

Municipality/Organization: Town of Hadley

EPA NPDES Permit Number: MAR041008

MaDEP Transmittal Number: W- 222972

**Annual Report Number
& Reporting Period: No. 9: May 1, 2011 - April 30, 2012**

NPDES PII Small MS4 General Permit Annual Report

Part I. General Information

Contact Person: Gary Girouard Title: Director of Public Works

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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: 

Printed Name: David Nixon

Title: Town Administrator

Date: 4/27/12

Part II. Self-Assessment

The Town of Hadley received confirmation for coverage under the General Permit for its Municipal Separate Storm Sewer System (MS4) on May 10, 2003. In accordance with the NPDES Phase II Stormwater requirements, Hadley has completed the required annual self-assessment compliance review for its Phase II Stormwater Program. 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; and
6. Changes in Identified BMPs or Measurable Goals.

The Town continued its public education and outreach efforts by distributing fact sheets and providing them for download on the Town website. Fact sheets and mailings typically target residences and provide applicable information on stormwater runoff, pesticides and fertilizers, vehicle washing, proper pet waste disposal, etc. The Town also broadcast the EPA video "After the Storm" on the local cable access channel. The Town also meets internally as needed on items such as proposed developments, site inspections, bylaw changes and approvals, and other coordination efforts. The Town has also coordinated in the past with the Pioneer Valley Regional Planning Commission. It is expected that coordination will increase once the new permit is released.

During previous years, the Town has mapped all stormwater structures within the Town's urbanized area, including catch basins, manholes, outfalls and culverts. Approximately 40 outfalls and 400 catch basins have been located to date. The Town performed illicit discharge screening at the same time, and did not detect any evidence of illicit discharge activities.

The Town has adopted bylaws to protect water quality, including an Illicit Discharge Bylaw and an Erosion and Sediment Control for Stormwater Management Bylaw. Bylaws prohibit illicit discharges in the MS4, require that erosion and sediment controls be in place during construction activities, and mandate that projects conform to the Massachusetts Stormwater Handbook. To ensure compliance, proposed projects are reviewed by the Conservation Commission, Planning Board, and/or Department of Public Works to ensure proper design. The Town also requires large projects be supervised by an outside engineering company and various Town departments conduct inspections periodically.

The Department of Public Works also conducts catch basin cleaning and street sweeping throughout the year, typically targeting priority basins and street first before moving onto less critical areas. Material is transported to the transfer station where they are stored for testing before being removed for final offsite disposal.

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 9 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Next Permit Term
1A	Partnership Lake Warner – Mill River Steering Committee	Highway Department	Specific goals set by Lake clean-up organization	The Lake Warner – Mill River Steering Committee was dissolved during Permit Year 5. No additional work occurred during Permit Year 9.	The Mill River Steering Committee is not expected to be reinstated. Continue cooperating with other organizations such as the Stormwater Management Steering Committee and Pioneer Valley Regional Planning Commission as necessary as outlined in BMPs 2B and 2E.
Revised		Department of Public Works			
1B	Distributing Fact Sheets Brochures with Water Bills	Highway Department & Water Department	Distribution to all Hadley households	Stormwater fact sheets were provided to Town residents for download via the Town’s website. Fact sheets included general information on stormwater runoff, pesticides and fertilizer usage, pet waste disposal, residential vehicle washing, and proper disposal of hazardous waste. Additionally, a certified mailing was sent to approximately 20 residences located in close proximity to public drinking water wells in March 2011. The mailing contained a fact sheet and letter with information on illegal dumping, pet waste, etc.	Continue to provide stormwater fact sheets for download. Explore the use of additional public education materials to increase public awareness. Conduct a mass mailing with tax bills or water bills.
Revised	Distribute Fact Sheets Brochures	Department of Public Works & Water Department			
1C	Presentation of Educational Video on Public Access Cable.	Highway Department	Provide generic or regional video, by others, for 2-4 airings	Planning Board and Town Selectmen meetings were televised on the local public access cable network, including stormwater information on development projects. The EPA video “After the Storm” was broadcast twice during Permit Year 9, on May 10 and 12, 2011.	Continue to broadcast Planning Board and Town Selectmen meetings on the cable channel. Continue to broadcast the EPA video “After the Storm” on the local cable channel as airtime is available.
Revised	Broadcast Stormwater Meetings and Informational Videos	Department of Public Works	Televised meetings and informational video for 2 airings		

1a. Additions.

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 9 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Next Permit Term
1D	Publish Stormwater Information on the Highway Website	Highway Department	Website posts on stormwater information. Record # of website hits	The Town’s DPW website provided the Annual Water Quality Report, water conservation tips, and a fact sheet on proper stormwater management for download. The fact sheet contained general information on stormwater runoff, pesticides and fertilizer usage, pet waste disposal, residential vehicle washing, and proper disposal of hazardous waste.	A new website will go live in May 2012. The site will continue to provide stormwater fact sheets, as well as provide additional links to outside stormwater website such as EPA. Provide additional educational information for download as feasible.
Revised	Publish Stormwater Information on the Town Website	Department of Public Works			

2. Public Involvement and Participation

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 9 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Next Permit Term
2A	Partnership Lake Warner – Mill River Watershed Steering Committee	Highway Department	Specific goals set by Lake clean-up organization	The Lake Warner – Mill River Steering Committee was dissolved during Permit Year 5. No additional work occurred during Permit Year 9.	The Mill River Steering Committee is not expected to be reinstated. Continue cooperating with other organizations such as the Stormwater Management Steering Committee and Pioneer Valley Regional Planning Commission as necessary as outlined in BMPs 2B and 2E.
Revised		Department of Public Works			
2B	Establish a NPDES Steering Committee to Oversee Permit Implementation	Town Administrator, David Nixon	Include members from all town boards and committees	The Stormwater Management Steering Committee was created from 2003 through 2005, originally consisting of the Highway superintendent and a consultant. Representatives from other Town boards and commissions were added in 2005. The Committee prepared bylaws to satisfy Phase II erosion & sediment control and illicit discharge requirements as outlined in BMPs 3G, 4A, and 5A. The Committee has not met since the bylaws were created.	The Stormwater Management Steering Committee will likely meet again once the new Phase II requirements are finalized by MADEP, expected to occur during the next permit term. The Committee will review the new regulations to determine applicability to Hadley.
Revised					
2C	Hold Public Meetings for Input on the Stormwater Program	NPDES Steering Committee	Hold three public meetings on the Town's proposed stormwater program	The Department of Public Works met with the Board of Selectmen and Conservation Commission as needed to discuss stormwater NOIs and other stormwater projects in town. The meetings were televised on the local cable channel (see BMP 1C). Internal Public Works meetings are held as needed to coordinate among personnel.	Continue to meet with other Town departments to coordinate on stormwater projects. Televisе public meetings on the local cable channel.
Revised		Board of Selectmen, Department of Public Works	Public broadcast of meetings		

2a. Additions.

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 9 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Next Permit Term
2D	Community Participation	Highway Department	Track the results of Hazardous Waste Collection	The Town did not participate in the Amherst Hazardous Waste Collection event due to lack of interest during previous events (only 4 cars during the most recent event).	Evaluate the feasibility of reestablishing participation the HHW event. Explore ways to improve attendance of Hadley residents.
Revised	Community Participation in Household Hazardous Waste Collection	Department of Public Works			
2E	Create a Partnership with the Pioneer Valley Planning Commission	Planning Board / Highway Department	Establish an agreement for the PVPC to provide monthly assistance to the Town of Hadley	Hadley has a contract with the Pioneer Valley Regional Planning Commission (PVPC) to provide professional assistance on regulatory and zoning development.	Hadley will continue to partner with the PVPC for assistance, particularly when the new Phase II regulations are released by MADEP, expected to occur during the next permit term.
Revised		Planning Board, Department of Public Works	Establish an agreement for the PVPC to provide assistance to the Town of Hadley as needed		
2F	Volunteer Roadway Cleanup	Highway Department / Volunteers	Number of volunteers and trash/debris collected	Hadley roads were cleaned by the Department of Corrections with events taking place approximately three times during the Spring, Summer, and Fall months.	Continue to work with the Department of Corrections to collect roadway trash and debris. Begin tracking the number of participants in the event and trash/debris collected.
Revised		Department of Public Works, Volunteers			

3. Illicit Discharge Detection and Elimination

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 9 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Next Permit Term
3A	Partnership with the Massachusetts Highway Department	Highway Department	Mapping of drainage system within Route 9 corridor	The Town created a map of all catch basins within the Route 9 corridor which was completed in July 2005. Approximately 40 outfalls and 400 catch basins have been located to date. No additional structures were mapped during Permit Year 9.	Continue to update the drainage map to include any new structures located or installed within the Town.
Revised		Department of Public Works			
3B	Storm Drain System Map with the Urbanized Area	Highway Department	Mapping of drainage system within the Urbanized Area and outwardly as possible	Mapping of catch basins, manholes, outfalls and culverts in the Urbanized Area was completed in July 2005. Approximately 40 outfalls and 400 catch basins have been located to date. No additional structures were mapped during Permit Year 9.	Continue to update the drainage map to include any new structures located or installed within the Town.
Revised		Department of Public Works	Mapping of drainage system within the Urbanized Area		
3C	Dry Weather Screening and Video Inspection	Highway Department	Screen 20% of outfalls per year, video suspicious pipelines yearly	Outfall screening in the urbanized area was completed in Spring 2006. No significant illicit connections were found. No additional sampling was performed during Permit Year 9.	Pursue additional illicit discharge detection efforts in locations outside the Urbanized Area as funding and personnel allows.
Revised		Department of Public Works			
3D	Establish Illicit Discharge Hotline & Provide Information in Water Bills	Police / Fire	Hotline for citizens to report illicit discharges established	No calls relating to illicit discharge were received during this permit year. Additional calls and complaints pertaining to flooding or requested maintenance were received and addressed by the Department of Public Works as appropriate. The DPW worked with other departments to coordinate response efforts as needed.	Continue to address all calls as received and maintain a log with a record of follow-up actions. Provide contact information to residents on illicit discharges in mailed bills or via the website in addition to current materials.
Revised		Police, Fire & Department of Public Works			

3a. Additions.

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 9 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Next Permit Term
3E	Coordinate with Neighboring Towns to Establish a Household Hazardous Waste (HHW) Event for Residents	Highway Department	Annual Hazardous Waste Day	The Town did not participate in the Amherst Hazardous Waste Collection event due to lack of interest during previous events (only 4 cars during the most recent event).	Evaluate the feasibility of reestablishing participation the HHW event. Explore ways to improve attendance of Hadley residents.
Revised		Department of Public Works			
3F	Storm Drain System Map Outside the Urbanized Area	Highway Department	Mapping of drainage system outside the Urbanized Area	Mapping of catch basins, manholes, outfalls and culverts outside the Urbanized Area is ongoing as budget allows. Approximately 40 outfalls and 400 catch basins have been located to date. No additional structures were mapped during Permit Year 9.	Continue to update the drainage map to include newly located or installed structures within the Town.
Revised		Department of Public Works			
3G	Develop an Illicit Discharge By-Laws	NPDES Steering Committee, Highway Dept., Planning Board	Drafting, public meetings adoption within three years	The Hadley Planning Board adopted an illicit discharge bylaw on July 5, 2005. No additional action was taken during Permit Year 9.	Continue to enforce the bylaw.
Revised		NPDES Steering Committee, Department of Public Works, Planning Board			

4. Construction Site Stormwater Runoff Control

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 9 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Next Permit Term
4A	Develop By-Laws for Land Disturbances Over 1 Acre	NPDES Steering Committee	Drafting, public meetings adoption within three years	The Hadley Planning Board adopted an Erosion and Sediment Control for Stormwater Management bylaw on July 5, 2005 which in part mandates that erosion and sediment controls be in place for all construction projects to be approved. No additional action was taken during Permit Year 9.	Continue to enforce the bylaw. Explore additional erosion control enforcement measures as needed.
Revised		NPDES Steering Committee, Department of Public Works, Planning Board			

4a. Additions.

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 9 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Next Permit Term
4B	Construction Site Runoff Inspection	Highway Department / Outside Firm	Conduct on-site inspections during construction activities	Hadley requires on-site supervision by an outside, third party engineering firm during all large scale construction activities. This is paid for by the developer. The Town also performs periodic site inspections as part of routine operations to ensure erosion and sediment controls are in place and being properly maintained. Town inspections also check the stormwater system construction is progressing according to the approved design.	Continue to enforce the current inspection program.
Revised		Department of Public Works, Outside Firm			

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 9 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Next Permit Term
4C	Pre-Construction Project Review	Planning Board / Highway & Conservation Commission	Require pre-construction review.	Construction projects were reviewed by the Conservation Commission, Planning Board, and/or Department of Public Works as necessary to ensure the proposed plans were in compliance with Local, State and Federal regulations and potential environmental impacts were minimized. The Department of Public Works worked with other Town departments to ensure proper design as necessary. Projects must conform to the Massachusetts Stormwater Handbook for construction approval.	Continue current site review methods.
Revised		Planning Board, Department of Public Works, Conservation Commission			
4D	Establish a Procedure for the Receipt of Information Submitted by the Public	Highway Department / Conservation Commission	Record number of phone calls to the Highway Department.	As discussed in BMP 3D, calls and complaints were received by the Department of Public Works. All construction site issues in Town were handled through the Department of Public Works and the Conservation Commission. Additional Town departments, including the Planning Board, Board of Health, and/or Building Inspector coordinate as required to address the complaint. Contact information is provided in informational flyers and on the Town website.	The Department of Public Work will continue to handle stormwater related phone calls. The Department of Public Works phone number will continue to be advertised through existing media. Track calls and record actions taken annually.
Revised		Planning Board, Department of Public Works, Conservation Commission	Address public concerns and phone calls		

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 9 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Next Permit Term
5A	Develop a Post Construction Runoff Control By-Law for Sites Over 1 Acre	NPDES Steering Committee, Highway Dept., Planning Dept	Drafting, public meetings adoption within three years	The Hadley Planning Board implemented an Erosion and Sediment Control for Stormwater Management bylaw on July 5, 2005 which in part mandates that projects conform to the Massachusetts Stormwater Management Handbook. No additional action was taken during Permit Year 9.	Continue to enforce the bylaw.
Revised		NPDES Steering Committee, Department of Public Works, Planning Board			

5a. No additions at this time.

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 9 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Next Permit Term
Revised					

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 9 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Next Permit Term
6A	Existing Spill Prevention Control Plans for Town Facilities	Highway Department	Revise plan/conduct annual training	SPCC Plans for the DPW Yard and Wastewater Treatment Facility were most recently updated in 2007 and 2008, respectively. Plan updates are due to occur during Permit Years 10 and 11, respectively. Plan requirements are followed at both facilities during all facility operations.	Continue complying with SPCC Plans. Prepare an updated SPCC Plan for the DPW Yard during Permit Year 10. Prepare SPCC plans for other town facilities as necessary.
Revised		Department of Public Works			
6B	Training Program for Maintenance and Landscape Crews	Highway Department	Develop pollution prevention workshop for municipal employees	Pollution prevention topics were informally discussed as part of routine Department of Public Works operations meetings.	Continue training of town employees, particularly the Department of Public Works.
Revised	Conduct Town Employee Stormwater Training	Department of Public Works			
6C	Incorporate the Use of Road Salt Alternatives for Deicing	Highway Department	Reduce the amount of road salt used by 25%	The Department of Public Works purchased 8,293 gallons of calcium chloride mix to reduce sand loads to the roadways. 493 tons of salt and 1,675 tons of sand were purchased for use during Permit Year 9. Sand and salt are typically mixed at approximately a 3:1 sand to salt ratio.	Continue to explore salt reduction options as available.
Revised		Department of Public Works	Reduce the amount of road salt used		

6a. Additions.

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 9 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Next Permit Term
6D	Mark Storm Drains with Buttons or Stencils	Highway Department and Volunteers	Mark or stencil storm drains as funding allows	The Department of Public Works decided not to use volunteers and instead use DPW personnel to perform this task. Catch basins have been stenciled with a nearby arrow located in the street to easily locate basins when covered with leaves, snow, debris, water, etc.	Explore using stencils on catch basins, such as labeling catch basins draining to surface waters as “No Dumping – Drains to River”. Repaint faded stencils and mark new basins when they are constructed in the Town as funding and manpower are available.
Revised		Department of Public Works and Volunteers			
6E	Clean Catch Basins	Highway Department	Clean half of catch basins annually	The Department of Public Works cleaned approximately 50 to 60 catch basins using a Vactor truck shared with the Wastewater Department during Permit Year 9. The Department of Public Works cleaned high priority basins first, followed by leaching basins, and finally the remainder of catch basins. The DPW also rebuilt approximately 12 catch basins found to be collapsing or otherwise failing during routine inspections or in response to calls from the public.	Continue catch basin cleaning program. Clean high priority basins first followed by lower priority areas. Continue to repair drainage structures as necessary in response to public complaints. Currently, 4 catch basins are scheduled for repair during the next permit term.
Revised		Department of Public Works			
6F	Track Catch Basin Cleanings	Highway Department	Sediment quantity records and dates cleaned of each catch basin	The Town utilized information collected previously to target specific basins for more frequent cleaning (See BMP 6E). High priority basins typically include prone to sediment accumulation such as those located at the bottom of a hill, in high traffic areas such as the downtown district, or located in environmentally sensitive areas. Disposal occurred as outlined in BMP 6G.	Track sediment accumulation for future cleaning priorities.
Revised		Department of Public Works			

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 9 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Next Permit Term
6G	Properly Dispose of Catch Basin Cleanings	Highway Department	Disposal of catch basin cleanings at an approved landfill	The Town previously received DEP approval for temporary storage of catch basin cleanings at the DPW garage, however the storage location was recently changed to the transfer station as approved by DEP. The DPW constructed a containment area in a low spot at the transfer station to store catch basin cleanings. Sediments are then sampled for environmental compliance by Huntley before being removed by Solid Waste Solutions for proper disposal.	Continue to store and properly dispose of catch basin cleanings in compliance with DEP regulations.
Revised		Department of Public Works			
6H	Sweep Streets in Town	Highway Department	Street sweeping schedule	Continued a street sweeping program in town that included two sweeping events throughout the year. Urbanized and commercial areas were cleaned more frequently as necessary. The typical method of doing a pre-sweep of heavily sanded streets in March was not conducted this year due to the mild winter and reduced sand application.	Continue street sweeping program annually and evaluate future sweeping priorities.
Revised		Department of Public Works			
6I	Properly Dispose of Street Sweeping Cleanings	Highway Department	Disposal of street sweeping cleanings at the Hadley Transfer Station	A total of 357 cubic yards of street sweeping residuals were generated from DPW operations. The Department of Public Works brought all street sweepings to the Transfer Station for storage. A low spot on-site was used to retain the sediment. The Town used two street sweepers for its cleaning efforts.	Continue to track quantities and properly dispose of street sweeping cleanings.
Revised		Department of Public Works			

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 9 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Next Permit Term
6J Revised	Ensure Covered Storage for Salt Materials	Highway Department Department of Public Works	All salt is covered in the storage shed	All salt materials were stored under cover in the salt storage shed or nearby barn.	Continue storing salt materials in the covered storage shed or barn.
6K Revised	Inspect and Maintain Culverts and Outfalls	Highway Department Department of Public Works	All culverts and outfalls functioning as intended	Culverts and outfalls were inspected and maintained during routine operations or in response to a complaint as outlined in BMP 4D. High incident structures were inspected more frequently.	Continue to inspect and maintain culverts and outfalls.
6L Revised	Inspect and Maintain Stormwater BMPs	Highway Department Department of Public Works	All stormwater BMPs functioning as intended	The Department of Public Works performed inspections of Town-owned BMPs during routine operations, and none required maintenance during Permit Year 9. There are several detention ponds and Vortechnic units in unapproved subdivisions that are maintained by outside contractors.	Continue current inspection activities. If necessary, provide BMP maintenance to facilitate proper operation.

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 9 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Next Permit Term
1A Revised	Partnership Lake Warner – Mill River Steering Committee	Highway Department Department of Public Works	Specific goals set by Lake clean-up organization	The Lake Warner – Mill River Steering Committee was dissolved during Permit Year 5. No additional work occurred during Permit Year 9.	The Mill River Steering Committee is not expected to be reinstated. Continue cooperating with other organizations such as the Stormwater Management Steering Committee and Pioneer Valley Regional Planning Commission as necessary as outlined in BMPs 2B and 2E.
3C Revised	Dry Weather Screening and Video Inspection	Highway Department Department of Public Works	Screen 20% of outfalls per year, video suspicious pipelines yearly	Outfall screening in the urbanized area was completed in Spring 2006. No significant illicit connections were found. No additional sampling was performed during Permit Year 9.	Pursue additional illicit discharge detection efforts in locations outside the Urbanized Area as funding and personnel allows.
4A Revised	Develop By-Laws for Land Disturbances Over 1 Acre	NPDES Steering Committee NPDES Steering Committee, Department of Public Works, Planning Board	Drafting, public meetings adoption within three years	The Hadley Planning Board adopted an Erosion and Sediment Control for Stormwater Management bylaw on July 5, 2005 which in part mandates that erosion and sediment controls be in place for construction projects. No additional action was taken during Permit Year 9.	Continue to enforce the bylaw. Explore additional erosion control enforcement measures as needed.
6A Revised	Existing Spill Prevention Control Plans for Town Facilities	Highway Department Department of Public Works	Revise plan/conduct annual training	SPCC Plans for the DPW Yard and Wastewater Treatment Facility were most recently updated in 2007 and 2008, respectively. Plan updates are due to occur during Permit Years 10 and 11, respectively. Plan requirements are followed at both facilities during all facility operations.	Continue complying with SPCC Plans. Prepare an updated SPCC Plan for the DPW Yard during Permit Year 10. Prepare SPCC plans for other town facilities as necessary.

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 9 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Next Permit Term
6C	Incorporate the Use of Road Salt Alternatives for Deicing	Highway Department	Reduce the amount of road salt used by 25%	The Department of Public Works purchased 8,293 gallons of calcium chloride mix to reduce sand loads to the roadways. 493 tons of salt and 1,675 tons of sand were purchased for use during Permit Year 9. Sand and salt are typically mixed at approximately a 3:1 sand to salt ratio.	Continue to explore salt reduction options as available.
Revised		Department of Public Works	Reduce the amount of road salt used		

7a. Additions.

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 9 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Next Permit Term
3D	Establish Illicit Discharge Hotline & Provide Information in Water Bills	Police / Fire	Hotline for citizens to report illicit discharges established	No calls relating to illicit discharge were received during this permit year. Additional calls and complaints pertaining to flooding or requested maintenance were received and addressed by the Department of Public Works as appropriate. The DPW worked with other departments to coordinate response efforts as needed.	Continue to address all calls as received and maintain a log with a record of follow-up actions. Provide contact information to residents on illicit discharges in mailed bills or via the website in addition to current materials.
Revised		Police, Fire & Department of Public Works			
3G	Develop an Illicit Discharge By-Laws	NPDES Steering Committee, Highway Dept., Planning Board	Drafting, public meetings adoption within three years	The Hadley Planning Board adopted an illicit discharge bylaw on July 5, 2005. No additional action was taken during Permit Year 9.	Continue to enforce the bylaw.
Revised		NPDES Steering Committee, Department of Public Works, Planning Board			

7b. WLA Assessment

The MADEP final 2010 303(d) Integrated List of Waters outlines two waters in the Town of Hadley that are classified as Category 5 “Waters Requiring a TMDL”: the Fort River (MA34-27) and Mill River (MA34-25), both impaired for *E.coli* bacteria. The final 2010 303(d) List also identifies Lake Warner (34098) as a Category 4a (TMDL is completed) for excess algal growth, non-native aquatic plants, dissolved oxygen, turbidity and phosphorus. Note that the draft 2010 303(d) List used during previous reporting years identified Lake Warner as a Category 4c Water (Impairment not Caused by a Pollutant).

The applicable TMDL is EPA number 651, titled “Total Maximum Daily Loads of Phosphorus for Selected Connecticut Basin Lakes”. The TMDL estimates current total phosphorus loadings to the lake at 7,150 kg/yr, with a target of 1,790 kg/yr. To achieve this reduction, EPA targets a 90 percent reduction to the internal phosphorus load (possibly with an alum treatment), and remaining non-forested land use areas are targeted for a 41 percent reduction. The TMDL lists the following implementation strategies to reduce phosphorus loadings to Lake Warner:

- Public education;
- Nonpoint Source (NPS) survey;
- Lake management plan;
- Agriculture BMPs;
- Residential BMPs;
- Septic system maintenance;
- Highway BMPs; and
- In-lake management.

Although Lake Warner is located within the Town of Hadley, it is located outside of the Urbanized Area and thus is not subject to the Phase II regulations. However, some Phase II BMPs currently employed by the Town can be used to target the above implementation strategies, such as public education, stormwater BMPs, and proper septic system maintenance. General water quality concerns associated with 303d waters are addressed through the implementation of BMPs under the six minimum measures for Phase II. The approach for addressing impaired waters will be updated based on the new permit.

The draft 2012 303(d) Integrated List of Waters does not indicate any changes from the final 2010 List for Hadley waterbodies. Waterbodies and category numbers remain unchanged for Lake Warner, the Fort River, and the Mill River as discussed above.

Part IV. Summary of Information Collected and Analyzed

Hadley has completed a map of all stormwater structures, including catch basins, manholes, culverts and outfalls. Approximately 400 catch basins and 40 outfalls have been located. Structure locations were imported into a GIS base map to form a complete map depicting all locations within the Town’s Urbanized Area (UA). An illicit discharge sampling program was completed during Spring 2006 and focused on outfalls within the urbanized area. No significant illicit connections were found in the UA storm drain system.

Part V. Program Outputs & Accomplishments (OPTIONAL)

Programmatic

Stormwater management position created/staffed	(y/n)	No
Annual program budget/expenditures	(\$)	

Education, Involvement, and Training

Estimated number of residents reached by education program(s)	(# or %)	
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.)	N/A
Household Hazardous Waste Collection Days		
▪ days sponsored	(#)	0
▪ community participation	(%)	N/A
▪ material collected	(tons or gal)	
School curricula implemented	(y/n)	No

Legal/Regulatory

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

Mapping and Illicit Discharges

Outfall mapping complete	(%)	100%*
Estimated or actual number of outfalls	(#)	~40
System-Wide mapping complete	(%)	100%
Mapping method(s)		
▪ Paper/Mylar	(%)	-
▪ CADD	(%)	-
▪ GIS	(%)	100%
Outfalls inspected/screened	(# or %)	100%
Illicit discharges identified	(#)	0
Illicit connections removed	(#) (est. gpd)	N/A
% of population on sewer	(%)	40%
% of population on septic systems	(%)	60%

*100% of outfalls within the Town.

Construction

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

Post-Development Stormwater Management

Estimated percentage of development/redevelopment projects adequately regulated for post-construction stormwater control	(%)	100%
Site inspections completed	(# or %)	
Estimated volume of stormwater recharged	(gpy)	

Operations and Maintenance

Average frequency of catch basin cleaning (non-commercial/non-arterial streets)	(times/yr)	50%/yr
Average frequency of catch basin cleaning (commercial/arterial or other critical streets)	(times/yr)	1/yr
Total number of structures cleaned	(#)	50-60
Storm drain cleaned	(lf or mi.)	
Qty. of screenings/debris removed from storm sewer infrastructure	(lbs. or tons)	
Disposal or use of sweepings (landfill, POTW, compost, recycle for sand, beneficial use, etc.)		Landfill
Cost of screenings disposal	(\$)	
Average frequency of street sweeping (non-commercial/non-arterial streets)	(times/yr)	2
Average frequency of street sweeping (commercial/arterial or other critical streets)	(times/yr)	2
Qty. of sand/debris collected by sweeping	(lbs. or tons)	357 CY
Disposal of sweepings (landfill, POTW, compost, beneficial use, etc.)	(location)	Fill at T.S.
Cost of sweepings disposal	(\$)	
Vacuum street sweepers purchased/leased	(#)	2 owned
Vacuum street sweepers specified in contracts	(y/n)	
Reduction in application on public land of: (“N/A” = never used; “100%” = elimination)		
▪ Fertilizers	(lbs. or %)	
▪ Herbicides	(lbs. or %)	
▪ Pesticides	(lbs. or %)	
Anti-/De-Icing products and ratios	% NaCl % CaCl ₂ % MgCl ₂ % CMA % Kac % KCl % Sand	8,293 gal
Pre-wetting techniques utilized	(y/n)	
Manual control spreaders used	(y/n)	
Automatic or Zero-velocity spreaders used	(y/n)	
Estimated net reduction in typical year salt application	(lbs. or %)	
Salt pile(s) covered in storage shed(s)	(y/n)	Yes
Storage shed(s) in design or under construction	(y/n)	No