthand that more environmentally safe lawn care can be both effective and beautiful.

"School Street Park] still looks great," she said. "[Agawam] is getting to demonstrate to the public that organic [landcare] doesn't mean it's going to look bad."

Capra commended Agawam and the four other communities for

making the switch to more sustainable land management practices.

"We feel the parks that are joining us now are really on the forefront [of land management]," Capra said, adding that Connecticut recently banned the use of synthetic pesticides on school grounds and playing fields. "Municipalities will have to go to [being] pesticide free in the potential future, and getting the training and beginning that transition process now is very wise."

Giblin said making the transition to organic land care practices now is also giving Agawam and its sister communities national status.

"They will be listed on the Beyond Pesticides website, a national organization that lists parks nationwide who are reducing the use of pesticides," Giblin said.

Appendix 1F

Year 10

Informational Pamphlets

Stormwater Report

What is NPDES and why is Agawam involved?

The Federal Clean Water Act requires municipalities to obtain stormwater permits under the National Pollution Discharge Elimination System (NPDES) permit program. It had become apparent that non-point source pollution contributed to the decreased water quality in our streams and rivers. Non-point source pollution comes from oil, pet waste, pesticide, herbicide, fertilizer, road salt, bacteria, sediment, cigarette butts and any other contaminant that ends up on the ground naturally or from human activity. Rainwater and snowmelt picks up these contaminants as it washes over yards, sidewalks, driveways, parking lots, and fields and deposits them into our lakes and streams as non-point source pollution.

In an effort to reduce non-point source pollution, the NPDES Permit requires that all affected municipalities create and implement a Stormwater Management Program, which address five required program elements. These elements are:



1. Public Education and Outreach
2. Public Involvement and Participation
3. Illicit Discharge Detection and Elimination
4. Construction Site Run-Off
5. Operations and Maintenance / Pollution Prevention

Since its implementation in 2003, Agawam has successfully executed a number of Best Management Practices through the following activities:

- ◆ Instituted a Town Stormwater Ordinance
- ◆ Outfall Inspection and Monitoring
- ◆ Earth Day Events
- ◆ HHW Day Events
- ◆ Water Conservation Education
- ◆ National Drug Take Back Day
- ◆ Transitioning to Organic Lawn Practices
- ◆ Street Sweeping
- ◆ Detention Pond Maintenance Education
- ◆ Pet Waste Campaign / Disposal Sites
- ◆ Catch Basin Marking Program
- ◆ Developed a comprehensive Stormwater GIS Mapping System. Available online at:
<http://hosting.tighebond.com/agawam/main.htm>



Agawam's Aqua Almanac

2011

Health Information

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline (1-800-426-4791).

Some people may be more vulnerable to contaminants in drinking water than the general population. People whose immune systems may be compromised because of chemotherapy, organ transplants, or HIV/Aids or other immune disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline (1-800-426-4791).

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. The Agawam Department of Public Works is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap water for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at <http://www.epa.gov/safewater/lead>

In accordance with the Long Term 2 Enhanced Surface Water Treatment Rule, the Springfield Water and Sewer Commission began monitoring for Cryptosporidium in 2006. The results indicate that no further treatment is required, other than the treatment already provided, which includes filtration

<u>Test Dates</u>	<u>Results</u>
07/10/07	0.1 oocysts/liter
08/14/07	0.1 oocysts/liter

"Cryptosporidium is a microbial parasite found in surface water throughout the U.S. Although filtration removes Cryptosporidium, the most commonly used filtration methods cannot guarantee 100% removal. Our monitoring indicates the presence of these organisms in our reservoir water. Current test methods do not allow us to determine if the organisms are dead or if they are capable of causing health problems. Most healthy individuals are able to overcome health problems associated with Cryptosporidium within a few weeks. However, immuno-compromised people have more difficulty and are at greater risk of developing severe, life-threatening illness. Immuno-compromised individuals are encouraged to consult their doctor regarding appropriate precautions to prevent infection. Cryptosporidium must be ingested for it to cause health problems, and may be passed through other means than drinking water. Symptoms of infection include nausea, diarrhea and abdominal cramps."

Water Quality

The sources of drinking water (both tap water and bottled water) include: rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or human activity.

Contaminants that may be present in source water include:

- Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- Inorganic contaminants, such as salts and metals, which can be naturally occurring or can result from urban storm runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
- Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses.
- Organic chemical contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and which can also come from gas stations, urban storm water runoff, and septic systems.
- Radioactive contaminants, which can be naturally occurring or the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, the EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water which must provide the same protection for public health. Agawam collects 30 water samples each month from locations throughout Town and tests these samples for coliform bacteria. Again in 2011 no positive samples were found.

Sanitary Survey

In March, 2007 the Mass DEP conducted a sanitary survey of our public water system. A sanitary survey is an on-site review of the water sources, facilities, equipment, operation and maintenance of a public water system for the purpose of evaluating the system's ability to produce and distribute safe drinking water. The following items are corrective actions taken by the Agawam Water Department as a result of that survey. A valve operating and flushing program is being instituted and to that end the Department purchased a valve cleaning and exercising machine. In 2011, the Agawam Water Department had two additional members become certified as a drinking water operators which brings the Department's total number of certified operators to six.

United Water (the Town's pump station operator) established a formal maintenance schedule for the water pump station. A study was performed on the overall water system to map the system and to identify areas for improvement. This study has been used to increase the redundancy and resilience of the water distribution system.

Water Service Line Replacement

The Agawam DPW has received several phone calls regarding "Water Service Line Coverage" and would like to inform you that these mailings are not affiliated with the Agawam DPW. The Agawam DPW is responsible for the repair/replacement of the service line to your property line/shut off. The service line from that point forward i.e., to your water meter/house, is your responsibility. The DPW offers water service line renewals if you have a leak on your line for a nominal charge; for more information please call the DPW at (413) 821-0600.

Source Water Assessment

The Massachusetts Department of Environmental Protection (DEP) has conducted a Source Water Assessment for drinking water produced by the Springfield Water and Sewer Commission and has assigned a **system susceptibility ranking of Moderate**. The complete assessment and protection report is available at the Agawam Department of Public Works at 1000 Suffield Street and online at <http://www.mass.gov/dep/water/drinking/swapreps.htm> For more information, call Deputy DPW Superintendent, John Decker at (413) 821-0600.

The drinking water originates from a surface water supply, the Cobble Mountain Reservoir, located in Western Massachusetts. The Borden Brook Reservoir, a smaller surface water supply that feeds into Cobble Mountain Reservoir, contributes to the system's combined water supply capacity of 25 billion gallons. There is no commercial industry within the watershed boundaries and population density is low. Only limited farming and grazing are practiced in the area. Boating, swimming, hunting, and fishing are forbidden in and around the reservoir areas to further protect the water supply. From the reservoirs, the water flows to a treatment plant in Westfield where it is filtered, treated to prevent corrosion of plumbing, and disinfected; no fluoride is added. The water then flows to storage tanks on Provin Mountain and then through large transmission mains in Agawam, and into Springfield.

Water Consumption and Rates

Agawam obtains its water from the Springfield Water and Sewer Commission but operates our own system for the distribution of water within the community. This system, comprised of one pump station and approximately 150 miles of pipe ranging in diameter from 4" to 16", and service 9,848 accounts. Residential water use accounted for 69.3% of total usage and overall annual consumption was down 19% to **1,322,207,040** gallons of water in 2011; the 2011 use increased over 2009 use by 4%.

The Mass Dept. of Environmental Protection is requiring that all water systems take steps to reach 65 residential gallons per capita per day standard. This residential usage includes water used for lawn irrigation. In Agawam the average residence has 2.5 people which, at the 65 gallon rate translates to 4,000 cubic feet (cf) in a 6-month billing cycle. To encourage the necessary reduction in water consumption the rate structure that was adopted on July 1, 2009 will remain in effect until a rate study recommends otherwise. Residential usage above 4,000 cf and all other water use including lawn irrigation would be charged at a rate of \$1.90 per 100 cf. This rate structure has been assisting in meeting the required reduction in residential and non-essential outdoor water use. We have concern, however, that the current rate structure will fall short of providing funds for essential water system improvements, such as meter reading equipment and water main replacements.

Analysis of Agawam's Water

Water samples are analyzed daily by state-certified laboratories to ensure that the water supplied is potable and meets all government standards. The water is monitored at the reservoir, the filter plant, the storage tanks and throughout the distribution system. The data on the next page represents finished water in the distribution system during calendar year 2011.

We wish to remind residents that pollution of their drinking water can come from their own home. Typically this may occur when a hose end is connected to a chemical sprayer or submerged in a container and there is a drop in water pressure due to a fire or main break and the substance is siphoned back through the hose into the water pipes. We recommend the installation of a low cost hose bib vacuum breaker for all hose connections. This item can be purchased at a hardware or plumbing supply store.

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.**

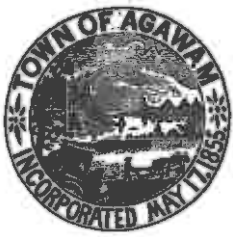
Informational Links:

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



Agawam Department of Public Works
1000 Suffield Street
Agawam, MA 01001

PRESORT STD
US POSTAGE
PAID
PERMIT 1035
SPFLD, MA 011
ECRWSS

Postal Customer
Feeding Hills, MA 01030

IMPORTANT INFORMATION
ABOUT YOUR DRINKING WATER

Christopher J. Golba
DPW Superintendent
PWS ID# 10050000

Department of Public Works
1000 Suffield Street
Agawam, MA 01001
Tel: (413) 821-0600
Fax: (413) 821-0631
Monday—Friday 8:30am—4:30pm

John G. Decker
Deputy Superintendent
Water Operations

Dear Water Consumers,

The Agawam Department of Public Works (DPW) is pleased to provide you with this Water Quality Report (Consumer Confidence Report) for 2011. This is Agawam's fourteenth annual report, advising the public of the quality of Agawam's tap water and related health issues as well as water system improvements and future plans.

Landlords: Please make this report available to your tenants.

Businesses: Please post this report where your employees and customers may read it.

Public Building and School Officials: Please post this report where people who may drink water may read it.

The Agawam DPW is responsible for the operation of the public water system. Our goal is to provide you with a continuous supply of quality water. We welcome comments and suggestions you may have to help us reach and maintain that goal. The DPW can be contacted at 413-821-0600 during normal business hours or at dpwsupt@agawam.ma.us to answer your water-related questions or comments. As an additional resource, the Mayor's office may be contacted at 413-786-0400 ext. 8200. In addition, the Town Council holds regular meetings on the 1st and 3rd Mondays of each month at the Agawam Middle School, and conducts a "citizen speak time" before each meeting, when citizens can voice concerns regarding water quality or operations. Citizens should inform the council clerk at 786-0400 ext. 8716 during weekday mornings in advance of any intention to speak. Emergency water problems at all other times can be reported to the police dispatcher at 413-786-4767, who will contact appropriate water service personnel.

Yours truly,

Christopher J. Golba, DPW Superintendent

Appendix 2D

Year 10

Watershed Committee

**CONNECTICUT RIVER STORMWATER COMMITTEE
2012 ANNUAL REPORT
JANUARY 1 TO DECEMBER 31, 2012**

The following is a summary of the work of the Connecticut River Stormwater Committee during the 2012 calendar year:

Member Community	Committee Representative and Department
Agawam	Tracey DeMaio, Department of Public Works
Chicopee	Joe Kietner, Waste Water Treatment Division
Easthampton	Stuart Beckley, Planning Department; Jim Gracia, DPW
Granby	Dave Derosiers, Highway Department
Holyoke	Matt Sokop, Department of Public Works
Longmeadow	Chris Reed, Department of Public Works
Ludlow	Jim Goudreau, Department of Public Works
Southwick	Richard Grannells, Department of Public Works
South Hadley	Melissa Labonte, Department of Public Works
Springfield	Kevin Chaffee, Conservation Commission
West Springfield	Jim Lyons, Department of Public Works
Westfield	Charles Darling, Water Resources Department

Low Impact Development Code (LID) Review for Chicopee and Ludlow

The Pioneer Valley Regional Ventures Center (PVRVC) was provided mitigation funds in the amount of \$24,000 as the result of Clean Water Action's Notice of Complaint against Ginmar Enterprises Inc. for use on projects related to stormwater benefiting water quality in the Chicopee River. The SEP addressed stormwater pollution for the improvement of water quality in the Chicopee River through: 1) education and outreach to chief elected officials in Chicopee and abutting communities; 2) develop innovative strategies for expanding green infrastructure for stormwater management including performance standards to reduce stormwater impacts from development; and 3) education and outreach to operators of industrial facilities within the Chicopee River watershed about proper best management practices for stormwater to reduce runoff and water quality degradation.

The Draft 2010 NPDES MS4 Permit for the Merrimack, Interstate and South Coastal regions issued October 24, 2010 requires MS4s to perform a local code review to assess the feasibility of implementing Low Impact Development (LID) techniques in new development and re-development at all scales. To address this requirement, PVPC developed a Green Infrastructure Checklist to use in reviewing local codes. The code review checklist was then implemented in the City of Chicopee and the Town of Ludlow, both communities share a border with the Chicopee River. From the checklist, two assessment and recommendation reports were generated for each community:

- Street and Parking Standards and Recommendations for Implementing Low Impact Development
- Local Regulation Review for the Feasibility of Having Low Impact Development

These reports present our assessments and recommendations regarding the landscaping of right-of-ways and parking lots, the curb and grade requirements of roadways and parking lots, and the dimension and layout requirements of streets, sidewalks, driveways, and parking spaces that influence the creation of impervious surfaces in right of ways, residential and nonresidential lots. The reports propose changes to the existing language of the zoning ordinances and subdivision regulations to allow for or encourage the use of LID integrated management practices. In making our recommendations of street, sidewalk, driveway, and parking lot dimensions, we referenced LID standards proposed in:

- Massachusetts Low Impact Development Toolkit by the Metropolitan Area Planning Council (MAPC), and
- "Better Site Design: A Handbook for Changing Development Rules in Your Community" by the Center for Watershed Protection, from which MAPC based their recommendations.

For Ludlow, the following bylaws and regulations were reviewed:

- a. Zoning Bylaws (version: May 14, 2012)
- b. Subdivision Rules and Regulations (effective: May 24, 2012)
- c. Smart Growth Overlay District Bylaw
- d. Design Standards for the town of Ludlow Chapter 40R Smart Growth Overlay District (version: May 13, 2011)
- e. Regulations for Construction within the Public Way (version: October 2012)

For Chicopee, the following ordinances and regulations were reviewed:

- a. current City Code Chapter 275
- b. Subdivision Regulations (April 7, 2005 version) for the right of way and parking lot guidelines that influence the creation of impervious cover

For each community the reports were submitted to the Planning Department and Department of Public Works for review and comment. The green infrastructure checklist and reports will also be presented to the Connecticut River Stormwater Committee at their February 12, 2013 meeting.

Outreach to Industrial Facilities

Also funded under the Clean Water Action SEP, PVPC performed outreach to industrial facilities with a NPDES Multi-Sector General Permit. The U.S. EPA Region 1 office provided a list of the NPDES Multi Sector General Permit holders in Hampshire and Hampden counties. During the summer of 2012, PVPC reviewed electronic submissions of their annual NPDES reports, and conducted phone interviews with a representative at each company to discuss their MSGP annual report submittals and to identify if training and/or outreach was needed to help them comply. Surprisingly, each of the representatives spoken to could not identify further training

and/or assistance needed. Overall, there seemed to be a lack of interest, or perhaps a wariness, to talk with a representative outside of their company about this regulatory compliance issue despite the fact that we emphasized that we were not a regulatory or enforcement entity. This wariness should be considered when conducting future outreach, and some means to incentivize the discussion needs to be considered.

Building Inspectors Workshop Planning

In follow up to the two workshops sponsored by PVPC on Green Infrastructure and Low Impact Development for municipal officials (1/30/12 Best Management Practices; 2/13/12 Exploring the Possibilities: Building Green Infrastructure in Your Community), we attempted to plan a third workshop targeting building inspectors. Building Inspectors are generally the Zoning Code Enforcement Officers as well as the entity that signs off on Building Permits. It is important that they are knowledgeable about green infrastructure, local stormwater bylaws, and the NPDES MS4 requirements and overview. Our intention is to work with the Western Mass Building Inspectors Association to co-host this workshop at one of their existing meetings to draw a larger crowd. It is our intention to offer CEUs for the workshop. However the Association contacts have been unresponsive for 8 months now. The Southwick Building Inspector offered to help contact the organization as he is a member, but he has not been able to connect us with the Association. This effort has been tabled until further notice.

TURI Grant – Organic Landcare at 5 Municipal Parks – Spring Outreach Events

2012 was the second half of a one year grant (September 2011 – June 30, 2012) from the Toxics Use Reduction Institute (TURI) at UMASS Lowell to promote organic landcare at municipal parks. PVPC received a Toxics Use Reduction Institute Grant (TURI) from UMASS Lowell to transition five municipal parks to organic land care programs. Participating parks included:

- *School Street Park, Agawam* - Within walking distance of the Connecticut River, School Street Park features 50 acres of land with four multi-purpose athletic fields, a handicap accessible playscape, a basketball court, shuffleboard and bocce ball courts, walking trails, picnic tables, and a historic barn. The park has a high volume of adult and children using the park.
- *Look Park, Northampton* – Look Park offers recreational opportunities for walkers, runners, bikers, etc. One of the focal points of the park is a grass 2,200 person capacity outdoor concert theatre. Earlier this year, through the use of a TURI grant this outdoor theater transitioned to a petrochemical and pesticide free venue.
- *Greenwood Park, Longmeadow* – The Park abuts Greenwood Center which houses the Council on Aging and the Longmeadow Park and Recreation Childcare Center. The Childcare Center uses Greenwood Park daily for its outdoor activities, as does the Council on Aging for certain seasonal events.
- *Town Center Park, Ludlow* – The Town plans to, with the help of this grant, transition a park where the summer community concert series is held pesticide and petrochemical free. The park is located in a highly visible area in the center of Town and the concert series is well attended.
- *Wistariahurst Museum grounds, Holyoke* - In 1959, Wistariahurst was given to the City of Holyoke for cultural and educational purposes. The grounds contain extensive

ornamental gardens and an expansive lawn. The Museum is home to the Master Gardener's Association and hosts weekly meetings and multiple plant sales and regional conferences throughout the year.

In 2012, the following outreach events were held:

- Friday, March 16, 2012 - Going Organic for Landscape Contractors 8am-noon – workshop for traditional landscape contractors, co-sponsored by Valley Green in Holyoke.
- Tuesday, April 24, 2012 – Week of the Young Child Parade, Ludlow –Think Blue display booth, donated the story walk “All the Way to the Ocean” by Joel Harper.
- Saturday, April 28, 2012 -Agawam Little League Jamboree and Earth Day celebration Think Blue display booth
- Saturday, May 12, 2012 – Look Park Lawnathon with Paul Tukey of Safelawns Foundation
- Saturday, May 19, 2012 – Longmeadow Days on the Town Common – Think Blue display booth with the DPW

EPA Soak Up the Rain Campaign

EPA has requested our assistance in promoting their new “Soak Up the Rain Campaign” by promoting rain gardens and other LID systems in the Pioneer Valley. PVPC is in negotiation with EPA about establishing a contract for programming in 2013.

Outreach and Training Events

“Skip the Scotts” at the Western Mass Master Gardener’s Annual Symposium on Saturday, March 31, 2012 at Dean Technical High School in Holyoke. This workshop targeted residential lawn owners about how to transition to organic lawn care practices.

The Green Infrastructure Workshop presentations (1/30/12 BMPs; 2/13/12 Exploring the Possibilities: Building Green Infrastructure in Your Community) are available at:
<http://www.sustainableknowledgecorridor.org/site/content/green-infrastructure>

Updated Greenscapes Guide

In collaboration with the Greenscapes Coalition, the Greenscapes Guide was updated. Copies were distributed to member communities for distribution at town offices, and are available at outreach events.

Community Innovation Challenge Grant Application

PVPC submitted a \$500,000 grant application to the MA Department of Finance and Administration’s Community Innovation Challenge Grant Program for the following services:
Task 1: Storm sewer database software implementation with mobile device application
Task 2: Outfall Mapping, Monitoring, and Illicit Detection Program
Task 3: Model Stormwater Pollution Prevention Plans (SWPPP) for MS4 Owned Facilities
Task 4: Pilot Cost Optimization Modeling for Nitrogen Removal
Task 5: Regional Education and Outreach Utilizing PVPC’s Think Blue Campaign

The grant was not funded due to a significant budget cut by the Governor.

General Administration

- FY12 Work Plan and Budget (July 1, 2012 – June 30, 2013)
- Many Stormwater Committee members also participated in the development of the Pioneer Valley Green Infrastructure Plan, coordinated by Patty Gambarini at PVPC. The GI Plan provides a detailed analysis of opportunities for green infrastructure in the Pioneer Valley, and sets for the plan for implementing more projects in the coming years. The Stormwater Committee will continue to participate in promoting green infrastructure.
- Meeting Dates – The Stormwater Committee met four times in 2012:

February 3, 2012

April 5, 2012

June 8, 2012

September 10, 2012

Appendix 3D

Year 10

Inform Employees, Businesses, and Public



Stormwater Report

Celebrate "A Green Day at the Park"

Saturday, April 28th

10am—2pm

Agawam Little League Complex
85 School Street

This outdoor event will be both entertaining and educational, providing adults and children with information and activities that showcase green practices in gardening, energy saving tips, recycling, organic lawn care and more! Stop in for your Free seed packet, pet waste bag and dispenser, tree sapling, have your soil tested, bring a compact fluorescent bulb and receive a flower bulb for planting, and more!

For more information visit the events section of the town website at www.agawam.ma.us



There Are No "Butts" About It!

According to the litter prevention group Keep America Beautiful, cigarette butts are the most littered item in America, accounting for 30 percent of litter on the streets.

Cigarette butts are most often seen in "transition points", areas where smokers must extinguish their cigarette before entering a building. Outside office buildings, schools, banks, or retail stores, chances are there

will be an unsightly scattering of butts. These butts are easily carried in stormwater runoff through drainage systems and eventually to our local streams, rivers and waterways.

Most cigarette filters are composed of cellulose acetate, a plastic that does not decompose easily or quickly. These filters were designed to trap the toxic chemicals from the cigarette. Now

floating in our waterways, these toxins are leaking out into the aquatic ecosystems, threatening the quality of the water and aquatic life. Cigarette butts may seem small, but with several trillion butts littered every year, the toxic chemicals add up!

Help keep our waters blue...put your butt in the trash.

Pet Waste and Water Quality

Pet waste is among the many common stormwater pollutants that can degrade water quality. If pet waste is not picked up, it can be washed into our storm drains and end up in a lake, stream, wetland or river. When pet wastes decompose, they demand a high level of oxygen from water. This demand can kill fish and plant life by reducing the amount of oxygen available to them. In addition, pet waste contains nitrogen

and phosphorus nutrients that accelerate growth of damaging algae and aquatic weeds. Children who play in yards or parks where pets defecate are most at risk for infection from disease-causing bacteria and parasites found in pet waste. Fortunately, as a pet owner there are three simple things you can do to help keep our children healthy, public parks clean and water safe for swimming, fishing and other recreational uses.

1. Take a plastic bag or pooper scooper along with you on your next walk.
2. Scoop up and seal pet waste in a plastic bag.
3. Dispose of it properly in the garbage.

Being a responsible pet owner not only keeps the areas you walk clean for everyone, but also reduces contaminants in storm water runoff.



Household Hazardous Waste Day—save the date!

HHW Day is scheduled for Saturday, September 8, 9am—noon at the DPW. The drop off of HHW is by appointment only. Agawam Residents may make an appointment by calling the DPW at 821-0624 beginning Monday, Aug. 7th.

Engineers Map Storm Drainage System

The DPW Engineering Department is currently creating a detailed map of Agawam's Storm Drainage System. Methods used in the mapping include GPS (Global Positioning System) field surveys. Data collected include pipe sizes, inlet and discharge points, condition of structures and evidence of pollution. The resulting GIS (Geographic Information System) map and data associated with each structure will be used to prioritize maintenance and capital improvement projects. The map will also be useful both during the review of new projects to ensure that the existing system can handle the water from new development and for quick reference during emergency spill situations.

As a part of Town's stormwater regulations, the EPA and DEP require that the town develop this comprehensive map of outfalls from the towns storm drainage system. The Department of Public Works is required to assess each outfall for pollutant discharges as well as the potential for pollutant discharges. The comprehensive map that is currently being developed will satisfy this regulatory requirement while providing an invaluable



Illicit Discharge Outfall Inspections

Direct or indirect dumping of pollutants into a storm drain is considered an illicit discharge. Sources of illicit discharges include, but are not limited to, improperly disposed motor oil, gasoline, or other automotive fluids, pet waste, cigarette butts, excess fertilizers, herbicides, and insecticides, litter, laundry wastewater, soapy untreated car wash water, and failing septic systems.

Illicit discharges that enter a stormdrain eventually flow to an outfall, the place or structure where water exits a stormdrain system and enters into a river, stream, pond, or other water body. The Department of Public Works is currently conducting Outfall Inspections. Outfall inspections are one of the most commonly used methods for identifying illicit discharges. The disadvantage of outfall inspections is that illicit discharges occur periodically and can be hard to find unless you are at the right place at the right time. This is why the DPW is asking for your help. If you suspect an illicit discharge in your neighborhood, please contact the DPW at 821-0600.

Consider a Rain Gardens in your Landscape

A rain garden is a garden which takes advantage of rainfall and stormwater runoff in its design. Although it may look like an ordinary garden, a rain garden collects rainwater from downspouts, driveways, or other drainage systems in your yard to provide water to the garden rather than sending it to the stormdrain.

Benefits of creating a rain garden include:

- Reduce runoff from your property
- Reduce runoff of fertilizers
- Reduce garden maintenance
- Conserve and use rainwater
- Filter pollutants from stormwater
- Improve water quality
- Increase garden enjoyment

For more information on creating a Rain Garden in your landscape, visit www.greenscapes.org or the town website at www.agwam.ma.us under Department of Public Works.

National Pollutant Discharge Elimination System Requirements

In the face of meeting new federal mandates requiring municipalities to value and maintain storm water infrastructures within their community, the Department of Public Works is reviewing the option of a Stormwater Utility. A stormwater utility is responsible for funding the operation, construction and maintenance of stormwater management devices, for stormwater system planning, and management. A stormwater utility generates its revenue through user fees and the revenues from the stormwater charges will go into a separate fund that may only be used for stormwater services. The average residence's share in meeting state mandate requirements would be 24% less under a stormwater utility.

Appendix 3F

Year 10

Failing Septic Systems

FAILED & NEW SEPTIC SYSTEMS
FROM 1/1/2012 - 12/31/12
Agawam Health Department

01/01/12	Lee Smith 814-816 South West Street/duplex Feeding Hills, MA 01030	repair
01/11/12	Charles Howard 720 Barry Street Feeding Hills, MA 01030	repair
10/12/12	Bear Realty 33 North West Street Feeding Hills, MA 01030	repair
01/17/12	Dennis St. Laurent 146 Barry Street Feeding Hills, MA 01030	repair
02/01/12	Lee Kyn Young 74/82 Barry Street Feeding Hills, MA 01030	new construction
02/10/12	David Carpenter 141 Barry Street Feeding Hills, MA 01030	repair
05/02/12	Paige Wier 22 Kathy Terrace Feeding Hills, MA 01030	repair
06/25/12	D.R. Finestone 43 High Meadow Road Feeding Hills, MA 01030	repair
06/11/12	Andrews/Goyette 79 Cosgrove Avenue Agawam, MA 01001	repair
06/22/12	Rick Karam 132 Robin Ridge Drive Feeding Hills, MA 01030	repair

FAILED & NEW SEPTIC SYSTEMS
FROM 1/01/12 - 12/31/12
Agawam Health Department

07/02/12	Douglas Cesan 173 Northwest Street Feeding Hills, MA 01030	repair
07/11/12	Daniel Lacienski 268 South West Street Feeding Hills, MA 01030	repair
07/20/12	Laura Richardson 76 Pheasant Run Circle Feeding Hills, MA 01030	repair
08/28/12	John Rachek 312 Southwick Street Feeding Hills, MA 01030	repair
09/19/12	John Tisdell 8 Woodcock Court Feeding Hills, MA 01030	repair
10/05/12	Kudlic Bros. Lot D - Southwick Street Feeding Hills, MA 01030	new construction
10/16/12	Richard Stenta 63 Duclos Drive Feeding Hills, MA 01030	repair
11/08/12	Martina Pocaterra 25 Barbara Lane Feeding Hills, MA 01030	repair
12/03/12	Gregory Warner 40 Partridge Lane Feeding Hills, MA 01030	repair
12/04/12	Daniel O'Sullivan 312 Southwick Street Feeding Hills, MA 01030	new construction - 2 lots

Appendix 6A

Year 10

Municipal Maintenance Activity Program

Boom Flail Mower



Specifications

Width of cut: 51"; overall width of head 64-1/2"

Horizontal reach: Center of MT6 to outside cut 13-1/2"

Below grade cut: 53"

Vertical reach: 13-1/2"

Overall level ground cutting coverage: 11', starting 5" inside outer line

Number of cutting blades: 36

Weight: wet and with counterweights - 1,960 lbs.



Almost every municipality has several areas which are difficult, unsafe or impossible to mow. Ditch, steep incline, over guard rail and waters-edge cutting become problems of the past once the Trackless Boom Flail enters the scene.

Trackless Boom Flail advantages include:

- 1) Better visibility than side or rear mount boom flails resulting in less operator fatigue and safer operation.
- 2) Can be removed from the Trackless MT6 in approximately 10 minutes. Within minutes another attachment can be installed and the operator can be on the way to another job site.
- 3) Hydrostatic control of the ground speed allows the operator to react more quickly when approaching an obstruction. It also allows the operator the ability to constantly vary the ground speed, as necessary, without shifting gears, which results in higher productivity.
- 4) Compact size of the Trackless MT6 and boom flail interferes with passing traffic less than larger agricultural-type tractor/mower combinations. The compact size is also beneficial when transporting to and from the job site.

Appendix 6B

Year 10

Training of Municipal Employees

DRAINAGE REPAIR 2012

	DRAIN WORK 2012	
MILL ST	REPAIR 2 BASINS X	2/14/2012
FOX FARM, CLOVER HILL	VAC LINES--RUN LINES	1/31/12--1/1/12
52 KAREN DR.	REPAIR DRAIN LINE APROX. X	3/19/2012
	45 FT. IN FROM ROAD	
perry lane park	put in 2 lengths pipe, stone area	4/18/2012
	make berm at basketball area	
fernwood dr.	repair cb X	4/17/2012
ADAMS ST	CB REPAIR X	4/2/2012
12 ROBERTA CIR.	CB REPAIR, WASH OUT X	4/3/2012
59 MORNINGSIDE DR.	CB REPAIR X	4/4/2012
23 WILDFLOWER	repair cb X	4/5/2012
385 N. WESTFIELD ST	CLEANED BASIN X	
103 SOUTH ST,	PICKED UP BRUSH	4/5/2012
BRIDGE ST	REPAIR PIPE AT MANHOLE	4/9/2012

DRAINAGE REPAIR 2012

BRIDGE ST	LOWER MANHOLE		4/10/2012
9 FERNWOOD ST.	CB REPAIR	x	4/12/2012
DUCLOS, MAYNARD	CB REPAIR	x	4/13/2012
Kanawha st.	vac 2 basins	x	5/25/2012
south westfield st.	clean d.i.	x	5/18/2012
500 north st	cb repair	x	5/11/2012
autumn st	vac 2 basins	x	5/2/2012
doover st.	vac 2 basins	x	5/2/2012
sunset terr.	repair cb	x	6/13/2012
182 cooper st.	cb repair	x	6/18/2012
5 elmar dr.	cb repair	x	6/26/2012
65 valentine terr.	cb repair	x	6/28/2012
bridge st.	cleaned cb	x	7/27/2012
lealand ave.	repair drain line		7/23/2012
712 south west st.	repair drain line		7/16/2012
223 adams st.	repair cb	x	8/27/2012
alhambra cir.	vac basins	x	8/17/2012
49 oak ln.	vac cbs	x	8/17/2012
river st.	vac cbs	x	8/17/2012
32 wild flower	cb repair	x	8/21/2012
forest rd.	cb repair	x	9/17/2012
sheri ln.	vac cbs	x	9/6/2012
duclos dr.	vac cbs	x	9/6/2012
pineview cir.	vac cbs	x	9/7/2012
168 maynard st.	cb repair	x	9/18/2012
tuck-leanard pond	cleaned pipe		9/19/2012
52 forest hill rd.	cb repair	x	9/20/2012
gunn geary-suffield st.	repair cb	x	9/20/2012
carr ave.	new pipe put in		9/26/2012
south park terr.	vac cbs	x	10/30/2012
perry lane	install 200 ft of drain pipe		10/17/2012
roberta cir.	vac 6 cbs	x	10/16/2012
70 forest hill rd.	cb repair	x	10/15/2012
fairview ave.	cb repair	x	10/15/2012
carr ave,	vac basins	x	10/11/2012
25 wrenwood dr.	repair cb	x	12/31/2012
90 bridge st.	vac basins	x	11/28/2012
28 garden st.	vac basins	x	11/26/2012
154 north st	cb repair		11/6/2012
111 christopher ln.	drain line repair		11/2/2012
33 cleveland st.	install new cb run 30 ft defusers	x	11/20/2012
731 mill st	cb repair	x	11/29/2012
33 oriole dr.	repair drain line	x	12/11/2012
50 fordham st.	cb repair	x	12/6/2012