

Part II. Self-Assessment

The Town of Ludlow has completed the required self-assessment of compliance with the Phase II Stormwater Management Program. In accordance with the NPDES Phase II Stormwater requirements, the following topics were evaluated for the completion of the Annual Report

1. Compliance with the Phase II Permit Conditions
2. Appropriateness of the Selected BMPs
3. Progress Towards Achieving the Program's Measurable Goals
4. Results of Any Information that has been Collected and Analyzed
5. Activities for the Next Reporting Cycle
6. Changes in Identified BMPs or Measurable Goals

Regulatory Mechanisms

The Town of Ludlow adopted a General Stormwater Bylaw at the October 2005 Special Town Meeting, Article 18, amended at the October 2006 Special Town Meeting, Article 24. The Bylaw provides mechanisms that 1) prohibit non-allowable, non-stormwater discharges to MS4s; 2) require sediment and erosion control at construction sites; and 3) control post-construction stormwater runoff from development or redeveloped parcels. A copy of the adopted bylaw was provided in permit year IV annual report.

Public Education and Outreach

Since joining the Connecticut River Clean-Up Committee – Stormwater Subcommittee (CRCC-SC) in 2005, the Town of Ludlow has participated in a regional media marketing campaign to educate residents about stormwater. Attachment A of this report contains details of public education and outreach programs accomplished by the CRCC-SC and the Town of Ludlow. The attachment details activities completed during permit year VIII.

Illicit Discharge Programs

As outlined in the Permit, the Town of Ludlow has completed its storm sewer system map (100%) in a GIS format and, as mentioned above, Ludlow adopted regulatory mechanisms to prohibit non-stormwater discharges to its MS4. The Town of Ludlow was successful in obtaining a SRF loan in the amount of \$5 million dollars to eliminate the last Combined Sewer Overflow in Town. This work was completed and the last overflow in Town was eliminated in 2010.

Outfall Mapping Requirement

The Town of Ludlow completed the outfall mapping requirement. The database was developed to allow for tracking the frequency of maintenance operations.

It should be noted that some portions of the Town of Ludlow MS4 is interconnected with the MS4 owned and operated by the Massachusetts Turnpike Authority. A total of eight (8) outfalls are located on property with limited access and have stormwater contributions from both the Town of Ludlow and MTA. Therefore, assessing and maintaining these outfalls cannot be accomplished without relying on the MTA.

Certification of Eligibility – Endangered Species Act (ESA) and National Historic Preservation Act (NHPA)

The Town of Ludlow complied with this requirement of the permit during permit year II and was detailed in the annual report.

Discharges into Water Quality Impaired Waters

According to the *Massachusetts Year 2004 Integrated List of Waters*, published by MassDEP, water bodies in Ludlow are categorized as the following: Category 2 Haviland Pond, Red Bridge Impoundment, and Springfield Reservoir; Category 3 Harris Pond and Murphy Pond; Category 4a Minnechoag Pond; and Category 5 Alden Pond and Chicopee River. In addition, the *2004 Integrated List of Waters* lists Minnechoag Pond as the only water body covered by a TMDL within Ludlow.

The Town of Ludlow was successful in obtaining a SRF loan in the amount of \$5 million dollars to eliminate the last Combined Sewer Overflow in Town. This discharged into the Chicopee River. This work was completed in 2010.

Discharges into Waters with Approved Total maximum Daily Load Allocations

The Town of Ludlow's MS4 discharges to Minnechoag Pond for which a TMDL has been approved. Ludlow had design plans completed for the reconstruction of a portion of the drainage system discharging to Minnechoag Pond. The drainage improvement project was constructed in concert with a roadway/intersection improvement project, both of which are being funded by the Commonwealth of Massachusetts. This project was completed in 2010 with minor punch list items to be completed.

Stressed Basins

According to the *Stressed Basins in Massachusetts* report published by the Massachusetts Water Resources Commission, the Town of Ludlow is located within a Low Stress Basin. Therefore, the Town of Ludlow is not required to address the annual loss of recharge to groundwater. However, the Town of Ludlow requires development and redevelopment projects to maximize groundwater recharge through the regulator mechanisms adopted by the Town Meeting.

Measurable Goals

As discussed above, most of Ludlow's original measurable goals were met prior to the end of permit year V and have maintained compliance each permit year.

Summary

The Town of Ludlow has nearly completed all activities as presented in the Original Notice of Intent for the implementation of Stormwater Management Program. Over the past five permit years, Ludlow has also added Best Management Practices that provide further resource protection.

The Town of Ludlow purchased a vacuum truck for the purposes of maintaining our MS4 and sanitary sewer system. This purchase will help to meet some BMPs outlined in the Town of Ludlow's Stormwater Management Plan.

Part III. Summary of Minimum Control Measures

1. Public Education and Outreach

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 8 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 9
1a.	Create website links	DPW	Post links to EPA & DEP stormwater information	Links to DEP and EPA Stormwater information posted on Town of Ludlow website and DPW website.	Update links as necessary and continue EPA and MA DEP stormwater information links.
1b.	Make Stormwater Management Plan available.	DPW	Have Plan copies available at Town Hall, Library & DPW	The plan is available.	Keep copies of the plan available & update as necessary.
1c.	Hold a household hazardous waste collection day.	DPW	One collection per year.	A household hazardous waste day was held in September 2010. 25 Ludlow Residents participated in a regional event in September.	A household hazardous waste collection day is scheduled for September 2011. Document # of participants.
1d.	Cable access bulletins.	DPW	Air bulletins each year.	Bulletins aired during the year with upcoming stormwater events.	Continue to run bulletins and update with upcoming stormwater related events.
1e.	Regional Public Outreach	DPW	Regional Multi-Media Campaign	See Attachment A “Connecticut River Stormwater Committee Progress Report Jan. 1 to Dec. 31, 2010	Continue participation in CRSS and document outreach materials distributed.

1a. Additions – No addition at this time

2. Public Involvement and Participation

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 8 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 9
2a.	Form a stormwater committee.	Selectmen	Begin meeting.	Stormwater Committee met in YR VIII to review bylaw implementation.	Continue to hold committee meetings.
2b.	Develop stormwater bylaws.	Stormwater Committee	Public hearing held.	No public meetings held.	Hold public hearings, as needed, to revise/update general bylaw for future Annual Town Meeting.
2c.	Develop a catch basin stenciling program.	DPW	Number of catch basins selected.	Stenciling program developed. None stenciled due to budget constraints.	Continue stenciling program and recruit volunteers as funds allow
2d.	Town Meeting consideration of Bylaws.	Selectmen	Recorded vote of Town Meeting.	No revisions to Stormwater Management Bylaw adopted Article 18 October 2005 Special Town Meeting.	Revise/Update bylaw as necessary.

2a. Additions - No additions at this time

3. Illicit Discharge Detection and Elimination

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) -- Permit Year 8 (Reliance on non-municipal partners indicated, if any)	Planned Activities -- Permit Year 9
3a.	Draft a drainage system bylaw.	Stormwater Committee	Draft bylaw ready for Town Meeting in year 2. Record Vote	Language added to existing Stormwater Management Bylaw governing penalties illicit discharge connections. Voted passed: Article 24 October 2006 Special Town Meeting	Revise/update bylaw as needed.
3b.	Map the MS4.	DPW	Completed map.	Map Completed. Continue field verification and inspection project. MTA reliance.	Continue map updates and outfall and receiving water inspections to identify high priority area.
3c.	Hubbard Street Area Sewer Separation Project	DPW	Eliminate the remaining Combined Sewer Overflow in Town	Construction completed.	Job completed.

3a. Additions No additions at this time

4. Construction Site Stormwater Runoff Control

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 8 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 9
4a.	Develop construction site runoff control regulations.	Stormwater Committee	Interdepartmental policy in place	General Stormwater Bylaw adopted in October 2005 Special Town Meeting, Article 18. Encompasses development construction activities.	Revise/update bylaw to include more stringent enforcement options for violations.
4b.	Multi-Departmental Pre-Project Release Form	Building Department	Institute Multi-Department Release Form	Draft form adopted in October 2005. Use for every development project in Ludlow.	Revise/update development form as needed.
4c.	Pre-Construction Stormwater Permit	DPW	Record number of Permits Filed	Conducted 3 permit reviews and site inspections	Continue to review permits and site plans for adequate stormwater controls for any constriction activity.

4a. Additions - No additions at this time

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

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 8 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 9
5a.	Adopt bylaw.	Stormwater Committee	Prepare for Town Meeting.	Revise General Stormwater Bylaw adopted in October 2005. Encompasses development construction activities.	Revise/update bylaw to include more stringent enforcement clauses for violations.
5b.	Detention/Retention/Infiltration Basin Inspections	DPW	Inspection Log	Developed maintenance plan of action to be accomplished. Due to budget constraints these inspections could not all occur.	Develop inspection program for all detention, retention, and infiltration basins to ensure proper function during future storm events.

5a. Additions - No additions at this time

6. Pollution Prevention and Good Housekeeping in Municipal Operations

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 8	Planned Activities – Permit Year 9
6a.	Clean catch basins.	DPW	Clean all catch basins once per year.	Most Catch basins were cleaned due to budget constraints.	Catch basins will be cleaned.
6b.	Sweep streets.	DPW	Sweep all streets.	All streets were swept.	All streets will be swept subject to funding.
6c.	Management Education	DPW	Remain up-to-date with current Stormwater policies and regulation.	Stormwater seminars attended by staff.	Attend Stormwater management classes and/or seminars.
6d.	Catch Basin Replacement	DPW	Document No. of Catch Basins Replaced	4deep sump catch basins were installed, when old Cb's replaced	Replace existing non deep sump, non-hooded catch basin with deep sump and hood catch basins throughout urbanized area.

6e.	Vacuum Truck	DPW	Purchase Vacuum Truck to Maintain MS4	The DPW utilize the Vacuum Truck to maintain the MS4	Utilize Vacuum Truck to maintain MS4 including cleaning drain lines and catch basins.
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6a. Additions - No additions at this time

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

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 8 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 9
7a.	Map drainage to Minnechoag Pond.	DPW	Document drainage to pond & identify all possible sources.	The drainage to Minnechoag Pond has been mapped.	Completed drainage project. Work was funded and completed.
7a-1.	Reconstruct drainage system to Minnechoag Pond from East Street.	DPW	Reduce sediment load reaching the pond from a major street via flow from a substantial discharge.	Construction was completed on this project.	The completion of the drainage system this past construction season removed sediment/phosphorous loading to Minnechoag Pond.

7a. **Additions - No additions at this time**

Part IV. Summary of Information Collected and Analyzed

No significant amount of information has yet been collected.

Part V. Program Outputs & Accomplishments (OPTIONAL)

Programmatic

	(Preferred Units)	Response
Stormwater management position created/staffed	(y/n)	No
Annual program budget/expenditures **	(\$)	~120,000
Total program expenditures since beginning of permit coverage	(\$)	~633,000
Funding mechanism(s) (General Fund, Enterprise, Utility, etc)		General Fund

Education, Involvement, and Training

	(Preferred Units)	Response
Estimated number of property owners reached by education program(s)	(# or %)	~2500
Stormwater management committee established	(y/n)	Yes
Stream teams established or supported	(# or y/n)	No
Shoreline clean-up participation or quantity of shoreline miles cleaned **	(y/n or mi.)	Yes
Shoreline cleaned since beginning of permit coverage	(mi.)	0.25
Household Hazardous Waste Collection Days		
▪ days sponsored **	(#)	1
▪ community participation **	(# or %)	25 households
▪ material collected **	(tons or gal)	~495 gal
School curricula implemented	(y/n)	No

Legal/Regulatory

	In Place Prior to Phase II	Reviewing Existing Authorities	Drafted	Draft in Review	Adopted
Regulatory Mechanism Status (indicate with "X")					
▪ Illicit Discharge Detection & Elimination		X			
▪ Erosion & Sediment Control	X				X
▪ Post-Development Stormwater Management					X
Accompanying Regulation Status (indicate with "X")					
▪ Illicit Discharge Detection & Elimination					X
▪ Erosion & Sediment Control					X
▪ Post-Development Stormwater Management					X

Construction

	(Preferred Units)	Response
Number of construction starts (>1-acre) **	(#)	3
Estimated percentage of construction starts adequately regulated for erosion and sediment control **	(%)	100
Site inspections completed **	(%)	100
Tickets/Stop work orders issued **	(#)	0
Fines collected **	(# and \$)	0
Complaints/concerns received from public **	(#)	3

Post-Development Stormwater Management

	(Preferred Units)	Response
Estimated percentage of development/redevelopment projects adequately regulated for post-construction stormwater control	(%)	100
Site inspections (for proper BMP installation & operation) completed **	(%)	100
BMP maintenance required through covenants, escrow, deed restrictions, etc.	(y/n)	Y
Low-impact development (LID) practices permitted and encouraged	(y/n)	Y

Mapping and Illicit Discharges

	(Preferred Units)	Response
Outfall mapping complete	(%)	100 paper 100 electronic
Estimated or actual number of outfalls	(#)	310
System-Wide mapping complete (complete storm sewer infrastructure)	(%)	100
Mapping method(s)		
▪ Paper/Mylar	(%)	100
▪ CADD	(%)	0
▪ GIS	(%)	100
Outfalls inspected/screened **	(# or %)	0
Outfalls inspected/screened (Since beginning of permit coverage)	(# or %)	0
Illicit discharges identified **	(#)	0
Illicit discharges identified (Since beginning of permit coverage)	(#)	0
Illicit connections removed **	(#); and (est. gpd)	0
Illicit connections removed (Since beginning of permit coverage)	(#); and (est. gpd)	0
% of population on sewer	(%)	60
% of population on septic systems	(%)	40

Operations and Maintenance

Average frequency of catch basin cleaning (non-commercial/non-arterial streets) **	(times/yr)	~1
Average frequency of catch basin cleaning (commercial/arterial or other critical streets) **	(times/yr)	1
Qty of structures cleaned **	(#)	~200
Qty. of storm drain cleaned **	(%, LF, mi.)	200 lf
Qty. of screenings/debris removed from storm sewer infrastructure **	(lbs. or tons)	100 cy
Disposal or use of screenings (landfill, POTW, compost, beneficial use, etc.) **	(location)	Disposal
Basin Cleaning Costs		
• Annual budget/expenditure (labor & equipment)**	(\$)	\$100,000
• Hourly or per basin contract rate **	(\$/hr or \$ per basin)	\$300/hr
• Disposal cost**	(\$)	\$
Cleaning Equipment		
• Clam shell truck(s) owned/leased	(#)	0
• Vacuum truck(s) owned/leased	(#)	1
• Vacuum trucks specified in contracts	(y/n)	Yes
• % Structures cleaned with clam shells **	(%)	0
• % Structures cleaned with vector **	(%)	100
Average frequency of street sweeping (non-commercial/non-arterial streets) **	(times/yr)	1
Average frequency of street sweeping (commercial/arterial or other critical streets) **	(times/yr)	3
Qty. of sand/debris collected by sweeping **	(lbs. or tons)	400cy
Disposal of sweepings (landfill, POTW, compost, beneficial use, etc.) **	(location)	Compost
Annual Sweeping Costs		
• Annual budget/expenditure (labor & equipment)**	(\$)	~\$25,000
• Hourly or lane mile contract rate **	(\$/hr. ln mi.)	\$
• Disposal cost**	(\$)	
Sweeping Equipment		
• Rotary brush street sweepers owned/leased	(#)	1
• Vacuum street sweepers owned/leased	(#)	0
• Vacuum street sweepers specified in contracts	(y/n)	no

Operations and Maintenance (cont)

• % Roads swept with rotary brush sweepers **	%	100
• % Roads swept with vacuum sweepers **	%	0
Reduction (since beginning of permit coverage) in application on public land of: ("N/A" = never used; "100%" = elimination)		
▪ Fertilizers	(lbs. or %)	
▪ Herbicides	(lbs. or %)	
▪ Pesticides	(lbs. or %)	
Integrated Pest Management (IPM) Practices Implemented	(y/n)	Y
Average Ratio of Anti-/De-Icing products used ** (also identify chemicals and ratios used in specific areas, e.g., water supply protection areas)	% NaCl % CaCl ₂ % MgCl ₂ % CMA % Kac % KCl % Sand	90 5 5
Pre-wetting techniques utilized **	(y/n or %)	Yes
Manual control spreaders used **	(y/n or %)	Yes
Zero-velocity spreaders used **	(y/n or %)	Yes
Estimated net reduction or increase in typical year salt/chemical application rate	(±lbs/ln mi. or %)	No change
Estimated net reduction or increase in typical year sand application rate **	(±lbs/ln mi. or %)	No change
% of salt/chemical pile(s) covered in storage shed(s)	(%)	100
Storage shed(s) in design or under construction	(y/n or #)	N
100% of salt/chemical pile(s) covered in storage shed(s) by May 2008	(y/n)	Yes

Water Supply Protection

Storm water outfalls to public water supplies eliminated or relocated	# or y/n	None
Installed or planned treatment BMPs for public drinking water supplies and their protection areas	# or y/n	None
<ul style="list-style-type: none">• Treatment units induce infiltration within 500-feet of a wellhead protection area	# or y/n	None

Attachment A

**Connecticut River Stormwater Committee Progress Report
January 1 to December 31, 2010**

Attachment B

2010 Household Hazardous Waste Day Results

**CONNECTICUT RIVER STORMWATER COMMITTEE
2010 ANNUAL REPORT
JANUARY 1 TO DECEMBER 31, 2010**

The following is a summary of the work of the Connecticut River Stormwater Committee during the 2010 calendar year:

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

Pilot Projects

PVTA Buses

The Think Blue campaign launched new outreach this year on the Pioneer Valley Transit Authority's (PVTA) buses. During 2010, the design and structure of the PVTA outreach was completed. The program will include the Think Blue cigarette butt and dog poop PSAs, formatted horizontally as billboards on both the outside and inside of the buses. The exterior billboards are 30"x80" full color mounted on the passenger-side of the bus. The interior billboards are 11"x28" full color mounted on the interior of the bus.

The campaign will run February 1 – July 1, 2011 out of the Northampton PVTA garage (Routes R42 Northampton to Williamsburg; R43 Northampton to Amherst; and R48 Northampton to Holyoke) and July 1, 2011 – January 31, 2012 out of the Springfield Garage (Routes to be determined). Cost for the campaign is \$6,500 for one year and includes 50 free interior PSAs. The entire cost of the program will be covered by an EPA Targeted Watershed Initiative Grant awarded to PVPC. A portion of the EPA grant is to conduct outreach about stormwater pollution. Given this projects potential to reach a very wide audience across the Pioneer Valley, it was deemed an appropriate use of EPA funds.

Movie Theaters

The Stormwater Committee once again revisited the idea of running Think Blue PSAs in local movie theaters prior to the movie previews. Price quotes were considerably higher than anticipated at \$8,000 for 13 weeks. This included cinemas in West Springfield, Springfield Plaza and the Eastfield Mall. Because of the high cost and limited network, the Committee decided not to proceed with this outreach media at this time.

Local Mall Postings

In late 2010, the Stormwater Committee investigated the possibility of placing poster size PSA in local malls. The Hampshire Mall on Russell Street in Hadley and the Holyoke Mall at Ingleside in Holyoke will place eight (8) 22"x28" mounted lightweight poster boards of the cigarette butts PSA at each of the malls. The posters will be installed on April 1, 2011 at no charge.

Local Media Outlets

The Think Blue lawn fertilizer PSA ran as a 1/8 page ad in the September 2010 Turley Publications: *Agawam Advertiser News*, *Chicopee Register*, *Country Journal*, *Holyoke Sun*, *Ludlow Register*, and *South Hadley Town Reminder*.

Local cable access stations were contacted in follow up to our initial outreach to them three years ago. PVPC provided an updated CD with the radio, video and poster PSAs for posting on cable access television as well as town websites.

Greenscapes

Outreach Materials

The design of a Greenscapes program display remains on-going, seeking to promote brand recognition as well as the best messaging to promote behavior change that reduces pollutant loading through land care practices. A 6'x8' large format display has been designed by PVPC and works well as a backdrop for a table display at an event. This display was used at the Ecological Landscaping Association's annual conference in February 2010. A 3-sided tabletop version has been designed with bulleted tips about organic land care practices including mowing tips, healthy lawn tips, and watering tips.

A Greenscape Kit is now available for people who call requesting more information about organic land care practices. It is essentially a 2-sided pocket folder that contains all of the outreach materials we currently use on this topic. The Think Blue magnets and pet waste flier are also included.

In partnership with the Greenscapes Coalition in eastern Massachusetts, a flier entitled "Can you reduce your daily water use by 5 gallons?" is now available. The flier promotes water conservation through various land care practices.

Greenscapes Regional Meeting 12/1/10 in Boston

The Greenscapes Coalition, mostly based in eastern Massachusetts, is gearing up for the 2011-12 land care season. Members are very interested in tailoring Greenscapes to better address the priorities identified for education and outreach in the 2010 MS4 permit. The Stormwater Committee will continue to partner with the coalition in the development of new outreach materials and methodologies for promoting organic land care practices to abate stormwater pollution.

Distribution of "Preventing Stormwater Pollution" Factsheets update

Utilizing DLTA FY09 funds, we have completed three one-page factsheets about stormwater best management practices targeted at the restaurant industry, the automotive industry, and small

business. These commercial target audiences were chosen based on the Draft North Coastal 2010 NPDES MS4 Permit. Larger affiliation/membership organizations as well as local regulators to seek their assistance in distributing the factsheets to their membership.

Automotive Guide - distribution 7,971 people/businesses

New England Service Station and Automotive Repair Association – Automotive BMP factsheet emailed to 171 member list serve in March 2010. Organization also interested in having a presentation on this issue at their annual meeting in December.

Massachusetts Vehicle Check: Cleaner Air and Safer Roads, MA DEP and RMV – Provided short article about Think Blue and a link to the flier on our website in the Fall 2010 *Inspection Update* newsletter mailed to 7,800 people statewide.

Food Industry Guide – distribution 508 people/businesses

Massachusetts Restaurant Association – Food industry BMP guide distributed at organization event in March 2010 (200 fliers).

Community Involved in Sustainable Agriculture (CISA) – Information about the Think Blue campaign and a link to the .pdf version of the guide appeared in the May 2010 issue of the Local Hero newsletter (308 newsletters).

Green Restaurant Association – Attempted to contact between February and March 2010 but non-responsive.

New England Food Show, Boston, MA – Food show involves a large list of participants but difficult to reach via conference programming.

Small Business Guide – distribution 1,164 people/businesses

Chicopee Chamber of Commerce – Included 300 fliers in a March 2010 membership mailing.
Greater Easthampton Chamber of Commerce – Included 400 fliers in a March 2010 membership mailing.

Holyoke Chamber of Commerce – Included 464 fliers in a Spring 2010 membership mailing.

The following Chambers were non-responsive to requests to distribute flier: Agawam, East Longmeadow, Longmeadow, South Hadley, Springfield, and Greater Westfield Chambers of Commerce.

School Curriculum CD Distribution Update from Communities

The curriculum developed by Selser Memorial School in Chicopee under our FY09 programming has been scanned and converted to a .pdf. The .pdf was posted to PVPC's FTP server where members could download it and distribute copies to schools in member communities.

Agawam is working with the Superintendent of Schools and the district Curriculum Coordinator to identify places under MCAS Strands where there are water pollution related opportunities for grades 4-9. Agawam is also sponsoring the “Watershed Waltz” puppet theater about watershed ecology for interested schools.

Connecticut River Water Quality Monitoring Project

PVPC has been involved in on-going E. coli monitoring of the CT River for the past three years. Monitoring in 2008 and 2009 was funded under an EPA Targeted Watershed Initiative Grant. Monitoring in 2010 was funded by a MA DEP 604b ARRA grant. This year we are also expanding the monitoring to area tributaries. The data is available for public viewing at: <http://www.umass.edu/tei/mwwwp/ctrivermonitoring.html>

NPDES MS4 Notice of Intent and Scope of Work for Education and Outreach Measure

The Draft 2010 NPDES MS4 Permit for the Merrimack, Interstate and South Coastal regions was issued October 24, 2010. The Pioneer Valley region is covered under the “Interstate”. A draft scope of work for addressing the 2010 Draft MS4 Permit requirements was developed for review at the January 2011 meeting. In general, businesses and developers will be targeted in years 1, 3 and 5; residential and industrial facilities in years 2 and 4.

Based on the North Coastal 2010 Permit, there are several new requirements for Education and Outreach in the new NPDES MS4 Permit. These requirements are as follows:

- a. Four target audiences:
 - Residents, businesses, institutions, and commercial facilities
- b. Define goals of the outreach program and objectives of changes in behavior and knowledge
- c. Distribute a minimum of two (2) educational messages over the permit term to each audience
- d. Messages to each audience must be spaced at least a year apart
- e. Show evidence of focused messages and audiences as well as demonstrate the defined goal of the program has been achieved
- f. Identify methods to evaluate effectiveness of program (behavior modification and increased awareness)

Given these new requirements a Draft Scope of Work for Stormwater Committee for new 5-year permit term needs to be developed for compliance. The following approach has been identified to meet permit requirements:

1. Define each of our target audiences more specifically. For example, residents = pet owners and lawn owners; two distinct groups of residents generating different pollutants.
2. Define behavior by target audience and pollutant associated with behavior.
3. Define message and outreach/delivery methodology
4. Determine mode for measuring effectiveness of outreach at: behavior modification, and pollutant load reduction.

Community Outreach

MA DEP 319 Grant Stormwater Training Sessions and Survey Summary

PVPC has partnered with VHB and a number of other organizations across the state to offer training on stormwater related issues. PVPC distributed a questionnaire with 16 potential

workshop topics to the 22 MS4s in the region to determine priority topics for a workshop that would be offered in the Fall of 2011. Priority topics based on survey results included: MA Stormwater Regulations; building an effective stormwater maintenance program; stormwater utilities; and planning and designing better development sites. The workshop has been scheduled for September 20, 1011.

DLTA FY10 – Regionalizing Stormwater Services Feasibility Study
PVPC received funding to examine ways regionalizing services can provide cost savings to communities. One of the pilot feasibility studies examined operation and management of stormwater related services such as catchbasin cleaning, street sweeping, MS4 permit requirements such as outfall mapping and monitoring. Due to the delay of issuance of the 2010 Interstate MS4 permit, committee members opted to not guess at their new requirements but rather focus on the work they currently perform and ways it could be accomplished through regional cooperation. The project resulted in an Invitation for Bid for Regional Highway Department Services issued jointly between Agawam, Chicopee and West Springfield. Bid results were due March 8, 2011 and resulted in 4 contracts for services in the region.

Other Outreach Events

Think Blue and Greenscapes materials were distributed at the following events:

- Wednesday, April 14, 2010 @ 6:30 pm Wistiriahurst Museum, Holyoke – Western Mass Gardner’s Club – “Getting your Lawn Off Drugs: Why this so important for our local waters
- Saturday, April 17, 2010 Agawam Earth Day Festival Think Blue Display
- Monday, April 5, 2010, Channel 22 News – coverage of area flooding and across New England due to 15 inches of rain. Discussed watershed dynamics and importance of stormwater management
- “Keep Springfield Beautiful” and Earth Day cleanup events
- Granby – Farmer’s Market sponsored by the Agricultural Commission

General Administration

- FY10 Work Plan and Budget
- Water Infrastructure Finance Commission Hearing
Monday, November 15, 2010 @ 10 a.m. at PVPC
The Water Infrastructure Finance Commission was appointed by the Governor to develop funding options to finance water infrastructure needs throughout the Commonwealth. PVPC hosted one of four statewide hearings. Communities across western Massachusetts attended.

- Meeting Dates – The Stormwater Committee met four times in 2010, and on two other dates about relevant business:

December 10, 2009

April 12, 2010

June 15, 2010

August 18, 2010

November 3, 2010

January 26, 2011

Town	total cars	1/2 car \$28 (10 gal)	full car \$48 (25 gal)	town #s car loads
actual numbers				
our counts				
East Longmeadow	71	49	36	0
Hampden	17	9	9	0
Longmeadow	64	41	32	3
Ludlow	25	17	13	0
Wilbraham	32	14	21	0
Sub-totals	209	130	111	3
Totals		130	114	
Therm.	13			
Thermostats	6			
Give away therm	13			