

Organization: **Town of Agawam, Massachusetts**

PERMIT YEAR 11: 2014 ANNUAL REPORT

NPDES PERMIT # MAR 041 001

Reporting Period: May 2013– April 2014

MA DEP Transmittal X260803

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, 2014

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 11 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 11 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 watershed education, the proper disposal of HHW and prescription drugs, transitioning from chemicals to organic land care, composting, rain barrel benefits, and why FOG-Fats, Oils and Grease" can do more harm than good to the sewer system.

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 continues use organic lawn care practices on a previously transitioned athletic field.

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

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

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

Year 11 Activities

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

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 11 Activities

During permit year 11, the DPW coordinated the “Watershed On Wheels” to visit the Agawam Middle School. Thirteen 5th grade classrooms were introduced to the CT River Watershed through an Immersion Trailer; highlighting habitats, ecosystems and food chains, lessons on the CT River Watershed using a Watershed Table, and a Biological Artifacts center; exploring the behavioral and structural adaptation of animals that live along the CT River Watershed.

See Appendix 1B

Best Management Practice Assessment / Proposed Change

No proposed changes to this BMP

Possible Future Activities

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

1C Local Cable 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 11 Activities

During permit year 11 the Town of Agawam posted the following information to help viewers learn more about stormwater management, healthy habits, and community activities.

- National Drug Take Back Day, Health Department
- Earth Day Event, Department of Public Works

- Household Hazardous Waste Collection, Department of Public Works
- National Drug Take Back Day 2, Health Department
- Rain Barrel Sale, Department of Public Works

Best Management Practice Assessment / Proposed Change

No proposed changes to this BMP.

Possible Future Activities

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

1D Community 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 1 Activities

During permit year 11 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.

- National Drug Take Back Day Events, Health Department
- Rot to Riches, Organic Composting Workshop, Department of Public Works and Agawam Public Library
- Earth Day Event, Department of Public Works
- Household Hazardous Waste Day, Department of Public Works
- Rain Barrel Sale, Department of Public Works

See Appendix 1D

Best Management Practice Assessment / Proposed Change

No proposed changes to this BMP

Future Activities

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

In February of 2014 the town released its newly redesigned website. It is expected that during permit year 12, photos of community projects related to stormwater management will be added to a photo gallery of the town website.

1E Newspaper Press Releases

Original BMP Description:

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

Year 11 Activities

During permit year 11, the following press releases were sent and published in local newspapers.

- "What's In the Water", Robinson State Park Day
- National Drug Take Back Day, Health Department
- Needle Exchange Program, Health Department
- Earth Day, Department of Public Works
- Rot to Riches Workshop, Department of Public Works and Agawam Public Library
- Household Hazardous Waste Day Collection
- Rain Barrel Sale

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 11 Activities

In June 2013, 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 "FOG" is and how "Fats, Oils, and Grease" cause major sewer clogs and overflows to the sewer pipes, potentially threatening water environment.

See Appendix 1F

Best Management Practice Assessment / Proposed Change

No proposed changes.

Possible Future Activities

Pending future General Permit Requirements

MINIMUM CONTROL BEST MANAGEMENT PRACTICES

SECTION 2 - PUBLIC INVOLVMENT AND PARTICIPATION

2A Adopt-a-Road

Original BMP Description:

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

Year 11 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.

2B Attitude Surveys

Original 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 11 Activities

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

Best Management Practice Assessment / Proposed Change

Any changes pending future General Permit Requirements

Future Activities

Additional surveys pending future General Permit Requirements

2C Catch Basin Marking**Original BMP Description:**

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

Year 11 Activities

No volunteers during permit year 11. The subdivision and site plan construction standards have been updated so as to require that all newly constructed catch basins be properly marked as part of the site plan and subdivision approval process.

Best Management Practice Assessment / Proposed Change

No Change at this time.

Possible Future Activities

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

2D Watershed Committee**Original BMP Description:**

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

Revised BMP Description:

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

Year 11 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.

Grant funding was not awarded for the town to participate in the EPW's Soak Up the Rain Campaign.

See appendix 2D

Best Management Practice Assessment / Proposed Change

No proposed changes

Future Activities

Activities are pending future General Permit Requirements.

2E Community Outreach

Original BMP Description:

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

Revised BMP Description:

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

Year 11 Activities

During Permit Year 11, the DPW has offered the following programs to residents in town.

- Household Hazardous Waste Day; 269 homeowners participated
- Rain Barrel Distribution, 15barrels sold
- Earth Day Event –over 300 attendees
- National Drug Take Back Day sponsored by Health Department; in permit year 11, eleven cubic feet of unused medications and 10 cubic feet of sharps were collected.
- Rot to Riches Composting Workshop; 34 participants attended and 25 attendees received free composting bins.

Best Management Practice Assessment / Proposed Change

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

Future Activities

Future activities are pending the rewritten General Permit Requirements.

Minimum Control Best Management Practices

Section 3 – ILLICIT DISCHARGE DETECTION AND ELIMINATION

3A Mapping Stormwater Outfalls

Original BMP Description:

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

Year 11 Activities

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

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

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

Best Management Practice Assessment / Proposed Change

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

Possible Future Activities

The GIS drainage mapping project is an ongoing activity. Maps are updated as new construction is completed and new information about existing drainage is discovered in the field. The Town will continue to work with Tighe & Bond as a consultant to improve and add to the GIS maps. In the future, if the budget allows, the DPW is considering obtaining tablets that would have access to the GIS database for use in the field.

3B Non-Stormwater Discharge 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 11 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 11. Any discovered illicit connections to the stormwater system are eliminated as soon as possible.

Possible Future Activities

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

The DPW has previously proposed a stormwater utility fee for all residents and private sites in Town due to the increased costs resulting from both the maintenance of the municipal stormwater system and continued compliance with the NPDES and the Six Minimum Control Measures in the MS4 General Permit. The Town continues to research, discuss and propose the opportunity to implement the new Stormwater Fee for all properties in Town. The monies acquired by this fee will be used to help offset the costs of maintaining the Town's drainage system, implementing the Illicit Discharge Program and educational purposes.

3C Develop Illicit Discharge 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 11 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 90% 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 used as a method of notification and documentation by the DPW when Non-Stormwater Discharges are observed at a site that is in violation of Town Code. Copies of these reports are available at the DPW.

In Year 11, the Town of Agawam has investigated and resolved illicit discharges in the following locations:

- **Silver Street:** The residents of #295 Silver Street filed a complaint about an overflowing drainage pipe running along the east side of their property. Site inspections indicated the outfall of the pipe had been plugged up due to sediment build up. The town cleared out the outfall and the downstream area to improve the flow of storm water runoff.
- **South Westfield Street:** The Agawam DPW observed that sediment from a construction project was flowing into the street and into Town owned catch basins. The project site contained steep grades that had not been seeded and

hay bales that did not provide adequate erosion control. The developer was contacted and instructed to clean the sediment from the street and to install proper erosion control measures. The DPW continued to monitor this project throughout its completion.

- Shoemaker Lane: The DPW observed that during rain storms, sediment from a dirt driveway on Shoemaker Lane was flowing onto the street and into catch basins at the Shoemaker Lane/Poplar Street intersection. These catch basins discharge into a stream at the intersection. Site inspections show a plume of sediment coming from the drainage outfall in the stream. A letter was sent to the owner of the driveway requesting that the sediment be removed from the street and precautions taken to prevent further sediment discharge.
- Lancaster Drive: A complaint was issued to the Agawam DPW about residents along Lancaster Drive dumping grass clippings into Town owned catch basins. Site inspections showed standing water in six catch basins on Lancaster Drive and Old Farm Road, most likely due to the buildup of yard waste. A letter was sent out to residents reminding them that dumping grass clippings and/or yard waste into the drainage system is against the Town ordinance. The DPW cleaned out the catch basins and continues to monitor this area for further illicit discharges.
- Lexington Street: The Agawam Conservation Commission contacted the DPW about a catch basin on Lexington Street with a reported history of clogging with sediment. The DPW determined that the Town did not install this catch basin and it is part of a private drainage system. The Town has indicated that the maintenance of this catch basin is the responsibility of the property owner.
- Agawam DPW: A piece of pavement marking equipment used by Highway Safety Systems broke and dumped approximately 20 gallons of thermoplastic paint on a gravel surface at the DPW headquarters. Highway Safety Systems was contacted to remove and properly dispose of the paint.
- Cooley Street: A resident reported seeing oil in the street during a rain storm. The DPW performed a site investigation and determined that the oil/gas spill originated from the driveway of one of the resident's neighbors. It is assumed that the oil/gas was coming from a vehicle in the driveway. A letter was sent to the property owner instructing that the source of the spill be fixed or removed. The DPW will continue to monitor this area for future spills.
- Parkview Drive: Jewel Environmental Corporation filed a Response Action Outcome (RAO) in response to a release/treat of release of oil and/or hazardous material. A level of No Significant Risk and a Permanent Solution was achieved at the disposal site. The disposal site was cleared without physical harm or bodily injury.

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 ND PES General Permit regulations, the Town hired Tighe & Bond to assist with the necessary inspection, as described above. The Town will continue to perform inspections as time and budget allows. In future inspections, if signs of an illicit discharge are discovered, a sample will be taken from the outfall and tested in-house for pH, Chlorine, Copper, Phenols, and Detergents. A list of outfalls that need maintenance will be created. These outfalls will be repaired and illicit discharge connections will be investigated as the Town's budget allows.

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

3D Inform Employees, Businesses, and 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 11 Activities

In June 2013, 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 "FOG" is and how "Fats, Oils, and Grease" cause major sewer clogs and overflows to the sewer pipes, potentially threatening water environment.

See Appendix 1F

Best Management Practice Assessment / Proposed Change

No proposed changes.

Possible Future Activities

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

3E Video 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 11 Activities

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

Best Management Practice Assessment / Proposed Change

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

Possible Future Activities

The DPW continues to discuss the opportunity to implement a new stormwater fee for all properties in Town. The monies acquired by this fee will be used to help offset the costs of maintaining the Town's drainage system and the Illicit Discharge Program including video inspections. If the new stormwater fee is implemented, the Town would have extra funding available to do more video inspections by either the Town's camera and crews or via a private company.

3F Failing Septic SystemsOriginal BMP Description:

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

Year 11 Activities

The Health Department maintains records on all inspections involving septic systems. The Health Department has forwarded a list of all failed systems from 2013 to the DPW. Septic System locations and their failures from 2003-2012 have been incorporated into the GIS mapping project.

See Appendix 3F

Best Management Practice Assessment / Proposed Change

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

Future Activities

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

3G CATCH BASIN 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 11 Activities

No volunteers during permit year 11.

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 11 Activities

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

Best Management Practice Assessment / Proposed Change

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

Possible Future Activities

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

The Town continues to research, discuss and propose the opportunity to implement a new Stormwater Fee for all properties in Town. The monies acquired by this fee will be used to help offset the costs of maintaining the Town's drainage system, implementing the Illicit Discharge Program and educational purposes. Also, the new stormwater fee rules will include special incentives for private sites: to implement low impact development procedures, to reduce peak stormwater runoff rates through detention or infiltration, and to improve existing TSS removal rates.

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

4B Construction Plan Review

Original BMP Description:

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

Year 11 Activities

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

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

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

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

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

Best Management Practice Assessment / Proposed Change

No Change is proposed.

Possible Future Activities

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

4C Inspection / ReportingOriginal BMP Description:

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

Year 11 Activities

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

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

Best Management Practice Assessment / Proposed Change

No Change is proposed.

Possible Future Activities

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

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

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

Year 11 Activities

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

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

Best Management Practice Assessment / Proposed Change

No Change is proposed.

Possible Future Activities

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

5B Site Plan ReviewOriginal BMP Description:

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

Year 11 Activities

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

Best Management Practice Assessment / Proposed Change

No Change is proposed.

Possible Future Activities

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

5C Stormwater System Maintenance PlanOriginal BMP Description:

Under the Post Construction Runoff Ordinance (or other regulatory mechanism), projects with disturbance over one acre will be required to include a program outlining enhanced procedures for long term operation and maintenance of stormwater facilities. Until a new ordinance is adopted (anticipated in Year 3), the Town will continue to require stormwater facility operation and maintenance in accordance with existing regulations. Pending adoption, additional operation and maintenance requirements for stormwater facilities to be constructed as part of new development and redevelopment projects will be enforced in Years 3 through 5. The DPW, Planning Department, and Building Inspector have responsibility for this BMP.

Year 11 Activities

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

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

maintenance. Three detention ponds have been identified as town owned and continue to be maintained by the DPW.

During permit year 6, the DPW proposed a stormwater utility fee for all residents and private sites in Town due to the increased costs resulting from both the maintenance of the municipal stormwater system and continued compliance with the NPDES and the Six Minimum Control Measures in the MS4 General Permit. The Town continues to research, discuss and propose the opportunity to implement the new Stormwater Fee for all properties in Town. The monies acquired by this fee will be used to help offset the costs of maintaining the Town's drainage system, expanding the Illicit Discharge Program and educational purposes.

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

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

Best Management Practice Assessment / Proposed Change

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

Possible Future Activities

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

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

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

Year 11 Activities

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

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

Best Management Practice Assessment / Proposed Change

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

Possible Future Activities

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

6B Training of Municipal EmployeesOriginal BMP Description:

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

Year 11 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.

During permit year 11, the Town Engineer and Assistant Town Engineer staff attended a Green Infrastructure / Low Impact Development Workshop sponsored through the PVPC and US EPA. Information learned during the workshop was brought back to the engineering staff for future use and implementation in town projects as applicable.

See Appendix 6B

Best Management Practice Assessment / Proposed Change

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

Future Activities

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

6C Catch Basin Cleaning ProgramOriginal BMP Description:

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

Year 11 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 11, approximately 67 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 Sweeping

Original BMP Description:

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

Year 11 Activities

During permit year 11, 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 Care**Original BMP Description:**

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

Year 11 Activities

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

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

Best Management Practice Assessment / Proposed Change

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

Possible Future Activities

Soil sampling and testing will be taken at the High School Athletic Field to determine possible organic practices as funding is available.

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

6F Stormwater Pollution Prevention Plan / MSGPOriginal BMP Description:

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

Year 11 Activities

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

Best Management Practice Assessment / Proposed Change

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

Future Activities

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

6G Used Oil Recycling

Original BMP Description:

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

Year 11 Activities

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

In 2013, 2,150 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 11 Activities

The Town hosted its annual Household Hazardous Waste Collection day in the fall of 2013. 269 vehicles dropped off Hazardous Waste rather than disposing of it in the trash or catch basins. In addition to the annual HHW Day, the DPW continues to collect used car batteries, used motor oil and mercury bearing waste by appointment.

The town purchased three safety storage cabinets in 2012. The cabinets are used to properly store illegally dumped items dropped along the roadsides as well as chemicals from residents moving prior to HHW Day.

Best Management Practice Assessment / Proposed Change

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

Possible Future Activities

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

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

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

Year 11 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

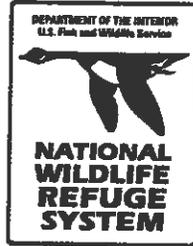
The future activities within the Town of Agawam's Stormwater Management Plan will be implemented as funding and other resources will allow.

Appendix

Appendix 1B

Year 11

Classroom Education



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.



What is the Conte Refuge?

The Silvio O. Conte National Fish and Wildlife Refuge was established in 1997 by an act of Congress to conserve the abundance and diversity of native plants and animals and their habitats in the 7.2 million acre Connecticut River watershed. The Conte Refuge is the only Refuge of its kind to be bound by a watershed. The Conte Refuge supports its conservation goals, in part, through educational activities and exhibits (such as the WoW Express) presented at several Refuge centers and as outreach programs in the four watershed states: Vermont, New Hampshire, Massachusetts and Connecticut. More information on the refuge can be found at <http://www.fws.gov/r5soc/>.

How can I bring the WoW Express to my location?

For information on bringing the WoW Express to your school or community, please call (413) 658-5403. We travel throughout the Connecticut River Watershed to schools and natural resource-related fairs, festivals, and conferences. Depending on the location and audience, all or parts of the exhibit will be displayed.

What are the requirements to host the WoW Express?

The WoW Express is presented free as part of the Silvio O. Conte National Fish and Wildlife Refuge's mission. In order to set up, the WoW Express requires a flat, hard surface, such as a concrete parking lot, to park the 28-foot walk-through exhibit trailer. The walk-through exhibit runs on a grounded electric outlet if available, or may be powered by our generator in the case that no grounded electric outlet is available. The kiosks can be set up on any flat, hard surface indoors or outdoors as weather permits. The watershed table requires a one-time supply of 25 gallons of water, and does run on electricity. There should be someone designated to meet the WoW Express drivers on-site approximately 1-2 hours prior to the event. Please keep in mind the WoW Express requires approximately 1-2 hours prior to and after the event for set-up and take-down.

September 30, 2013

Tracy DeMaio
TDeMaio@agawam.ma.us
413-821-0624

Roberta G. Doering School

Agawam, MA

Dear Tracy,

Thank you for inviting the Watershed on Wheels (WoW Express) to your school on Monday to Thursday October 21-24, 2013! As you may already know, the WoW Express is the mobile visitor center for the Silvio O. Conte National Fish and Wildlife Refuge. The refuge itself spans the entire 7.2 million acre Connecticut River watershed! Our hope is that our program will help to highlight the importance of watershed health, as well as identify what happens in and around the river. Many teachers use the WoW Express visit as a jumping-off point for a science unit on water, or even as a culmination in-school "field trip" to make connections to what students have been studying.

This letter is to confirm the details of our visit. Because our program is set up outdoors, inclement weather may force us to reschedule or move pieces inside. Having a classroom or activity room set aside for this possibility will help to ensure a smoother day if it begins to rain.

Each program runs 90-100 minutes and we see one class (15-25 students) at a time. After an introduction to what watersheds are, the class is split up into three groups, and begins a rotation through three different stations:

Immersion Trailer: A five-habitat twilight walk along the Connecticut River. A WoW Express educator will lead students through, encouraging thought and questions about habitats, ecosystems, and food chains. *[This station is a total of 50 feet long, with attached truck. It requires a flat, hard space outside.]*

Watershed Table: As we are focusing on watersheds, it's important to learn about rivers as well. This table highlights the ways that rivers form and change, and how humans might impact them. *[This station, once in place, is not easily movable. It can be set up inside or outside, and does require power.]*

Conte Case: Using biological artifacts, we explore behavioral and structural adaptations of animals that live in the Connecticut River Watershed. *[This station can be set up in a classroom or on the parking lot.]*

The WoW Express is fairly self-sustaining once we are set up. We bring a generator with us and we are handicap accessible. Below is a list of what our needs are. If you have any questions, please do not hesitate to let us know beforehand.

Program Date(s):

~~October 21-24, 2013~~

13 - 5th Grade Classrooms

- **A flat, hard space for 50' trailer and truck. Please consider traffic patterns, gates, underpasses, and bridges (we are 12' 6" tall) that the trailer may have to drive through, so that we do not block school vehicles. (We arrive approximately 2 hours before the first class starts)**
- **A one-time supply of 25 gallons of water (for watershed table; we have 100' of hose)**
- **If possible, a grounded electrical outlet will allow us to run electricity to our watershed table. In the absence of one, we can certainly use our own generator.**
- **At least 3 adult chaperones per class (a classroom teacher plus 2 others: i.e a para, a parent, etc.)**
- **Students do not need to bring anything with them, but should be dressed for being outdoors for 90-100 minutes.**

Please review and confirm the above information carefully and fill out the attached information sheet (including the school address) to ensure a smooth visit. If you have any questions or concerns, please contact the WoW educators as soon as possible at (413) 658-5403.

We look forward to visiting your school!

Appendix 1D

Year 11

Community Website

4/27/2013: Drug Take Back Day

Free Drug Collection Day

Safe Disposal of drugs and syringes - No questions asked

Located at
Agawam Townhall
36 Main St
10am to 2pm

Used needles, syringes and lancets will be collected in approved sharps containers.
Puncture proof laundry bottles will be accepted.

Items Not Accepted:

Chemo Drugs, IV Bags, No liquids of any type.

This event is sponsored by the: Drug Enforcement Administration, Agawam Health Department, Agawam Police Department, Agawam MRC, and Mayors Office

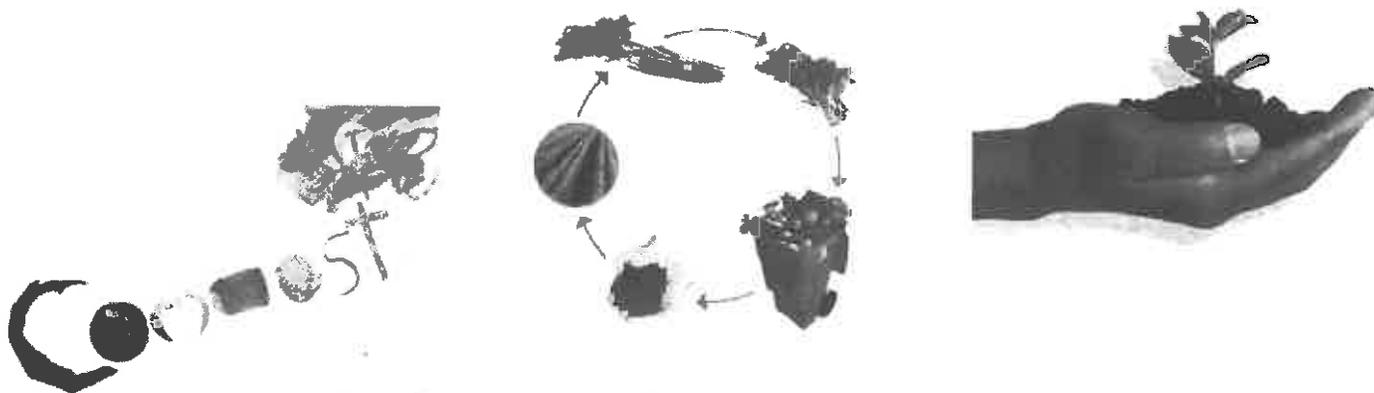
Archives

FROM ROT TO RICHES

5 EASY STEPS TO ORGANIC COMPOSTING

WITH BERNADETTE GIBLIN AND AGAWAM DPW

Agawam Public Library - Wednesday, August 7th at 7:00



Learn to compost organically in 5 easy steps! Bernadette Giblin of Safeground Organic Landcare will present information on organic composting, safe organic land care and how both practices keep our waterways clean.

The Agawam DPW has home composting bins for the first 25 people (1 per family) that sign up for and attend this event. (Bins will be given out at the end.)

Call 789-1550 x4 or visit www.agawamlibrary.org to register. This event is part of the Adult Summer Reading Program and is open to adults 18 and up.

The 2013 Adult SRP "Groundbreaking Reads" is sponsored by the Agawam Center Library Association, the MA Cultural Council, the MA Library System, the Boston Bruins, the MA Board of Library Commissioners and CSLP.

Town of Agawam HOUSEHOLD HAZARDOUS WASTE COLLECTION DAY

SATURDAY, SEPTEMBER 7th

Agawam Department of Public Works, 1000 Suffield Street
9:00 AM - 12:00 NOON- BY APPOINTMENT ONLY!

The DPW will begin taking appointments on
Monday, August 12th
821-0600 ext.0 / 821-0624

PROOF OF AGAWAM RESIDENCY REQUIRED
NO COMMERCIAL BUSINESSES

Each household will be limited to a quantity of waste equal to 25 gallons liquid or 25 pounds solid.

WHAT DO I BRING??

FROM THE HOUSE

Rubber Cement
Photo Chemicals
Furniture Polish
Oven Cleaner
Drain\Toilet Cleaners
Rug\Upholstery Cleaner
Fluorescent Light Bulbs

FROM THE GARAGE

Gasoline\Kerosene
Antifreeze
Engine De-greaser
Car Wax\Polish
Driveway Sealers
Roofing Tar

FROM THE WORKBENCH

Oil Paints
Stains\Varnishes
Wood Preservative
Paint Stripper\Thinner
Aerosol Cans
Adhesives

FROM THE YARD

Insecticides\Fungicides
Chemical Fertilizers
Weed Killers
Flea Control Products
No-Pest Strips
Pool Chemicals

WHAT NOT TO BRING!!

- Empty Containers - **DO NOT BRING EMPTY PAINT CANS** - Empty paint cans may be thrown in your trash.
- **Latex Paint** - Dry paint out by adding kitty litter. Leave dried out- opened cans near trash container on regular pick up day.
- Commercially Generated Wastes
- Radioactive Wastes\Smoke Detectors
- Biological Wastes
- Explosives\Ammunition
- Prescription Medicine\Syringes

**USED MOTOR OIL and CAR BATTERIES – May be brought to the DPW Garage, 1000 Suffield Street
Monday –Friday, 8:00 AM - 3:00 PM**

10/26/2013 - National Drug Take Back Day

National Drug Take Back Day

Saturday, October 26, 2013

10:00 am to 2:00 pm

Agawam Town Hall

36 Main Street

Free Collection Day

SAFE DISPOSAL OF DRUGS AND SYRINGES-NO QUESTIONS ASKED
needles, syringes and lancets will be collected in approved sharps containers
(Puncture proof heavy duty laundry bottles will be accepted)

Items we cannot accept:

Chemo drugs- IV bags- no liquids of any type

Archives

4/12/2014 - Rain Barrel Sale***Order your Rain Barrel today!***

A rain barrel collects rainwater from the roof and stores it for use during dry weather to water house plants or outside gardens. Collecting water in a rain barrel is an excellent way to save some of the runoff and take the pressure off our water supply and stormwater management systems. By using the rainwater on your gardens you are helping to replenish your groundwater and benefit our water supply. Collected rainfall is especially valuable during droughts or dry conditions. It contains more nutrients and less salts than tap water, so it's great for plants.

The Department of Public Works will be taking orders with payment through April 4th.

For more information, download order form and payment information.

Prepaid rain barrels must be picked up at the DPW on Saturday, April 12th between 9:30 - 10:30am.

Archives

Appendix 1E

Year 11

Newspaper Press Releases

Bolde works for Kucec in the Building Maintenance Department and nominated him for the award.
Reminder Publications submitted photo

Celebrate 'Green Day' at the park

AGAWAM - On April 27 from 11a.m. to 2 p.m., the Town of Agawam will celebrate Earth Day in partnership with the Agawam Little League, at Opening Day at the Little League Complex, located at 85 School St.

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

The following vendors will be participating:

- Forest Park Zoo on the Go - from noon to 1 p.m., stop by and learn about a variety of animals, their special adaptations, habitats, behavior, diets and status in the wild.
- Agawam Department of Public Works - Learn what happens to your items when they are recycled. Students should visit the display to receive an ID Lanyard made out of recycled soda bottles.
- Agawam Conservation Commission - View a replica of the last remaining 19th century barn

located right here in Agawam at the School Street Park.

- Agawam Democratic Committee - Bring a compact florescent bulb to recycle and receive a flower bulb to plant in your garden.
- Agawam Energy Commission - Find out where the Energy Commission has set up new "Info Centers." These locations will provide useful information and brochures to help residents with energy conservation decisions and projects for their homes and businesses.
- Agawam Junior Women's Club - Stop by for a reusable bag to carry all the Earth Day goodies.
- Covanta Waste to Energy - Drop off old reusable batteries to be recycled.
- Cybercat Robotics - Check out the Cybercat Robotics solar panel demonstration as well as learn about energy saving light bulbs and surge protecting power strips.
- L.A. Home Improvement - This company can help residents determine which windows and doors are Energy Star Rated for residential use, helping keep those

- heating bills down.
- Pioneer Valley Planning Commission - This year's display will focus on organic lawn and land care practices and how to transition away from synthetic chemicals and fertilizers for a safer environment and beautiful yard.
- RE-Energize: - Learn how Re-Energize collects used cooking oil and processes it into biodiesel for cars, machines and furnaces.
- Relay for Life - "Dream Big, Hope Big, Relay Big for 2013." The second annual American Cancer Society Relay For Life of Agawam is slated for May 17 and 18. Stop by to learn about the event and how to participate.
- Republic Waste Services - Recycling Literature, Waste Reduction and Safety Presentations.
- Solar City - Learn about residential solar panel installation, maintenance and management.
- Western Massachusetts Electric Company - Visit the table to learn about residential programs regarding energy efficiency programs and offerings available rebates and tips on saving energy.

...the maintenance-focus of the CIP to the fact that many capital improvements have been completed over the past 10 years, including the construction of the public library and the creation of full day kindergarten with modular classrooms.

The mayor referred to the completion of the CIP as an "ongoing process" that begins before he and the Town Assessor/Collector Laurel Czok meet with the department heads in November of December.

"The process is made possible by the cooperation of myself, the City Council, the School Committee, the department heads and the town," Cohen said. "I like to do things right. It's a process that's in place and works very well - and it will continue to do well."

He added that his approach is a "frugal" one. Cohen said that improvements such as updated traffic signals, sidewalks and irrigation systems are necessary for own operations.

Also included in the CIP for fiscal year 2014 is an energy program for the James Clark Elementary School at a projected cost of \$135,000 and rooftop air conditioners for the Agawam Junior High School at a projected cost of \$240,000.

Another appropriation for an upgrade to the town's permitting software is included at a projected cost of \$70,000 divided between fiscal years 2014 and

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- Reminder 4/14/13*

Bye Your Way

Celebrating Earth Day

The town of Agawam celebrated Earth Day Saturday, April 27, in partnership with the Agawam Little League at opening day at School Street Park. The event featured a variety of vendors that provided information showcasing green practices in gardening, energy saving tips, recycling, and organic lawn care, as well as activities for kids.

Photos by Hatch



Donna Hammond of Canton, Conn., watches over her 7-week-old





Wingard and Howard Safford chat about Agawam projects.



Parents keep a watchful eye over their children as they play.



Among the many fun activities for kids.



Michael Winer, 9, of Agawam, looks at a model of the School Street project table.



at School Street Park Saturday.



Zoie Leopardi, 4, of Agawam, enjoys playing on a blow-up playhouse.



Agawam residents Corinne Wingard and Howard Safford chat about Agawam Energy Commission projects.



Agawam Dodger, Joseph Long, while attending "A Green Day At..."



BEANE, from page 16

move into the dedication, which include the Beane family

Both brothers Darily and Allan praised the public address announcer for continuing to contribute in his hometown, making public appearance showing off his baseball memorabilia collections in town. He also frequently shared his two World Series rings from 2004 and 2007. Everyone in the Red Sox organization received rings when the team won titles.

Beane made yearly appearances at Agawam Junior High School for Career Day, and was continuously one of the most popular speakers at the event.

In addition to the monument dedication, an additional symbol of Beane's legacy was displayed with a red bench bought and installed by members of the Class of 1971, the Agawam High School class Beane graduated with. The bench is located along the third base line of Carl Beane Field and was in full use during the Opening Day's games last Saturday.

Before becoming involved with radio and the Red Sox, Beane did spend time coaching little league baseball.

Gregory A. Scibelli is a sports correspondent for Turley Publications. He can be reached at gscibelli@turley.com.



Turley Publications submitted photo
Mayor Richard Cohen (far right) and Agawam Little League President David DeMatteo (next to Cohen) poses with members of the Beane family on the bench that was dedicated.



Turley Publications photo by Gregory A. Scibelli
Lucas Blackack, 5, checks out a lizard from the Forest Park Zoo. The zoo visited Agawam Little League as part of many activities for children on Opening Day.



Turley Publications photo by Gregory A. Scibelli
Little leaguers get ready to play baseball last Saturday.



April 16, 2013
Online Newsletter
Agawam Catalyst



Mark your calendars for Little League Opening Day on April 27th with the parade starting at 10:00am followed by the dedication of the baseball Field #1 to the late Carl Beane.



Carl Beane with Red Sox trophy from World Series 2004

Celebrate "A Green Day at the Park"!

On Saturday, April 27th from 11am – 2pm, the Town of Agawam will be celebrating Earth Day in partnership with the Agawam Little League at Opening Day at the Little League Complex at 85 School Street. This year we have a variety of local vendors that will provide adults and children with information and activities that showcase green practices in gardening, energy saving tips, recycling, organic lawn care and more! The following vendors will be participating:

- **Forest Park Zoo on the Go - 12:00 to 1:00** - Stop by and learn about a variety of animals, their special adaptations, habitats, behavior, diets and status in the wild.
- **Agawam Department of Public Works** - Learn what happens to your items when they are recycled. Students should visit the display to receive an ID Lanyard made out of recycled soda bottles.
- **Agawam Conservation Commission** - View a replica of the last remaining 19th century barn located right here in Agawam at the School Street Park.
- **Agawam Democratic Committee** - Bring a compact florescent bulb to recycle and receive a flower bulb to plant in your garden.
- **Agawam Energy Commission**- Find out where the Energy Commission has set up new "Info Centers". These locations will provide useful information and brochures to help residents with Energy Conservation decision and projects for their homes and businesses.
- **Agawam Junior Women's Club**- Here you will find a reusable bag to carry all your Earth Day goodies!
- **Covanta Waste to Energy** -Drop off your old reusable batteries to be recycled.
- **Cybercat Robotics**: Check out the Cybercat Robotics solar panel demonstration as well as learn about energy saving light bulbs and surge protecting power strips.
- **Friends of Robison State Park**
- **L.A. Home Improvement**- This company will help you determine which windows and doors are Energy Star Rated for residential use, helping keep those heating bills down!
- **Pioneer Valley Planning Commission**-This year's display will focus on organic lawn and land care practices and how to transition away from synthetic chemicals and fertilizers for a safer environment and beautiful yard.
- **RE-Energize**- Learn how Re-Energize collects used cooking oil and processes it into biodiesel for cars, machines and furnaces.
- **Relay for Life**- "Dream Big, Hope Big, Relay Big for 2013"! The second annual American Cancer Society Relay For Life of Agawam is slated for Friday, May 17th and Saturday, May 18th. Stop by to learn about the event and how you may participate.
- **Republic Waste Services**- Recycling Literature, Waste Reduction and Safety Presentations.
- **Solar City** - Learn about residential solar panel installation, maintenance and management.
- **Western Massachusetts Electric Company**- Visit WMEC's table to learn about residential programs regarding energy efficiency programs and offerings, available rebates and tips on saving energy.

Residents reminded to dispose needles, syringes properly

The Agawam Department of Public Works and Health Department would like to remind residents not to dispose of any unopened or used syringes, needles, lancets, or epens in the household trash collection regardless of its containment.

As of July 1, 2012, medical waste regulations do not allow the disposal of sharps

in household garbage. The Agawam Health Department has since set up a safe alternative for disposing of used needles and syringes through its office. The health department has a limited supply of containers available to the public at no charge. Once the containers are full, residents should return the containers back to the health de-

partment for \$5 disposal fee.

Residents may pick up their free container at the Agawam Health Department at 36 Main St., while supplies last.

Call 786-0400 ext. 8207 for more information about Agawam's "Safe Needle Disposal Program."

Advertiser 5/2/13

Just another form of recycling

Library program teaches easy steps to organic composting

By Sarah Platanitis
Turley Publications Correspondent

Curious about composting? Bernadette Giblin and the Agawam Department of Public Works hosted "Rot to Riches: Five Easy Steps to Organic Composting" on Wednesday, Aug. 7, at the Agawam Public Library.

Giblin, founder of Safeground Organic and known in the Pioneer Valley as the "Grass Whisperer," started her journey teaching others about composting after learning it from her late in-laws.

"They both were Victory Garden watchers on public TV and mega garden enthusiasts their whole adult life, especially in retirement," said Giblin. "I remember them having their own garden stand in the front yard and a compost in the backyard. There was a running joke that the best tomatoes grew there."

Composting, if created with a proper balance of food waste, green and brown matter, can become treasured soil. It also helps redirect waste away from area landfills that are quickly filling up.

"Compost is loaded with biological life. You then use that in your garden and lawns to feed the biological life in the soil," said Giblin. "People think that fertilizer feeds plants and they go around buying fertilizer before supporting the biological life in the soil. That's both expensive and inefficient because you need to feed the biology of the soil in order to feed whatever plant you're trying to grow."

The library workshop showed five simple strategies for composting that included making a large pile in covered bins using a 50/50 mix of green plant material like grass clippings, old flowers, and organic kitchen waste with dried plant material like dead leaves, twigs and branches and finely shredded

newspaper.

It's recommended to keep ingredients small in size and keep the pile moist but not soggy. When turning over the pile, beginners will know they are doing it correctly if there is an earthy odor and some heat coming from it, meaning that composting is in progress.

"It's so simple and easy to get started. Kids and teachers do it in kindergarten all the time," said Giblin.

Tracy DeMaio, of the Agawam DPW, said that 25 compost bins were allotted to the first 25 participants that were registered and in attendance at the event.

"There's really no cost to start composting. Honestly all you need is a desire to transform your food and other yard waste into rich free super soil," said Giblin. "It's just like any kind of recycling, you just need to take a little time to set up a system and then the willingness to stick to it."

Giblin and the DPW had previously worked together on a grant project to transition the School Street Park to a pesticide-free space.

"I'm an expert on organic turf transitioning. The town's DPW is very concerned about storm water runoff and deeply committed to reducing pesticides and encouraging composting to protect water," said Giblin.

The lecture, held in conjunction with this year's themed Adult Summer Reading Program of "Ground Breaking Reads," was sponsored by the Agawam Center Library Association, the Massachusetts Cultural Council, the Massachusetts Library System, the Boston Bruins, the Massachusetts Board of Library Commissioners, and CSLP.

For more information about Bernadette Giblin and how to compost for healthy and more sustainable lawns and gardens, visit www.safegroundlandcare.com or call 413-584-6175.

Hazardous waste collection set for Sept. 7

The Agawam Department of Public Works (DPW) will hold its annual Household Hazardous Waste Collection Day Saturday, Sept. 7 at the Department of Public Works Annex, 1000 Suffield St. from 9 a.m. to noon.

This program offers residents a safe, economical way to dispose of household items that are flammable, reactive, corrosive or toxic. Solvents, pesticides,

caustic cleaners, and oil based paints are some examples of the different types of items that will be accepted.

For a complete list of acceptable materials, visit www.agawam.ma.us. This event is free to Agawam residents, but pre-registration is required.

Appointments may be scheduled by calling the DPW at 821-0600 ext. 0.

Rain barrels available again this spring

AGAWAM – Department of Public Works Environmental Project Coordinator Tracy DeMaio has announced that the town will again be selling rain barrels this spring.

“Rain barrels have become very popular in Agawam,” said DeMaio. “More and more residents are using them, making water conservation a way of life in their homes, while also helping to reduce the impacts of storm water runoff on Agawam’s wetlands, rivers, and streams.”

A rain barrel collects rain water from the roof and stores it for use during dry weather to water house plants or outside gardens. Collecting water in a rain barrel is an excellent way to save some of the runoff and take the pressure off the water supply and storm-water management systems. Collected rainfall is especially valuable during droughts or dry conditions. It contains more nutrients and less salt than tap water making it great for plants.

The rain barrels are made from 60-gallon recycled food grade barrels in a terra cotta color. The fully-screened intake port keeps mosquitoes, insects and debris out. The lid can be removed for easy cleaning and for storing hoses inside the barrel during the winter. The solid brass threaded spigot can be connected to a regular hose or soaker hose. The overflow connector and tubing can be used to direct water away from the foundation or to join multiple barrels for additional storage capacity.

Orders with payment will be taken through Friday, April 4, with pick-up day Saturday, April 12, at the DPW, 1000 Suffolk St., Agawam from 9:30-10:30 a.m. The cost of the rain barrel is \$60 each.

To order, send or drop off payment and order form to the DPW. Make checks payable to “Jack Miller.” Order forms are available online at www.agawam.ma.us or at the DPW.

4/25/13

An incredible number of very little critters make their homes in local streams and ponds. And thanks to the state Department of Conservation and Recreation, families were treated to a program to find out exactly "What's in the Water" at Robinson State Park Sunday, April 21.

The program was run by regional educator Gini Traub, who helped a group of about 15 children and 12 adults identify a host of life forms in a flowing stream and vernal pool on park grounds.

According to Traub, the group found frog tadpoles, fairy shrimp (small crustacean that indicates a vernal pool), dragonfly larvae, water beetle, mayfly larvae, water fleas, mosquito larvae, salamander, frogs and more.

"We used simple equipment that any family could use themselves if they wished," Traub said. The tools included small white plastic containers, small aquarium nets, and small magnifying hand lenses. "We did have some guides that helped to identify and understand what it was we found," she said.

Traub said the program was considered a success.

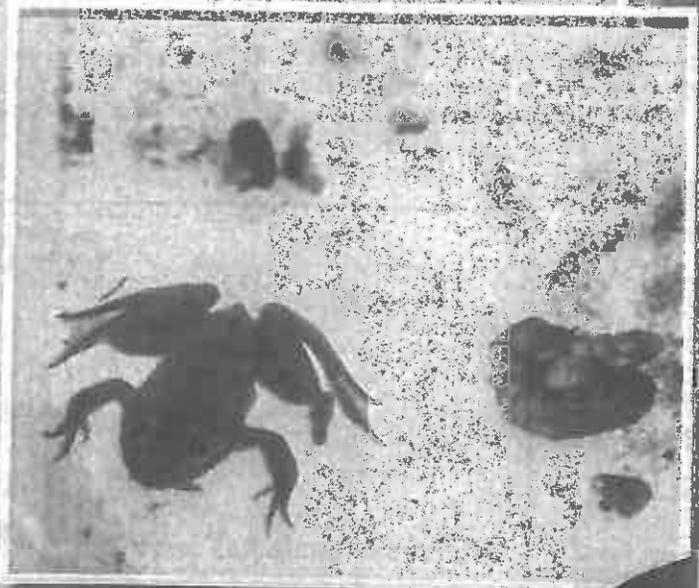
"If there were more people, it would be more difficult to give individual attention and talk about what they found and how all the pieces fit together."

Robinson State Park, located in Agawam, includes over 800 acres with five miles of frontage on the Westfield River. It is open to walkers, hikers, mountain bikers and horseback riders Sunday through Thursday from 10 a.m. to 6 p.m.

- Jennifer Wroblewski



Jeremy Haynes, 6, of Springfield, checks his net for live creatures.



A frog and a water worm were amongst the many creatures found.



Clean out medicine cabinets

'Drug Take Back Day'
set for April 27

By Jennifer Wroblewski
Staff Writer

AGAWAM — Inside almost every bathroom medicine cabinet there's likely to be at least one outdated prescription taking up space. For those looking to dispose of old medications, the Drug Enforcement Administration's national "Drug Take Back Day" will be held Saturday, April 27 with a drop off location here in Agawam.

The event encourages safe disposal of unwanted prescription and over the counter drugs with no questions asked.

The free service will be held 10 a.m. to 2 p.m. at Agawam Town Hall, 36 Main St. Volunteers will collect the drugs which will remain in the custody of law enforcement until they can be properly disposed.

"There are a few reasons why it's done in general. One is to get unwanted drugs out of the hands of unauthorized users," said Randall White, director of Agawam Health Department. Because unused drugs in medicine cabinets can be stolen in the event that a home gets broken into, making sure those drugs are disposed of will help keep them off the streets.

In addition, there is a risk that those drugs could get into the

Please see RX, page 8

Drug Take Back Day April 27

RX, from page 1

wastewater system.

"If people happen to be on septic systems and drugs are flushed down the toilet, they could end up in ground water," White said. "Some of this stuff doesn't just disappear and go away."

The April 27 event is part of the Drug Enforcement Administration's national campaign to provide a safe way for people to empty their medicine cabinets of unwanted and potentially harmful prescription drugs, which, if abused, can lead to accidental poisoning, overdose and addiction. It is sponsored by the Agawam Health Department, Agawam Police Department, Agawam Medical Reserve Corps (MRC) and the office of Mayor Richard A. Cohen.

"This is absolutely important because of the number of prescription drugs or over the counter drugs that people have in their homes that are outdated or not used. They need to discard them in a proper fashion," said Cohen.

This marks the fifth year the town has taken part in this annual event, he said.

"It's been extremely successful," Cohen said. "The amount of drugs collected that are then disposed of by the DEA is just incredible. It just makes for a safer environment."

According to a recent National Survey on Drug Use and Health, prescription medications are the most abused by Americans, next to marijuana. Of the 10 drugs most commonly abused by teenagers, seven are prescription medications.

Used needles, syringes and lancets will be collected in approved sharps containers. Puncture-proof laundry bottles will be accepted.

Items not accepted include chemotherapy drugs or radioactive substances, IV bags and liquids of any type, pressurized canisters, or oxygen containers.

"There's a whole procedure for disposing of the drugs; how they're packaged and where they're delivered to," said Cohen. "The police, my office and the town health department all work together to provide a wonderful service to the community while at the same time making sure everything is done correctly and safely."

Officers from Agawam Police Department will be on hand to transport the drugs for proper disposal, said Agawam Detective Lt. Richard Light.

Health department personnel and MRC volunteers will actually collect the drugs during the "drive-through" collection.

"What happens is people want to park their cars and get out, but it's being done at Agawam Town Hall," said White. "It's a drive in and drop off situation. You don't even need to get out of your car."

The whole process should take less than five minutes, he added.

"We get people in and out of there," he said. "All we ask is that if people have a large quantity of pills, they put them together in a Ziploc baggy."

Once the pills are collected, they will be screened by volunteers, boxed up and placed in a police cruiser to be transported to the central DEA collection site in Springfield, where they will be incinerated.

The correct disposal method for liquid medications is to use a container with coffee grounds or Speedy Dry (or some other kind of absorbent material) and pour the medicine in to be put in the trash.

News, upcoming events from the Agawam Health Dept.

Drug Take Back Day

The Agawam Health Department has announced that National Drug Take Back Day will be held Saturday, April 27 from 10 a.m. to 2 p.m. at town hall located at 36 Main St. This free collection day is for the safe disposal of drugs and syringes. No questions asked. Used needles, syringes and lancets will be collected in approved sharps containers (puncture-proof, heavy duty plastic bottles will be accepted). Items that cannot be accepted are chemo drugs, IV bags, and liquids of any type.

Safe Needle Disposal Program

Effective July 2012, home sharps, as well as unopened packages of hypodermic needles and lancets, shall not be

disposed of in solid municipal waste, including household waste, and shall be collected and disposed of in accordance with 105 CMR 480.125 B.

The health department would like to remind all residents that they are not allowed to dispose of their 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 alternative 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. Residents may also purchase a medical sharps container at any

medical supply store and return it filled to the health department for disposal for a fee. Coffee cans, milk bottles and soda bottles are not approved containers and will not be accepted.

For those that cannot afford to purchase a medical sharps container, a heavy-duty, one-gallon, puncture-proof liquid laundry detergent bottle with a screw on cap may be substituted. A \$10 disposal fee will be charged when it is brought to the health department for disposal.

Call 786-0400 ext.8207 for more information or to obtain a sharps container.

Used needles, syringes, lancets, epipens, and auto injectors may not be disposed of in household trash or recycle bins.

Celebrate 'A Green Day at the Park'

AGAWAM - The town of Agawam will celebrate Earth Day in partnership with the Agawam Little League Saturday, April 27 from 11 a.m. to 2 p.m., at Opening Day at the Little League Complex, 85 School St. This year a variety of local vendors will provide adults and children with information and activities that showcase green practices in gardening, energy saving tips, recycling, organic lawn care and more.

The following vendors participate:

Forest Park Zoo on the Go: Noon to 1 p.m. - Stop by and learn about a variety of animals, their special adaptation habitats, behavior, diets and status in the wild.

Agawam Department of Public Works: Learn what happens to your items when they are recycled. Students should visit the display to receive an ID Lanyard made out of recycled soda bottles.

Agawam Conservation Commission: View a replica of the last remaining 19th century barn located in Agawam at School Street Park.

Agawam Democratic Committee: Bring a compact fluorescent bulb to recycle and receive a flower bulb to plant in your garden.

Agawam Energy Commission: Find out where the energy commission has set up new "Info Centers." These locations will provide useful information and brochures to help residents with energy conservation decision and projects for their homes and businesses.

Agawam Junior Women's Club: Here you will find a reusable bag to carry all your Earth Day goodies.

Covanta Waste to Energy: Drop off your old reusable batteries to be recycled.

Cybercat Robotics: Check out the Cybercat Robotics solar panel demonstration as well as learn about energy saving light bulbs and surge protecting power strips.

L.A. Home Improvement: This company will help you determine which windows and doors are Energy Star rated for residential use, helping keep those heating bills down.

Pioneer Valley Planning Commission: This year's display will focus on organic lawn and land care practices and how to transition away from synthetic chemicals and fertilizers for a safer environment and beautiful yard.

RE-Energize: Learn how RE-Energize collects used cooling oil and processes it into biodiesel for cars, machines and furnaces.

Relay for Life: "Dream Big, Hope Big, Relay Big for 2013" The second annual American Cancer Society Relay For Life of Agawam is slated for Friday, May 17 and Saturday, May 18. Stop by to learn about the event and how you may participate.

Republic Waste Services: Recycling Literature, Waste Reduction and Safety Presentations.

Solar City: Learn about residential solar panel installation, maintenance and management.

Western Massachusetts Electric Company: Visit WMEC table to learn about residential programs regarding energy efficiency programs and offerings, available rebates and tips on saving energy.

Friends of Robison State Park.

Appendix 1F

Year 11

Informational Pamphlets

Help The Agawam Department of Public Works Stop the "FOG"!

WHAT IS "FOG" ?

FOG is fats, oils and grease than can build up in sewer lines. When grease is washed down the sink or toilet it coats and sticks to the inside of sewer pipes. FOG is a major cause of sanitary sewer clogs and over-flows.



Grease clog in sewer pipe.

WHERE DOES "FOG" COME FROM?

- ◆ Meat Fats (bacon, sausage)
- ◆ Lard
- ◆ Cooking Oil
- ◆ Butter or Margarine
- ◆ Food scraps
- ◆ Baking products
- ◆ Milk, ice cream, yogurt, sour cream
- ◆ Cream based sauces
- ◆ Salad dressing, cheeses, mayonnaise

Keep these foods out of all drains!

WHY IS "FOG" A PROBLEM?

Sewer pipes can become clogged by FOG and cause backups into basements, roadways and water bodies. Sewer backups create health hazards, can result in expensive property damage, and threaten the environment.



Sewer backup in residential basement.

Best Management Practices for Home Owners

- ◆ Never pour grease down sink drains or toilets.
- ◆ Dispose of cooled cooking fats, oils and grease into a waxed food container such as a milk carton or container with a lid and dispose of it in the garbage.
- ◆ Use baskets or strainers in sinks to catch food scraps. Empty scraps into the trash can.
- ◆ Scrape food scraps from dishes and pans into the trash can for disposal, before washing.
- ◆ DO NOT use the toilet for disposing of food scraps, sanitary items, rags, cloths, diapers, paper towels, napkins, face tissues, cat litter, "Flushable" wipes, medicines.

Did you know?

Liquid dish detergents that claim to dissolve grease may actually pass grease down the sewer line, which could cause a sewer backup. It is important to scrape greasy foods off all dishes.



Best Management Practices for Food Service Establishments

Agawam Town Code §175-29 requires Grease Interceptors (Grease Traps) for all facilities at which on-site food preparation/processing/handling/service or have other related activities.

- ◆ Train Kitchen Staff on methods to reduce the amount of grease
- ◆ Post "No Grease in Drain" Signs as a reminder to employees
- ◆ Dry Wipe Pots, Pans, and Dishware prior to dishwashing
- ◆ DO NOT dispose of waste food through a garbage disposal
- ◆ Inspect and clean Grease Interceptor ROUTINELY and keep records



- ◆ Cover floor and sink drains with strainers to catch food scraps. Empty scraps into the trash can.
- ◆ Clean up grease spills with paper towels and disposal of the towels in the trash.



Working Together We Can Cease the Grease!



If you have any questions please call the Agawam DPW at 413-821-0600 www.agawam.ma.us

Created in partnership with the Springfield Water and Sewer Commission www.waterandsewer.org

- Importance of Construction Administration
- Resources and Tools to Get the Job Done

Of particular interest to EPA and PVPC were understanding barriers to green infrastructure implementation. Thus, ORD developed a very detailed pre-workshop survey that was sent to all registered attendees. A total of 44 attendees completed the survey and results will be used to inform future outreach and training. See attached pre workshop survey results as well as workshop flier and agenda.

Soak up the Rain Stormwater Education Campaign

Much of the work for the Connecticut River Stormwater Committee this year was devoted to working with EPA's new "Soak up the Rain" education campaign to adapt it for the Pioneer Valley. The campaign — a call to action for property owners to reduce stormwater runoff through strategies that soak up the rain — involved several major outreach efforts for the Connecticut River.

- ***Pioneer Valley Soak up the Rain Logo***

PVPC worked with the standard EPA Soak up the Rain logo to modify and adapt it for the Pioneer Valley. The logo is being used in all materials associated with stormwater education events and materials going forward. Colors of the logo are integrated with print and other elements for other products.



- ***Pioneer Valley Soak up the Rain Website***

www.pvpc.org/soakuptherain/

Developed over the course of several months, the Pioneer Valley Soak up the Rain website promotes a range of practices, including rain gardens, permeable pavements, dry wells, and green roofs through examples from the region, a semi weekly blog, and a library of and links to other informational resources. For the website, PVPC had an intern collect and develop narrative, images, and video on 15 local stormwater projects that are scheduled to be introduced as part of the semi weekly blog and then cataloged on the website within a local stormwater gallery feature. Property owners throughout the Pioneer Valley are invited to submit projects that they know of to feature on the website. As this website becomes further established, PVPC plans to phase out the Connecticut River Think Blue website.

- ***Demonstration Workshops for Homeowners and Businesses - EPA Matching Funds \$7,000***

The first of two half-day workshops for homeowners and businesses was held in October in Northampton and attracted 29 participants. Led by staff from PVPC and the University of Connecticut NEMO program; the workshop covered a range of techniques appropriate for residential and commercial sites, including rain barrels and cisterns, porous pavers, rain gutter downspout diversion, rain gardens, and green roofs. As part of the workshop, participants had an opportunity to try out the new NEMO rain garden app and understand exactly how to conduct a soil perc test and cut a downspout to accommodate a rain barrel. In a post workshop evaluation, participants gave the entire event high marks. The evaluation results will be used to slightly revise a very similar workshop that will be held in Holyoke in June of 2014. In promoting the workshop, the Springfield Republican newspaper provided very high profile coverage on the front of their Home & Garden Section. See attached: flyer for workshop, agenda, Republican article, and evaluation results.

- ***Design of templates for interpretive signs at green infrastructure stormwater management facility - EPA Matching Funds \$3,000***

PVPC began working to develop a series of interpretive sign templates that will be offered to property owners for use where they would like to celebrate and highlight their best stormwater management practices, particularly rain gardens, porous paving, and green roofs. For rain gardens and porous paving, sign templates will include one version (varying in size and content) for residential use and another for commercial, municipal, or institutional use. The green roof sign will be designed in only one version as need for such a sign at the residential scale is negligible. The intent is that signs will help to not only inform people about the good practices that are around them , but also inspire additional good practices by example.

Additional Stormwater Outreach and Education Events

In 2013, the following outreach events were held:

- Saturday, April 27, 2013, Agawam Little League Jamboree and Earth Day celebration - Think Blue display booth
- Tuesday, June 11, 2013, Citizens Restoring Congamond Lakes meeting – Presentation on green infrastructure stormwater management practices for homeowners, as well as brief summary of organic lawn care.

Springfield Rain Gardens Project Planning

Matching Funds \$49,000 CWA SEP

The Pioneer Valley Regional Ventures Center (PVRVC) received mitigation funds in the amount of \$49,000 as the result of Clean Water Action's Notice of Complaint against Don Casters Inc. for use to support rain garden workshops and training and construction within the City of Springfield. PVPC initiated this project in December with a meeting of Springfield municipal officials. Work will continue into the coming year and PVPC is hoping to extend the training program into other communities in the region.

US Forest Service Urban and Community Forestry Grant Application

In partnership with the Franklin Regional Council of Governments and Massachusetts Workforce Alliance, PVPC submitted a \$187,000 grant application to the U.S. Forest Service to: work with a steering committee of stakeholders to identify market drivers for Green Infrastructure, analyze existing successful initiatives, and make recommendations for expanding and growing the green infrastructure cluster. The intended result was to be: 1) a detailed report that presents data, analyzes job opportunities and career paths, and makes recommendations to implement training and job development initiatives, and 2) a brochure in hard copy and .pdf form that summarizes key findings and recommendations and provides resources. The grant was not funded.

Appendix 3F

Year 11

Failing Septic Systems

FAILED & NEW SEPTIC SYSTEMS
FROM 1/1/2013 - 12/31/13
Agawam Health Department

01/06/2013	Daniel O'Sullivan 312 Southwick Street Feeding Hills, MA 01030	repair
01/18/2013	Steve Moccio 104 Tobacco Farm Rd Feeding Hills, MA 01030	repair
03/20/2013	Francis Hoban 94 Red Fox Drive Feeding Hills, MA 01030	repair
03/27/2013	Frank Palange 326 North West Street Feeding Hills, MA 01030	repair
04/17/2013	Diane Graveline 58 Oak Lane Feeding Hills, MA 01030	repair
04/26/2013	David Tackley 427 Southwick Street Feeding Hills, MA 01030	repair
05/10/2013	Michelle Heim 39 Tanglewood Lane Feeding Hills, MA 01030	repair
05/15/2013	Annemarie Johnston 376 Southwick Street Feeding Hills, MA 01030	repair
05/20/2013	Dorothy Mazeika 597 Barry Street Feeding Hills, MA 01030	repair
06/06/2013	Kevin Learned 319 South West Street Feeding Hills, MA 01030	repair

FAILED & NEW SEPTIC SYSTEMS
FROM 1/01/13 - 12/31/13
Agawam Health Department

08/30/2013	Richard Isom 45 Cricket Road Feeding Hills, MA 01030	repair
09/09/2013	Michael Kunze 37 Bailey Street Feeding Hills, MA 01030	repair
09/16/2013	Audrey Besaw 25 Seymour Avenue Agawam, MA 01001	repair
10/11/2013	Kathryn Carmody 95 Christopher Lane Feeding Hills, MA 01030	repair
10/17/2013	Jeffery Hastings 131 North West Street Feeding Hills, MA 01030	repair
10/22/2013	Jason Morin 258 North West Street Feeding Hills, MA 01030	repair
11/26/2013	Brian Tassone 702 Barry Street Feeding Hills, MA 01030	repair
12/11/2013	Peter Magagnoli 490 South West Street Feeding Hills, MA 01030	repair

Appendix 6B

Year 11

Training of Municipal Employees

The Voice of Pioneer Valley

Summary of Results from the Pre-Workshop Exercise & Next Steps



Catalyst for Regional Progress

PVPC

Green Infrastructure/Low Impact Development Workshop

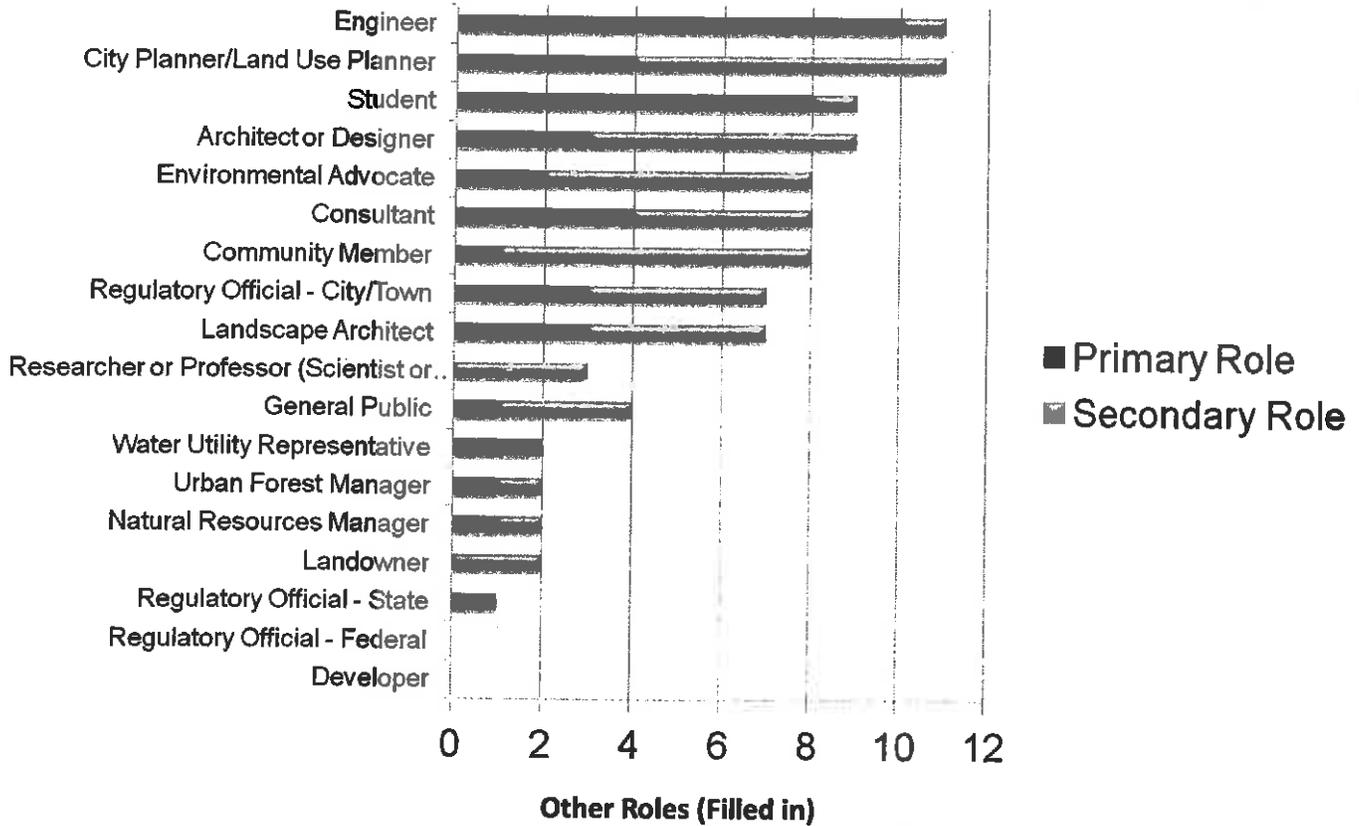
June 13, 2013

Pioneer Valley Planning Commission

US Environmental Protection Agency Region 1

US Environmental Protection Agency, Office of Research & Development

Roles of Respondents



- ◆ Tree warden, parks, commons, cemeteries, Athletic fields, pools Division Director
- ◆ Ecological Landscape Designer (self-employed, Northampton) and part-time Project Designer (Green Infrastructure Planning) for an engineering firm in Boston (Nitsch Engineering, Inc.)
- ◆ I am a community volunteer for the Northampton Board of Public Works and the city's Storm Water Ad-Hoc Advisory Task Force
- ◆ Grant Writer
- ◆ Head gardener at a 3 acre public garden surrounding Wistariahurst Museum in Holyoke. I am dealing with storm water issues from building roofs and the need to water the gardens and turf and would like to consider a cistern system to keep all of the water that falls on site.

Response Rate: 98%

41 Responses

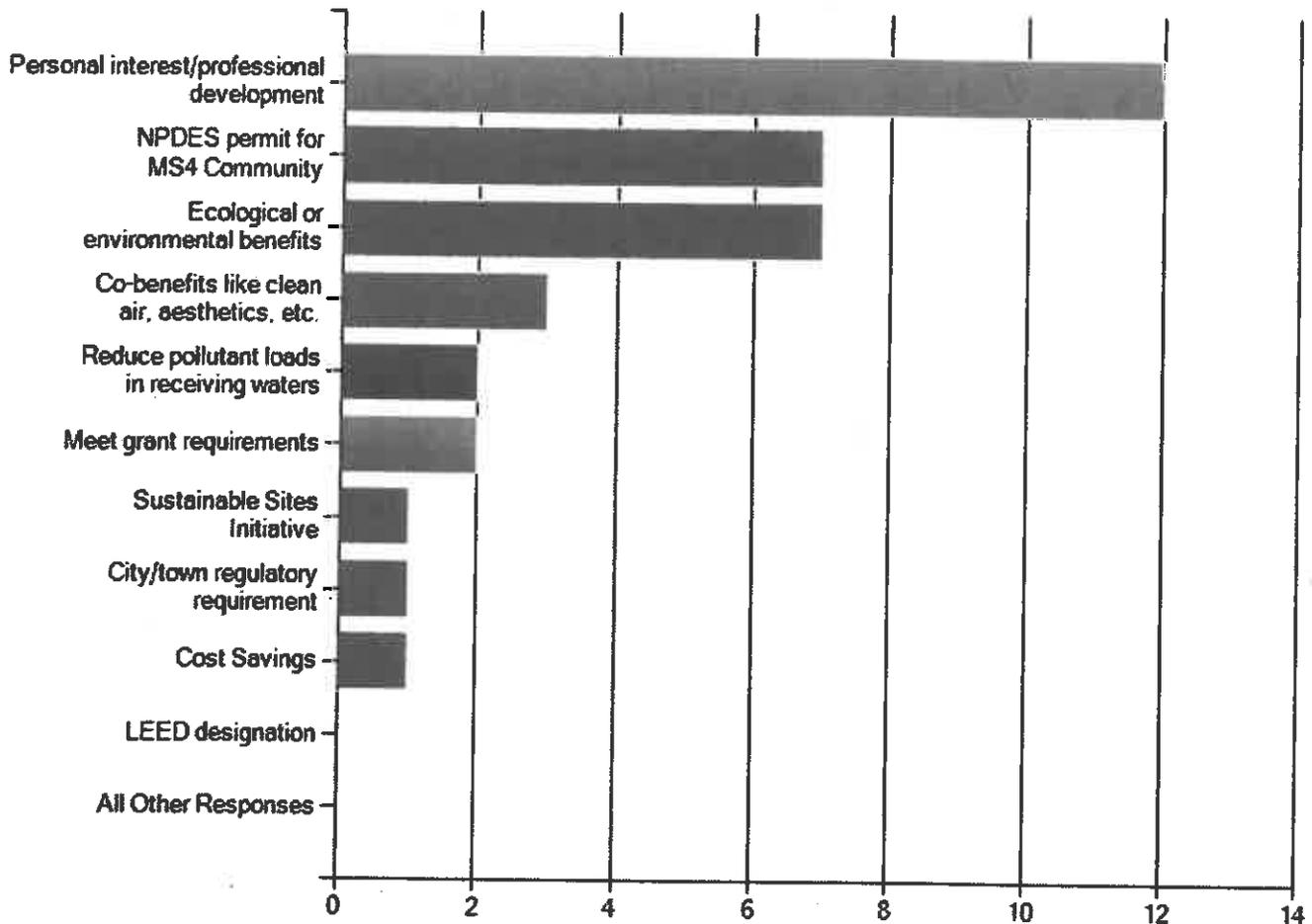
42 Participants (not including speakers)

72 People registered

Note: Some responses may have come from people that registered but did not attend.

Drivers

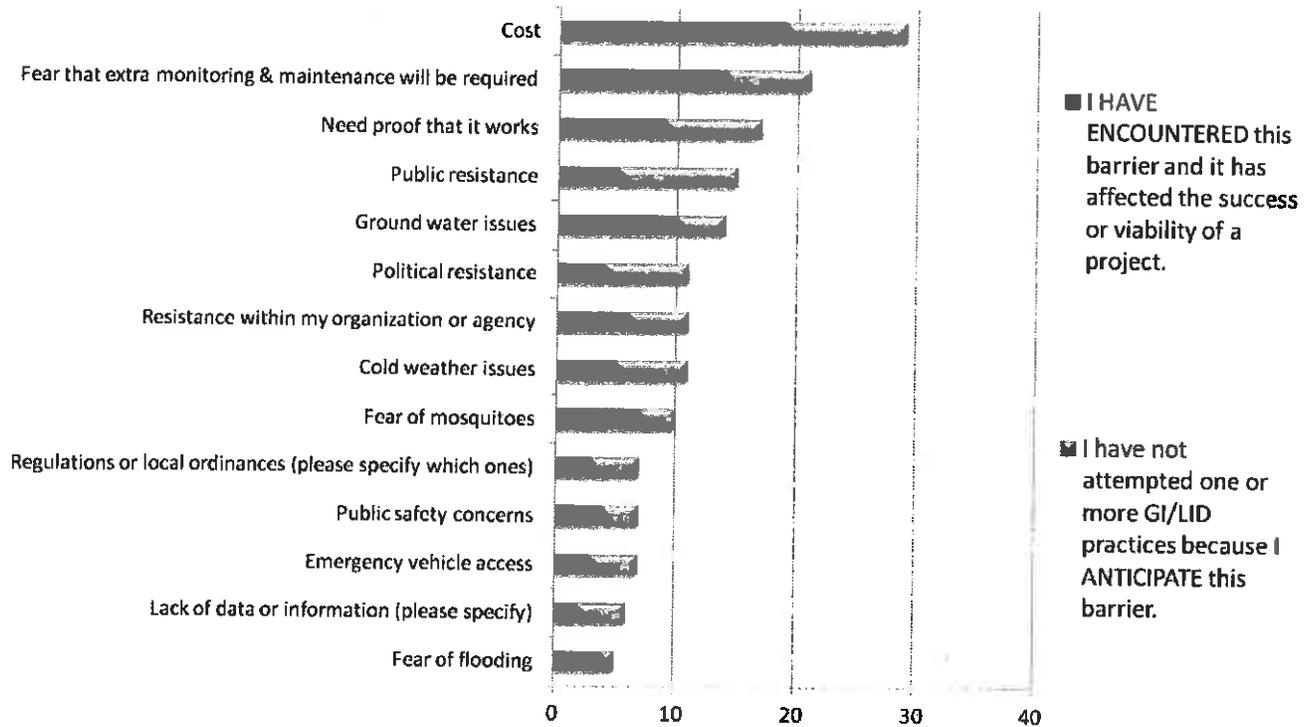
What is the primary reason that participants are interested in GI?LID?



- ◇ "I am an engineering consultant practicing in the area of stormwater management and green infrastructure/LID"
- ◇ "Reduce peak flow rates of stormwater into wastewater collection systems in City sewersheds which have a combined sewer system, and thereby help reduce the frequency of combined sewage overflow from that sewershed into the Western MA rivers."
- ◇ "reduce stormwater flows to collection systems and improve stormwater quality"
- ◇ "Looking to develop a vision for the multi-functional landscape."
- ◇ this goes hand-in-hand with "reduce pollutant loads in receiving waters"
- ◇ "As Northampton considers the implementation of a storm water fee, we are looking at ways that residents and commercial properties might utilize GI to qualify for credits/fee reductions as part of a comprehensive incentive program."

Barriers

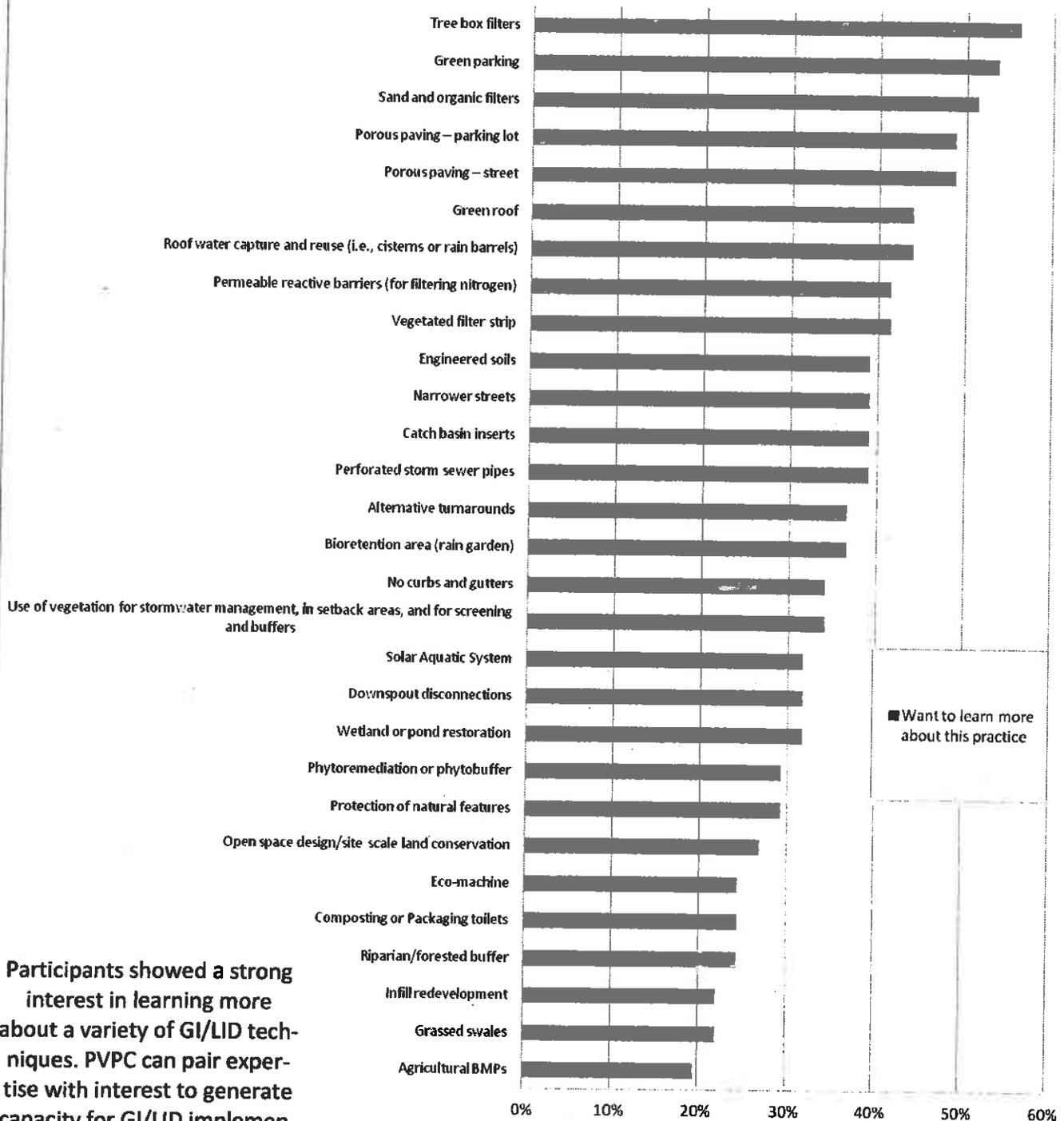
What is in the way?



Other Fill-in

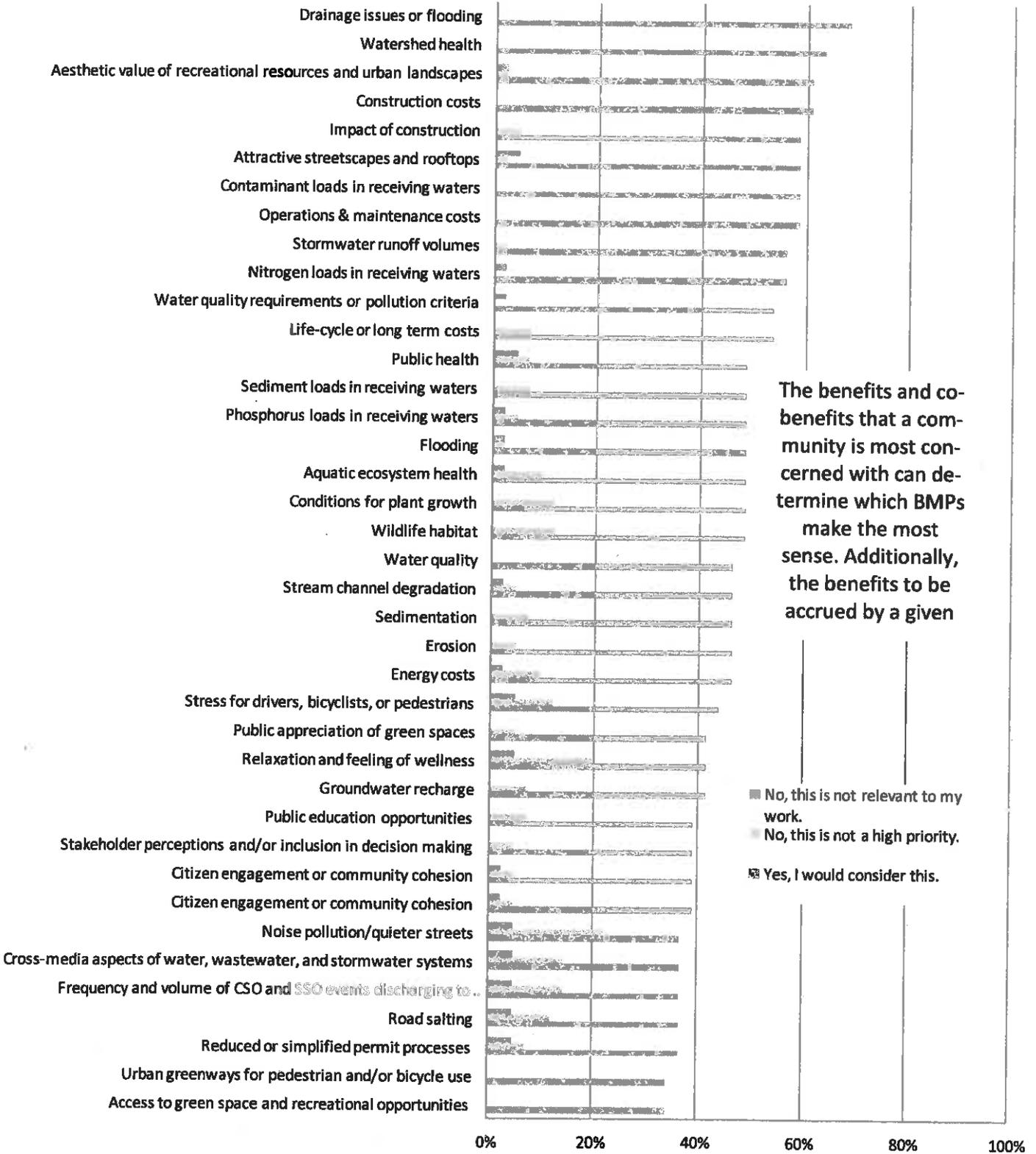
- ◇ Such resources aren't widely known in my country (Brazil).
- ◇ State and Federal
- ◇ Test pits needed to determine whether ledge present (water quality swale). Extra design time & cost to implement over traditional project. Deep sump basins are easily implemented.
- ◇ Lack of experience successfully constructing GI
- ◇ Zoning, land use, etc.
- ◇ I have not implemented GI/LID practices yet

Interest in Management Practice



Participants showed a strong interest in learning more about a variety of GI/LID techniques. PVPC can pair expertise with interest to generate capacity for GI/LID implementation, maintenance, and cost reduction.

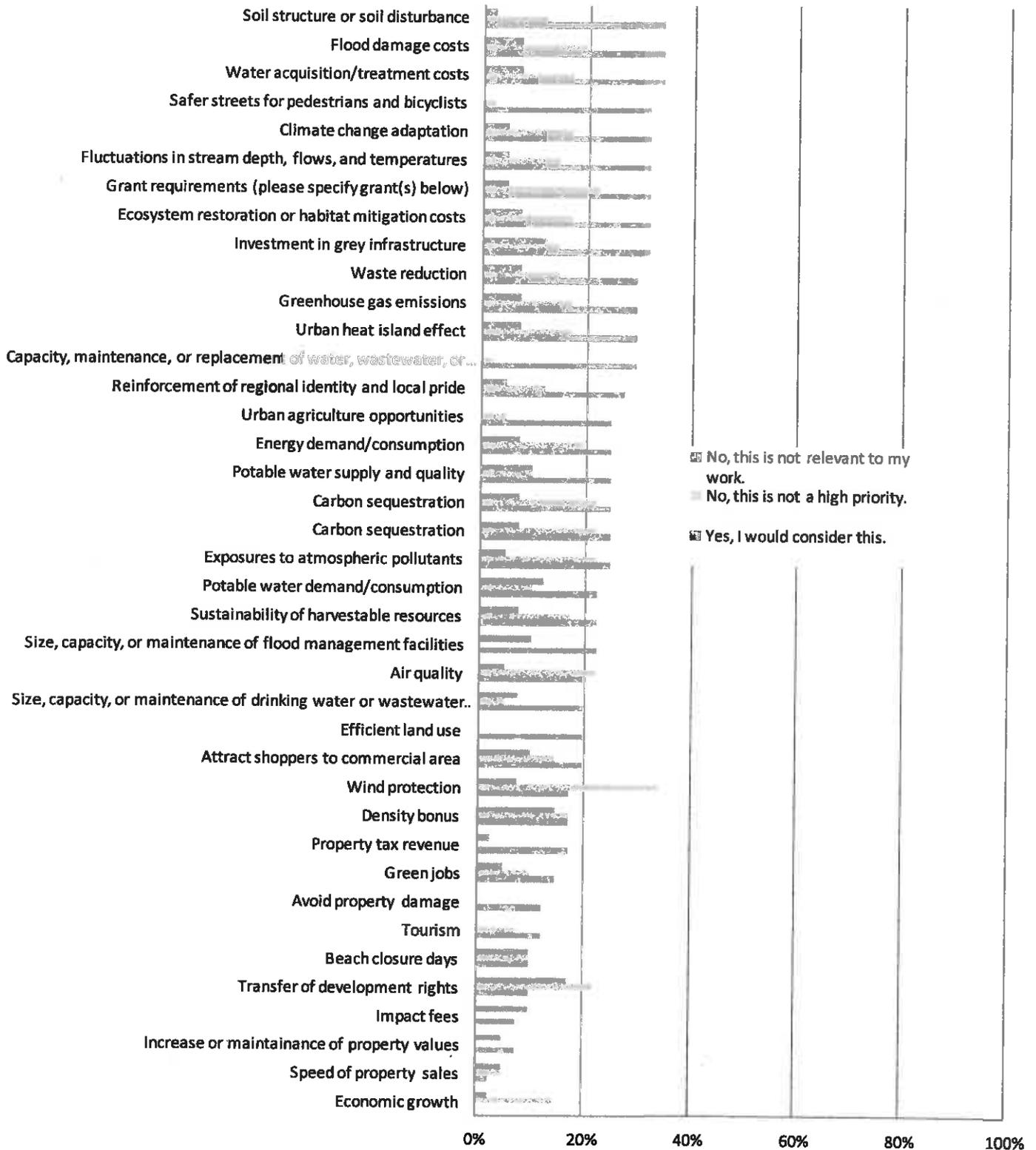
Priorities - Highest 39/78



The benefits and co-benefits that a community is most concerned with can determine which BMPs make the most sense. Additionally, the benefits to be accrued by a given

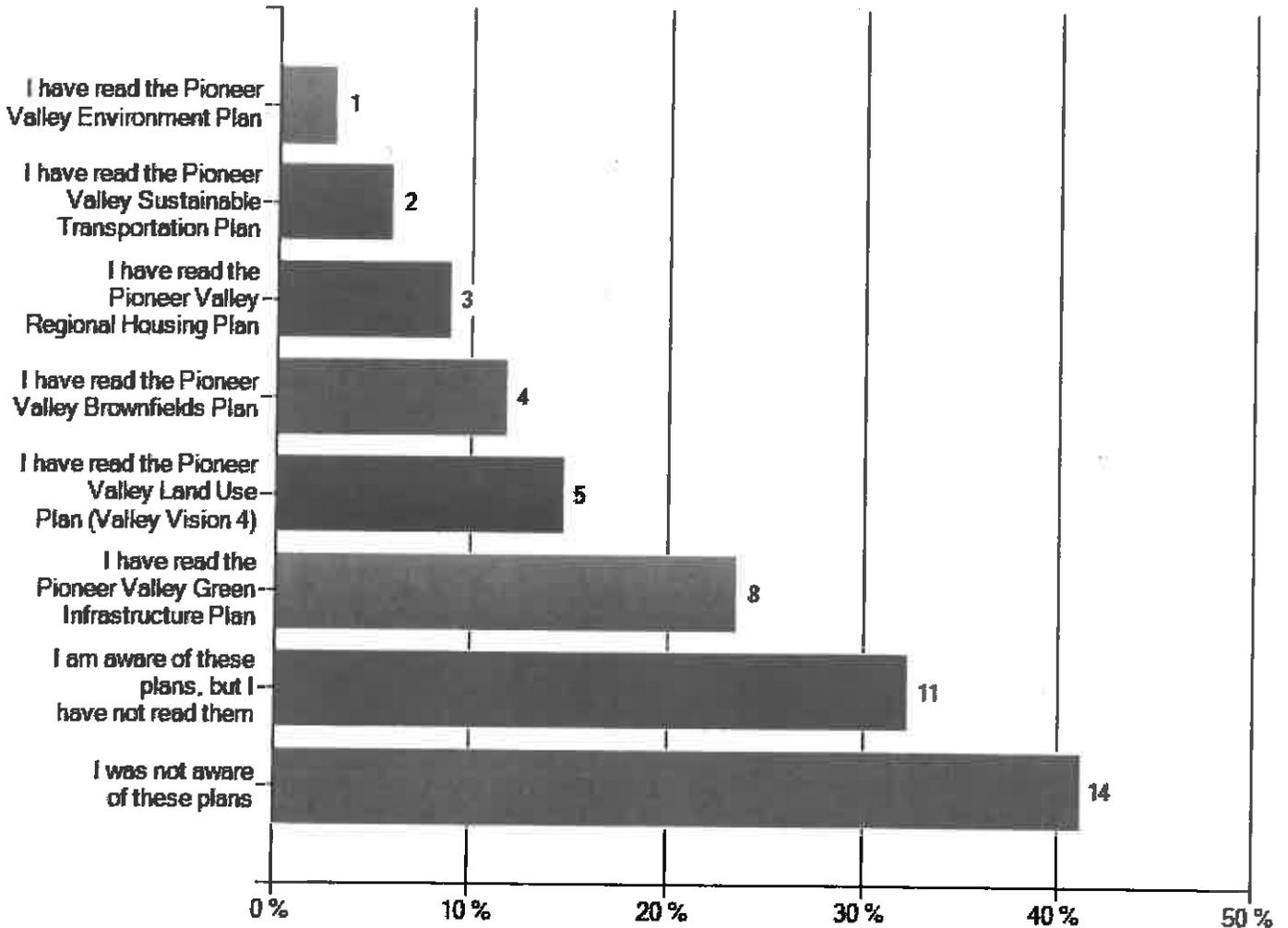
No, this is not relevant to my work.
 No, this is not a high priority.
 Yes, I would consider this.

Priorities - Lowest 39/78



Awareness of PVPC Plans

Are you aware of, or have you read, any Pioneer Valley Regional Plans?



PVPC Plans are a resource to the region. The Green Infrastructure plan, in particular, provides an assessment of and spatial analysis of communities within the region in order to determine cost-effective placement of BMPS. Practitioners can use the results of the analysis as well as the process used within the plan to inform their own decision making.

Tools & Resources Used by Participants

- ◇ Text books (Sarte, McMahon, etc.)
- ◇ Stormwater calculator
- ◇ design details from cities and towns
- ◇ <http://www.unh.edu/unhsc/>
- ◇ http://www.flowstobay.org/ms_sustainable_streets.php
- ◇ http://efc.muskie.usm.maine.edu/docs/roseen_right_practice_right_place.pdf
- ◇ ArcGIS, Town Stormwater Ordinance, MADEP website
- ◇ LEED Guidance, Sustainable Sites Initiative Guidance, Best Practices
- ◇ green street design guidelines storm water calculator
- ◇ Mass Stormwater Handbook MassDEP stormwater website.
- ◇ Massachusetts Stormwater Handbook Stormwater calculator
- ◇ MA Wetlands Protection Act Stormwater guidelines/handbook, stormwater calculator, EPA website, CT River Stormwater Committee
- ◇ stormwater calculator, MA DEP stormwater management website
- ◇ CT DEP Stormwater Quality Manual
- ◇ Case studies of places implementing GI practices
- ◇ I am not aware of any. The gardeners at Wistariahurst are not represented on the board and have no input. We can only make suggestions and try to back them with good research.
- ◇ <http://precip.eas.cornell.edu/>
- ◇ HydroCAD
- ◇ <http://websoilsurvey.nrcs.usda.gov/app/>
- ◇ MA Stormwater Handbook

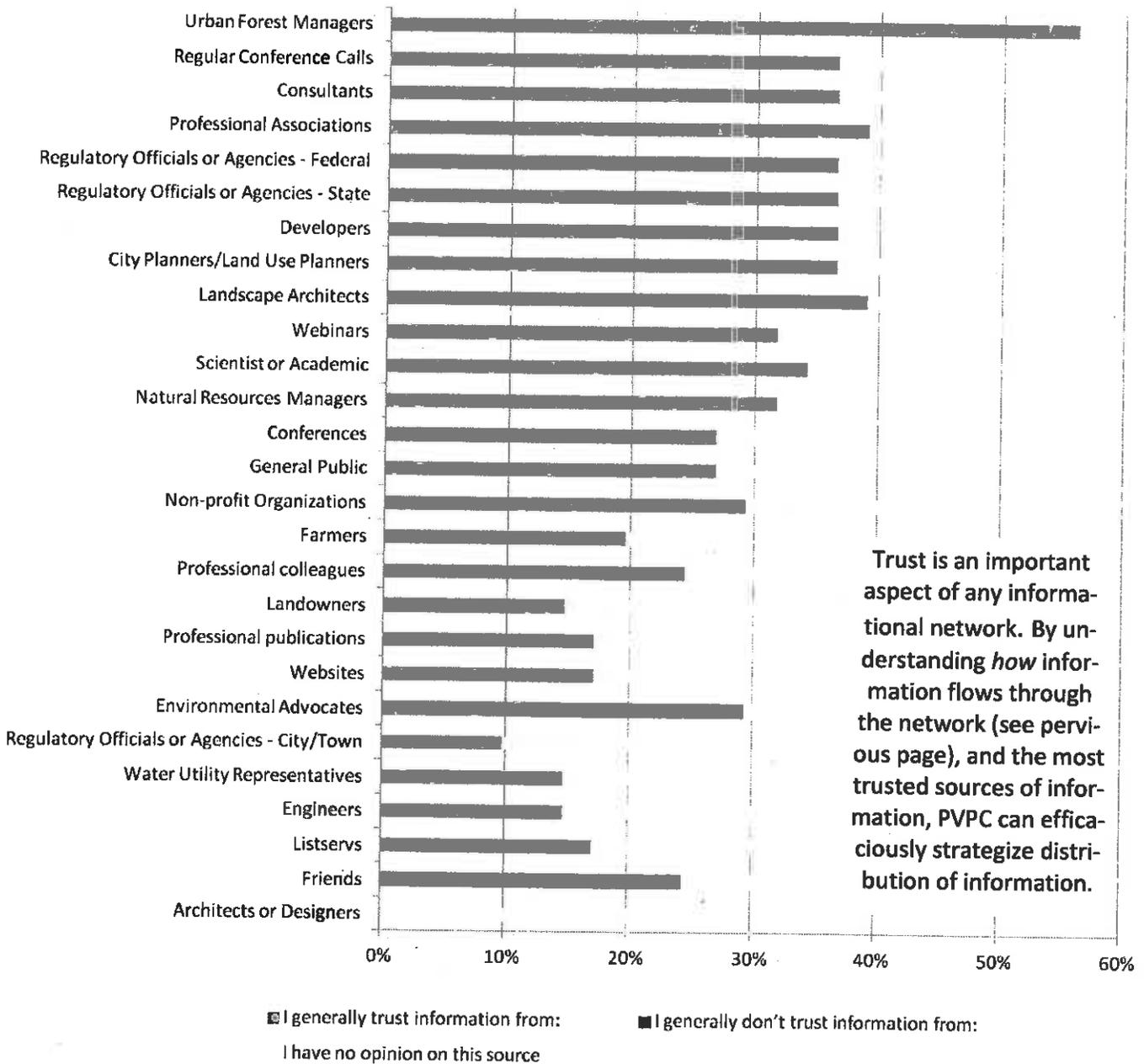
Missing Tools, Resources & Information

What has been difficult for participants to find?

- ◇ Open discussion of problems related to GI/LID projects esp in cold weather climates.
- ◇ Contributing drainage area for specific projects/BMPs - except for public 319 grant-funded projects, local groups/officials often do not have access to this information--need to contact project engineers/designers and they are often too busy to follow up.
- ◇ I'm interested in to what extent GI is practiced on a residential level. Many examples are of commercial sites and neighborhood-scale projects. Perhaps this is most effective scale at which to apply these principles. It would be interesting to know if which GI/LID practices are most appropriate to smaller-scale projects.
- ◇ porous pavement design and cost analysis
- ◇ What is the range of stormwater fee practices that would be legal and practicable in MA/CT? Are there monitoring and measuring technologies (ie to meter stormwater and grey water outflow) in recent years? What are the fed/state/regional resources available for support and training to assist DPW transition to GI/LID practices?
- ◇ It would be nice to have a resource area (library) of sample projects with specific implementation details which could be used on actual projects.

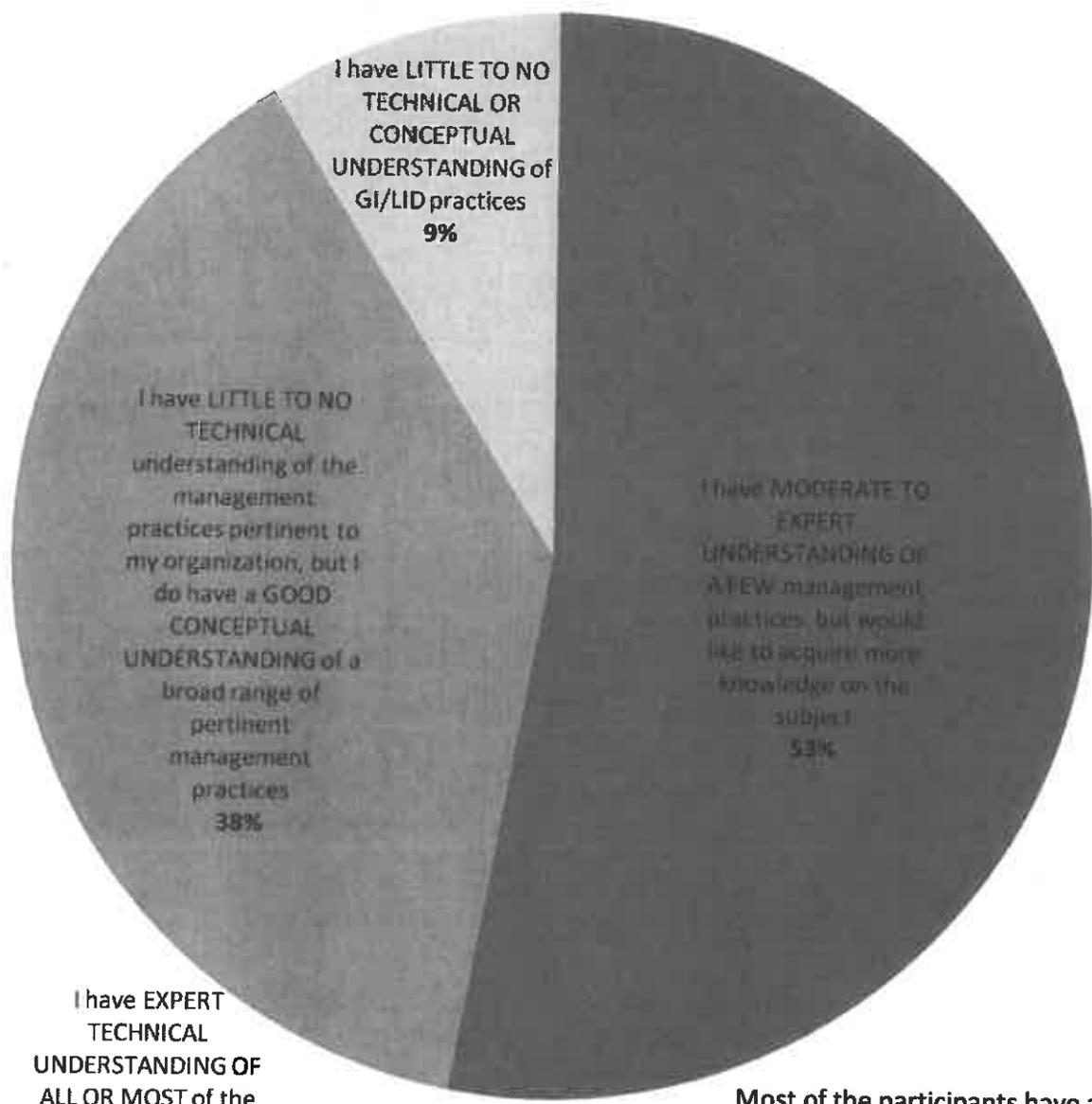
Trust

Participants' trust different sources of information differently



Familiarity

Technical & Conceptual Understanding of GI/LID



Most of the participants have a good conceptual understanding of GI, and are seeking more refined technical knowledge. PVPC can focus future efforts on expanding technical knowledge as much as possible through topical workshops and targeted information resources.

Appendix 6C

Year 11

Catch Basin Cleaning Program

DRAINAGE WORK 2013-2014

- 4/4/2013 25 rugby rd.--basin repair
- 4/8/2013 butternut dr.-- basin repair
- 4/9/2013 17 hearthstone cir--basin repair
vasser dr.--basin repair
- 4/18/2013 180 cambridge dr.--basin repair
- Monday, April 22, 2013 north st hill--2basin repairs
- 4/25/2013 pheasant hill --basin repair
12 coyote cir.--basin repair
- 4/26/2013 646 mill st.--basin repair
- 5/1/2013 silver st.--responsive trucking dredge drain ditch
- 5/2/2013 pheasant hill --basin repair
- 5/15/2013 51 howard st. -basin repair
- 5/22/2013 24 white fox dr. basin repair
- 5/28/2013 pine st. vac drain lines
- 5/29/2013 20 hastings st.--repair basin
- 5/30/2013 118 high st.--basin repair
11 blair hill rd.--basin repair
- 6/1/2013 14 primrose ln.--basin repair
- 6/3/2013 253 rowley st--basin repair
- 6/4/2013 adams st. brook--dredge brooke
- 6/5/2013 129 oak ln.--basin repair
- 6/6/2013 72 homer st--high velocity lines and vac. Basin
295 southwick st.--vac basins
- 6/12/2013 princeton ln.--vac basins
18 hall st-- vac lines
- 6/13/2013 lancaster st. vac lines
76 bridge st. --basin repair

6/25/2013 76 ottawa st. basin repair
7/1/2013 squire lm--basin repair
7/3/2013 provin mt.basin repair
7/4/2013 20 sterling rd.basin repair
7/8/2013 high school--6 basin repairs
7/12/2013 24 liswell dr.--basin repair
7/15/2013 library--5 basin repairs
7/18/2013 begley st.--basin repair
robinson park school-- basin repair
7/22/2013 158 elmar dr.-basin repair
42 cricket ln.--basin repair
7/23/2013 bowles rd.--basin repair
7/24/2013 12 lealand ave. basin repair
8/1/2013 white fox dr.--3basin repairs
8/5/2013 88 butternut dr.--basin repair
8/6/2013 150 garden st. basin repair
8/7/2013 132 valley brookerd.--basin repair
8/12/2013 50 moore st.-- basin repair
8/13/2013 senator and cooper st.
8/14/2013 10 clifton dr. basin repair
8/15/2013 647 springfield st--basin repair
9/4/2013 southwestfield st--basin repair
9/5/2013 124 barry st. basin repair
9/9/2013 775 suffield st--basin repair
9/10/2013 mckinley ave.--basin repair
9/11/2013 southwestfield st--replace d.i. covers
9/12/2013 54 althea cir.--basin repair
9/16/2013 20 eastview cir--basin repair
9/23/2013 36 royal st.--basin repair
9/24/2013 96 karen lynn cir.--basin repair
9/25/2013 118 karen lynn cir--basin repair
10/7/2013 214 n. west st.--vac drain line
10/8/2013 southwick st. basin repair
10/9/2013 67 campbell dr. basin repair
10/21/2013 18 carr ave-- basin repair
11/5/2013 69 garden st. install new c.b.
11/6/2013 64 hamilton cir-- basin repair