

Municipality/Organization: Town of Palmer

EPA NPDES Permit Number:

MassDEP Transmittal Number: W-040564

Annual Report Number & Reporting Period: Year 11
April 1, 2013 – March 31, 2014

**NPDES PII Small MS4 General Permit
Annual Report
(Due: May 1, 2014)**

Part I. General Information

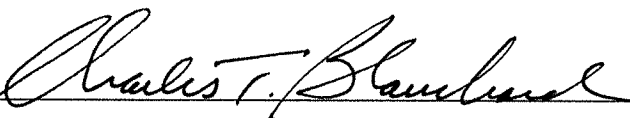
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Certification:

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: CHARLES T. BLANCHARD

Title: TOWN MANAGER

Date: APRIL 28, 2014

Part II. Self-Assessment

The Town of Palmer submits this Annual Report for the eleventh year of activities associated with Palmer's NPDES permit for stormwater discharges, defined as the period of April 2013 through March 2014. This report is for the time period that reflects the seventh full year of the Town Council and Town Manager form of Government.

In Year 11, the Town of Palmer was an active participant in the Central Massachusetts Regional Stormwater Coalition (the Coalition). The Coalition's work in Year 11 was funded by a \$115,000 fiscal year 2013 (FY2013) Community Innovation Challenge (CIC) grant from the Massachusetts Executive Office of Administration and Finance. This grant was supplemented by a contribution of approximately \$2,800 from each of the 30 Towns, including Palmer.

Overview of the Coalition

The FY2013 Coalition communities included 13 communities that formed the Coalition during the previous year (Auburn, Charlton, Dudley, Holden, Leicester, Millbury, Oxford, Paxton, Shrewsbury, Spencer, Sturbridge, Webster, and West Boylston) plus 17 new "Expansion" Towns (including Boylston, Grafton, Hardwick, Hopkinton, Monson, Northbridge, Northborough, North Brookfield, Palmer, Rutland, Southbridge, Sterling, Upton, Uxbridge, Ware, Westborough, and Wilbraham).

The FY2013 work included numerous technical tasks focused on compliance with the 2003 Massachusetts MS4 Permit, although much of the Coalition's work prepares the communities to comply with requirements anticipated in the pending 2014 Massachusetts MS4 Permit. The Coalition's FY2013 efforts were facilitated by the consulting firms of Tata & Howard, Inc., and Verdant Water, supported by vendor PeopleGIS. However, the Coalition members themselves are responsible for putting the tools developed by the Coalition to use.

The FY2013 effort included monthly meetings of the Coalition Steering Committee, four formal training workshops, and other presentations. Palmer participated in 2 training workshops, reviewed deliverables, and served other key roles as described in this Annual Report.

The Coalition's Partnerships in Central Massachusetts

The Coalition is actively engaged with many water quality agencies and organizations and is committed to sharing the knowledge it has developed for the benefit of other communities.

The Coalition expanded its partnership with the Massachusetts Department of Environmental Protection (MassDEP) in FY2013, formally including budget in its FY2014 CIC Grant Application to support and assist in development of the stormwater-focused Interactive Qualifying Project (IQP) with four students at the Worcester Polytechnic Institute (WPI). The IQP underway in spring 2014 is the third such project the Coalition is doing in conjunction with MassDEP and WPI.

The IQP that was completed in Fall 2013 developed two products that will be highly useful to Coalition communities:

1. A Compliance Checklist, evaluating the 2003 Massachusetts MS4 Permit and looking forward to the pending 2014 Massachusetts MS4 Permit (based on the Draft 2013 New Hampshire MS4 Permit). This serves as a tool for Coalition communities to identify their most critical priorities as in preparation of the new MS4 permit and fully complements the Coalition's other tasks.

2. A Catchment Ranking tool, which processes user input including water quality screening data, land use and development, history of illicit discharges, and other criteria to suggest ranking into one of the four catchment categories defined in the Draft 2013 New Hampshire MS4 Permit.

Many Coalition communities are working in spring 2014 with the WPI IQP project, benefiting from the students' mapping and inspection services as well as a detailed review of municipal stormwater management programs. For the latter, the WPI IQP will quantify the actual cost of the participants' stormwater programs, which will serve as the foundation for ongoing discussions about how each community will fund future stormwater programs. The Coalition appreciates the dedication of MassDEP to work with our members so closely and collaboratively.

Further documentation of the Coalition's dedication to stormwater management is evidenced by its coordinating with several other groups with a similar stormwater focus- some existing and some just developing- that are also funded at least in part by CIC Grants. These include:

- The Merrimack Valley Stormwater Collaborative (coordinated by the Merrimack Valley Regional Planning Commission);
- The Neponset Valley Regional Stormwater Collaborative (coordinated by the Metropolitan Area Planning Council);
- The Northern Middlesex Stormwater Collaborative Expansion (coordinated by the Northern Middlesex Council of Governments);
- The Southeastern Massachusetts Regional Stormwater group (just forming, coordinated by the Southeast Regional Services Group); and
- The North Suburban Planning Council (also coordinated by the Metropolitan Area Planning Council).

The benefits of collaboration between these groups include:

1. Sharing the tools that the Coalition developed in FY2012 and FY2013 with other groups, honoring the goal of the CIC Grant Program that projects produce deliverables that can be shared regionally;
2. The ability to utilize organic, innovative projects being developed and implemented by those groups that focus on additional stormwater management or education opportunities that the Coalition had not specifically addressed; and
3. Reducing redundancy or scope overlap in projects funded by the CIC Grant Program.

In Year 11, the Coalition began to coordinate with the Massachusetts Coalition for Water Resources Stewardship, and will present on its work at its 5th Annual Water Resources Strategies Symposium, to be held on Friday, May 16, 2014.

Finally, the Coalition has initiated conversations with technical assistance staff in USEPA Region 1, with the goal of benefiting from knowledge and experience of the agency's staff and from its network. An example of this outreach to the agency is the March 26, 2014 presentation by USEPA Region 1's Josh Secunda, which the Coalition hosted at MassDEP's Central Office in Worcester. Mr. Secunda's presentation focused on the critical role of engaging community stakeholders in the evaluation and decision-making processes that are part of developing a sustainable stormwater funding program. Representatives from many of the other stormwater groups listed previously also attended this meeting. When the actual municipal stormwater program budgets quantified by the WPI IQP student project are evaluated through the lens of Mr. Secunda's presentation, the Coalition believes the result will be a new motivation for many communities to review their current funding approach.

In March 2014, the Coalition met with representatives of USEPA Region 1, encouraging the agency to take an active role in sharing the materials produced by the Coalition (and similar groups) across the state, for the benefit of all MS4 communities. We are supported in this goal by the Massachusetts Municipal Association.

The Coalition intends to submit formal comments to USEPA when the 2014 Draft Massachusetts MS4 Permit is issued.

Representatives of the Coalition presented its work at the following other events in Year 11:

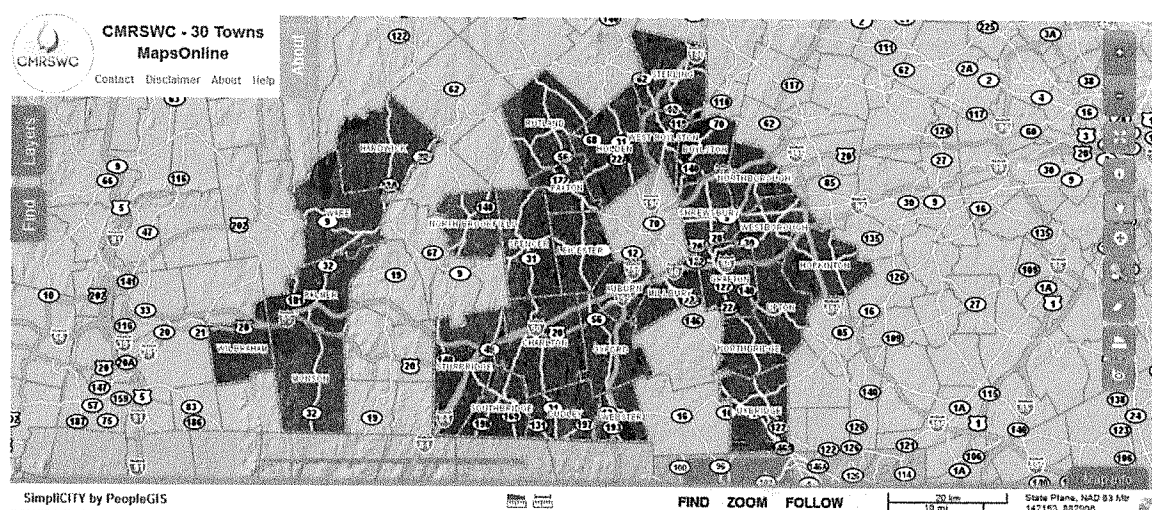
- “*Doing More With Less: The Benefits of Stormwater Regionalization Within Your Watershed*”, in Woonsocket, RI on September 30, 2013, at a workshop sponsored by MassDEP and Rhode Island’s Department of Environmental Management;
- “*Managing Stormwater for Water Supply Protection*”, in Worcester, MA on December 3, 2013, at a Drinking Water Source Protection seminar sponsored by USEPA Region 1.

The Coalition has already given additional presentations in Year 12 to other organizations, with more planned.

Tasks Included in this Annual Report

In the following sections, descriptions of the technical tasks and resources made possible by the CIC grant funding have been separated into sections that mirror the six Minimum Control Measures (MCM’s) in the 2003 Massachusetts Small MS4 Permit.

One of the more innovative tools- developed by the Coalition in Year 10 and expanded in Year 11- supports many MCM’s and has been noted separately: an integrated online mapping and inspection database. The database is cloud-based, and can be accessed by all 30 member communities through a desktop or tablet computer. Below is a screen shot of the platform showing the extent of Coalition communities.



In Year 11, existing mapping completed by the 17 “Expansion” communities, including Palmer, was converted to a project standard format and uploaded to the online platform, which already included data from the 13 FY2012 communities. All 30 communities can see each other’s infrastructure, but each maintains full control over their asset information and water quality data. This tool represents the essence of the Coalition project’s message, which is that stormwater is regional- it doesn’t stop at a community boundary.

All mapped infrastructure is connected to inspection reports that mirror hard-copy forms developed in Year 10 in the 15 Standard Operating Procedures discussed under MCM 1, below: for example, outfall and catch basin inspections. The developed integrated mapping and inspection system is so comprehensive and flexible that does not fit into just one of the MCM's. It aids communities with public education and outreach (MCM 1), as surveying is a highly-visible activity that will generate questions, and would make an engaging demonstration to school groups). The integrated mapping and inspection database documents evidence of potential illicit discharges or the absence thereof (MCM 3), aids construction site stormwater control (MCM 4) by allowing for data evaluation of how much sediment is contained in a sump, and makes good housekeeping (MCM 6) easier by collecting data on how often catch basins are cleaned. Other tasks and tools of the project connect to the integrated mapping and inspection database, which was designed to serve the needs of the Coalition communities well beyond the 2003 Massachusetts Small MS4 Permit.

Each of the online forms is fluid- many were updated in Year 11 and will continue to be revised, as needed, to meet the goals of the Coalition members and the Massachusetts MS4 Permit requirements.

Minimum Control Measure 1: Public Education and Outreach

In Year 11, Palmer gained access a number of materials appropriate for public education and outreach, with materials on a variety of topics, which were compiled or developed by the Coalition in Year 10. The topics included illicit discharge detection and elimination, management of pet wastes, and appropriate use of fertilizer, among others. These materials are all available on the Coalition's website, www.CentralMAStormwater.org. The benefit of this delivery format is that the group members can print materials on demand. Palmer also has access to presentations on stormwater management, with content focused on educating the general public, elected officials, and volunteer groups.

Palmer has access to water quality monitoring kits from the World Water Monitoring Challenge program (www.worldwatermonitoringday.org), purchased by the Coalition in Year 10. These kits "build public awareness and involvement in protecting water resources around the world by engaging citizens to conduct basic monitoring of their local water bodies". Several communities used this in Year 11 to work with teachers in their local school department or district to do outreach to elementary and middle-school aged students. The kits are being stored in Spencer and Shrewsbury for distribution to the Coalition members.

Palmer has access to an Enviroscape table focused on non-point source pollution education (<http://www.envirosapes.com/nonpoint-source.html>), purchased by the Coalition in Year 10. This tool is a hands-on, visual trainer to demonstrate the importance of good housekeeping and low-impact development for pollution prevention, with the objective of maintaining water quality in our communities.

The Coalition continued to expand its educational website, www.CentralMAStormwater.org, focused on providing information about the project to a number of audiences, including the general public, educators, and kids. In Year 11, a members-only area was created within this website to share materials for communities to review.

Minimum Control Measure 2: Public Involvement and Participation

In Year 11, Palmer received access to several presentations on stormwater management, with content focused on educating elected officials and municipal department heads about the requirements of the 2003 Small MS4 Program, changes likely in the anticipated 2014 Massachusetts MS4 Permit, and the financial impact these potential changes may have on Massachusetts communities.

Minimum Control Measure 3: Illicit Discharge Detection and Elimination

The Coalition provided training at two Year 11 workshops (September 17 and 26, 2013) on SOP 10, "Locating Illicit Discharges", intended to define the types of illicit discharges that may be observed in the Coalition communities and provide guidance on tools that can be used to identify each. SOP 10 includes an Illicit Discharge Incident Tracking Sheet.

The Coalition provided training in Year 11 at a workshop on November 20, 2013 on the Coalition's Illicit Discharge Detection and Elimination (IDDE) Documentation Packet, which specifies how illicit discharges are detected and what department or person is responsible for eliminating them. Identifying and removing illicit discharges, and ensuring that they are not reconnected, remains a substantial challenge to many MS4 communities. Without documentation of the entity responsible for this task for a variety of types of illicit discharge, communities may not satisfy the requirements of the 2003 Massachusetts Small MS4 Permit and may be unprepared for increased IDDE compliance in the new Small MS4 Permit. This deliverable clarified USEPA's minimum IDDE requirements and incorporated appropriate existing IDDE Plans and materials by reference. More importantly, the task provides a framework for people in multiple departments to understand each person's responsibilities, encourage cooperation and communication toward a single objective, and provide templates for documenting observations, actions, and compliance. The November 2013 training workshop included a comprehensive review of many types of illicit discharges, and an interactive discussion with attendees about how several examples would presently be managed in their own community.

In Year 11, Palmer received access to two Leica surveying devices purchased by the Coalition in Year 10 that can be used to map new structures with very high accuracy, using connection to a military-grade Real Time Kinematic (RTK) satellite network. The Coalition also provided an ASUS tablet computer to each Expansion community in Year 11, including Palmer. Both of these tools can be used to directly access the online mapping and inspection system: the Leica will be most valuable for mapping outfalls, catch basins, pipe, drain manholes, BMPs, and other components of the MS4, while the tablet computers will be most valuable for ongoing inspection of the structures. These two activities serve as the foundation of IDDE. The Leica units rotate between the 30 Coalition communities on a schedule, with formal handoff between Towns documented.

In Year 11, Palmer was provided with a portable wireless device (MiFi), purchased by the Coalition, so that both Leica and tablet computers can be used in the field. The Coalition and its members provided training on the Leica device, the tablet computers, and the online mapping and inspection system during Year 11.

In Year 10, the Coalition purchased several water quality field kits and meters, most of which are focused on identifying illicit discharges and aligned with the field screening parameters expected to be listed in the pending Massachusetts Small MS4 permit. In Year 11, the Coalition began the process of rotating these water quality kits and meters around the 30 Coalition communities, including Palmer, on a schedule that follows the use of the Leica device. The objective of this approach was that inspection and mapping activities completed with the Leica may result in a list of outfalls or structures for which screening-level monitoring should be completed. The Coalition provided training on the use of these water quality kits at the workshop on November 20, 2013; this training was professionally recorded so that Towns can review it if and when they need a refresher.

The Coalition purchased additional water quality field kits in Year 11, based on materials provided by USEPA Region 1 Technical Assistance staff that summarized products recently approved by the agency for this use. The online inspection and mapping database enables any community to add screening-level or full analytical data to any inspection form, for any type of infrastructure, in the field. The online water

quality monitoring forms are pre-populated with the specific water quality field kits and meters purchased and used by the Coalition.

In Year 11, the online mapping and inspection system was expanded for all 30 communities to include the ability to add pipe between structures, and gather data related to that pipe. Prior to Year 11, the system managed only point geometry, such as outfall, catch basin, drain manhole, and Best Management Practice infrastructure. All 30 Coalition communities will benefit from this new linear infrastructure feature, which is consistent with the requirements anticipated in the pending 2014 Massachusetts MS4 Permit based on what is included in the Draft 2013 New Hampshire MS4 Permit.

In Year 11, the Coalition revised the Request for Proposals (RFP) for a third-party firm to perform many of the field or inspection services defined in the 15 SOP's, including outfall inspection (dry weather and/or wet weather), water quality monitoring, catch basin inspection, and other related tasks. These services are all vital to the effort to identify illicit discharges in the Coalition communities. It was originally anticipated that the work of the RFP would be funded using FY2013 CIC monies. However, in Year 11, the Coalition Steering Committee voted to postpone putting the RFP out to bid, based on the fact that the new Massachusetts MS4 Permit has not yet been issued. This RFP will be re-evaluated in Year 12.

In Year 11, the Coalition performed a review of industrial facilities located in each of the 30 FY2013 communities, including facilities that applied for coverage under the USEPA's Multi-Sector General Permit (MSGP) program, and the compliance status of each. The objective of this activity was to connect data the two permit programs, consistent with requirements anticipated in the pending 2014 Massachusetts MS4 Permit.

Finally, the Coalition is currently planning a demonstration of Environmental Canine Services for May 2014 (in Year 12). This company uses highly-trained dogs to detect the presence of human sewage very low levels in water, and represents a quick and cost-effective screening tool for locating illicit discharges.

Minimum Control Measure 4: Construction Site Stormwater Runoff Control

In Year 11, Palmer received access to SOP 6, "Erosion and Sedimentation Control", developed in Year 10, which is intended to help communities minimize discharges from land disturbing activities. The SOP addresses design, planning, construction, and inspection tools and activities that can serve as BMPs. The SOP also outlines inspection requirements for a variety constructed BMPs that need to serve a long-term purpose for protecting surface waters from discharge of sediments.

Construction activities- including erosion control, stormwater pollution prevention, and appropriate management of waste materials- are also covered in the Stormwater Best Management Practices (BMP) Toolbox, development of which began in Year 10 and which was finalized in Year 11. The Stormwater BMP Toolbox was written to inform the general public about the importance of managing private construction projects responsibly.

Minimum Control Measure 5: Post-Construction Stormwater Management in New Development and Redevelopment

In Year 11, Palmer received access to the Stormwater Best Management Practices (BMP) Toolbox, developed in Year 10 and finalized in Year 11. This tool compiles the stormwater post-development tools currently permitted and encouraged for small development or redevelopment, specifically single-family homes and limited commercial renovations that have a small development footprint. The Stormwater BMP Toolbox provides technical data, design factors, and construction limitations with these BMPs in non-technical language. The Coalition provided training on the Stormwater BMP Toolbox at two Year 11 workshops (September 17 and 26, 2013).

The objective was to provide the average property owner with easy-to-understand information that encourages them to select low-impact stormwater management tools for their properties, construct them safely, and maintain them for long-term benefit. The BMPs in the Toolbox are consistent with the requirements of the current Small MS4 Permit, the Massachusetts Stormwater Handbook (February 2008), and other current guidance documents.

Minimum Control Measure 6: Pollution Prevention and Good Housekeeping in Municipal Operations

In Year 11, Palmer received access to the Stormwater Pollution Prevention Plan (SWPPP) template in the form of a word processing document. The Coalition provided training on the SWPPP Template at two Year 11 workshops (September 17 and 26, 2013). This document was developed in Year 10 and addresses elements common to all SWPPPs, including storage of materials, site inspection practices, water sampling, training, spill prevention and cleanup, Standard Operating Procedures for a number of activities, and other sections. The SWPPP template covers many types of municipal properties. This includes highway department garages and public works yards- where salt is stored and vehicle maintenance or storage is completed- as well as parks, golf courses, and cemeteries, where fertilizers and pesticides may be applied and lawn mowing activities may result in small spills. The SWPPP template includes built-in instructions to make it as simple as possible for each community to develop a SWPPP for a property, simply by deleting text that doesn't apply.

In Year 11, Palmer received access to 15 Standard Operating Procedures (SOP's) developed by the Coalition in Year 10, and intended to provide guidance on activities required or encouraged by the 2003 Massachusetts Small MS4 Permit. The Coalition provided training on these SOP's at two Year 11 workshops (September 17 and 26, 2013). These SOPs addressed such diverse activities or needs as outfall inspection (both dry weather and wet weather), catch basin cleaning, erosion and sedimentation control, oil/water separator maintenance, use and storage of pesticides and fertilizers, and many more. The group developed standard forms and methodologies for these procedures, many of which were incorporated into the Integrated Online Mapping and Inspection System, described in following paragraphs.

In Year 11, Palmer received access to two presentations developed in Year 10 on pollution prevention in stormwater management, with content focused on educating employees of public works, engineering, conservation, planning, highway, and other similar municipal departments on the requirements of the 2003 Small MS4 Program. The Coalition provided training on how to use these presentations to educate staff at two Year 11 workshops (September 17 and 26, 2013). One presentation is focused on using the SWPPP Template and the responsibilities of municipal personnel to implement requirements of the SWPPP, and the second training presentation provides explanation and insight on the 15 SOP's described previously.

In Year 11, Palmer received access to a Sump Pump Discharge Policy developed in Year 10 that provides a framework for the member communities to respond to needs to remove sump pumps from the sanitary sewer system without causing property damage or creating a hazardous condition for the public. The Coalition provided training on the Sump Pump Discharge Policy at two Year 11 workshops (September 17 and 26, 2013). The Policy discusses considerations related to potential contamination and reduction in capacity of the storm drain system when sump pumps are permitted to connect to the drainage system, and lays out a situational approach to provide flexibility in administering a policy. The Policy includes guidance for when such a connection should be considered, what information the municipality can request from a residential or commercial property to guide in its decision, and outlines the responsibilities of the property owner.

In Year 11, Palmer received access to a Salt/Sand Benchmarking tool developed in Year 10 to guide member communities in calibrating deicing equipment. The Coalition provided training on the calibration approaches and spreadsheets at two Year 11 workshops (September 17 and 26, 2013). The Benchmarking tool calculates the present loading rate of chloride (per lane-mile) presently applied by its salt trucks and other municipal vehicles, regardless of the compound (e.g.: sodium chloride, green salt, calcium chloride) or form (e.g., solid or liquid, mixed with sand), and in evaluating alternative application methods and materials to current practices. The Benchmarking tool deliverable guides communities through two different equipment calibration processes and suggests a target reduction rate that is coupled to and appropriate for the benchmarked loading rate. The objective of this task is to reduce the overall loading of chlorides to surface waters in the region while maintaining safe conditions on roadways.

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The Sump Pump Discharge Policy and the Private Drainage Connection SOP (SOP 15) documents both include technical criteria for a member community to evaluate when considering granting approval to residential and/or commercial users to connect such private drainage into engineered storm drain systems within the MS4. However, this approach is not effective in areas where no engineered storm drain system exists. In Year 11, the Coalition finalized an approach to connect pieces of data managed by multiple departments within a community for the benefit of all departments. Specifically, the task merges knowledge of areas where high inflow (i.e., sump pumps and drainage connections) to the sanitary sewer has been identified but where no engineered storm drain system exists. This knowledge includes drainage Capital Improvement Plan (CIP) categories and fields to prioritize the extension of the engineered drain system, within the parameters of the Sump Pump Policy and the Private Drainage Standard Operating Procedure, to reduce inflow to the sanitary sewer while protecting surface water quality. In Year 11, the Coalition provided training on the Drainage Extension Approach at the November 20, 2013 training workshop.

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 11 (Reliance on non-municipal partners indicated, if any) | Planned Activities |
|-----------------|---------------------------|---|---|--|---|
| 1 | Create Stormwater Program | Public Works Planning Board Conservation Commission Board of Health Town Manager | Palmer will present to the public at public meeting Palmer's Comprehensive Stormwater Management Program | Palmer has developed two Stormwater Ordinances, which were presented public hearings on July 14, 2008 (Projects greater than one acre) and February 9, 2009 (Projects less than one acre). | Palmer will continue to evaluate its Stormwater Ordinances and adjust them to provide adequate protection of local bodies of water. |
| Revised | | | | | |
| 2 | Create Stormwater Program | Town Manager Public Works | Palmer will identify appropriate sources of funding assistance (SRF, 319 Grant Program, 604(b) Grant Program, Lakes & Ponds Grant Program) and apply for assistance in implementing portions of Palmer's Comprehensive Stormwater Management Program, including public education and outreach | The Town received Community Development Block Grant funds for an infrastructure redevelopment project on Crest St and Hill St. that included storm drains, water, sewer, streets and sidewalks. This project was designed and constructed in 2012. | The Town of Palmer has joined an intermunicipal agreement with 29 other communities for regionalizing municipal stormwater management in central Massachusetts through collaborative education, data management and policy development. |
| Revised | | | | | |

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| 3 | Address Specific Groups | Town Manager Public Works Conservation Commission | Distribute EPA and other relevant educational brochures to targeted audiences. Distribution points include Town Hall, Library and Transfer Station, Conservation Commission will sponsor biodiversity days at Palmer High School | The Town has received EPA educational material on disk for easy printing and distribution. Brochures regarding stormwater and sewers are available at the Palmer Town Building, Senior Center, Library and Recycling center. | The Town will continue to offer current educational materials to the public on the protection of its water bodies. |
| Revised | | | | | |
| 4 | Target groups likely to impact stormwater. | Town Manager Public Works | Brochures targeting specific audiences and activities will be available. These target groups include homeowner and lawn maintenance activities, disposal of household waste, and pet maintenance | The Town of Palmer has available the following brochures: Watch Your Waste prepared by MADEP, door hangers A Guide to Your Building's Recycling Program prepared by MADEP. Water Department posts Water Conservation Tips on the town website, including measures to reduce outdoor waste. Announcements of events concerning leaf disposal and composting are also posted on the town website and attached to this report. The Town's Highway Department also posts education links and announcements for lead disposal on their website. | The Town will continue to make these and other material available. |
| Revised | | | | | |
| 5 | Identify alternative information sources | Town Manager MIS Department | Palmer will post links to stormwater BPMs and other water quality education resources, including EPA and DEP on its website: www.townofpalmer.com | Palmer has identified an posted links to EPA and DEP stormwater regulations and other water quality education resources on its website: www.townofpalmer.com The Town's website includes links to local water departments and water quality reports. | Palmer will continue to locate new educational sources to post to its website as well as maintain the links to current resource materials. |
| Revised | | | | | |

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|---------|--|-----------------------------------|---|--|--------------------------------------|
| 6 | Identify alternative information sources | Town Manager MIS Department | Palmer will also post links on its website to the Chicopee River Watershed Association @ www.chicopeeriver.org , | The Town of Palmer's webmaster is in the process of identifying local watershed links to post to its website. Palmer will then review additional links for relevancy when located. | This effort will continue into 2014. |
| Revised | | | | | |

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|---|--|---------------------------------|---|---|---|
| 7 | Utilize local public access channel | Town Manager | Public Meeting notice for the meeting to review Palmer's Comprehensive Stormwater management Program will be posted on Palmer's website | Public meeting notices were posted on the town website and the public meetings reviewing Palmer's Comprehensive Stormwater Management Program (held July 14, 2008 and February 9, 2009) aired on Palmer's local access channel. | The town continues to post announcements for public forums regarding stormwater on their website. |
| 8 | Develop, conduct and document educational programs | Town Manager Liaison | The Town of Palmer will appoint a liaison to the Chicopee River Watershed Council to disseminate information to the Town on programs and activities | Due to budget constraints, the Town of Palmer has not appointed a liaison to the Chicopee River Watershed Council. | Volunteers will be sought for this role. |
| 9 | Promote Household Waste Recycling | Public Works Board of Health | The Town of Palmer will work with the Town of Monson and the Town of Wilbraham and the Board of Health to continue to sponsor Regional Hazardous Waste Collection Days. | Palmer holds monthly Recycling Events the first Saturday of each month, published on the town website. A recycling announcement posted to the town's website, along with a typical month's calendar showing the monthly recycling event, are attached to this report. The Town of Palmer maintains an ongoing partnership with the Town of Wilbraham for Hazardous Waste Collection. Every September there is a multi-community event for hazardous waste. Palmer participated in 2012 and plans to remain involved. | Palmer will continue to hold and advertise monthly Recycling Events as well as continue the multi-community partnership for Hazardous Waste Collection. |

2. Public Involvement and Participation

| BMP ID # | BMP Description | Responsible Dept./Person Name | Measurable Goal(s) | Progress on Goal(s) – Permit Year 11 (Reliance on non-municipal partners indicated, if any) | Planned Activities |
|----------|------------------------|--------------------------------------|--|---|---|
| 10 | Storm drain stenciling | Public Works | Palmer will work with local lake and Scout groups to develop a stenciling program. Stenciling will target Palmer's subwatersheds. | Stenciling was completed during the original 5-year permit term; No additional activities took place this permit year. | The Town will continue to identify and support watershed protection activities involving local student and community groups. |
| Revised | | | | | |
| 11 | Community clean-ups | Public Works Conservation Commission | Town of Palmer will encourage local stream team cleanups with local residents and area Scout groups. Town will provide solicitation of sponsors and notice of events on local access channel and website | The Hampden County Sheriff's Department provides manpower for riverbank cleanups several times a year. The Palmer DPW provides trucks for waste pickup. Local Boy Scouts clean up the banks of at least one river or stream each year. Palmer Events Planning hosted a Pick-up Palmer Day in May. | The Town continues to support and encourage local cleanups with local residents. |
| Revised | | | | | |
| 12 | Community clean-ups | Public Works | Town will provide trucks and other material to support cleanup efforts and disposal of materials. | The Town of Palmer accepts yard waste and materials from town cleanup efforts at the Burleigh Park composting site and at the town DPW yard. The Palmer DPW provides transportation for waste pickup during school-based Earth Day cleanups. | The Palmer DPW supports residents in picking up garbage from streets, curbs, sidewalks and drainage areas along roadways, and will continue to support community cleanup efforts. |
| Revised | | | | | |

3. Illicit Discharge Detection and Elimination

| BMP ID # | BMP Description | Responsible Dept./Person Name | Measurable Goal(s) | Progress on Goal(s) – Permit Year 11 (Reliance on non-municipal partners indicated, if any) | Planned Activities |
|----------|--|---------------------------------|---|--|---|
| 13 | Inventory and mapping of storm drain system | Public Works | Palmer will identify appropriate sources of funding assistance (SRF, 319 Grant Program, 604 (b) Grant, Lakes & Ponds Grant Program, Source Water Protection Grant Program, Recycling Grant Program) and apply for assistance in implementing portions of Palmer's Comprehensive Stormwater Management Program, including public education and outreach. | <p>The Town of Palmer has joined an intermunicipal agreement with 29 other communities for regionalizing municipal stormwater management in central Massachusetts through collaborative education, data management and policy development.</p> <p>The official joint application began in permit year 11 and will continue develop into the next permit cycle.</p> | The Town of Palmer along with the Conservation Commission will continue to seek funding opportunities to support its protection of local bodies of water. The Town will also be working with the Municipal Stormwater Management Collaborative to identify funds. |
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| 14 | Mapping and identification of outfalls and receiving waters. | Public Works Board of Assessors | Palmer will develop and implement a plan to map all outfalls and receiving bodies of water, contingent on Town Council approval of funding. | <p>All known outfalls within Palmer's CSO area were mapped during the original 5-year permit term and are inspected annually to make sure they are in proper working condition.</p> <p>Palmer's Wastewater Treatment Plant personnel maintain the outfall maps that have been completed</p> | <p>The Town will continue to monitor for unknown outfalls and maintain all known outfalls in the CSO area.</p> <p>Through the CIC Grant, the town has access to a GPS monitor and water testing instruments to track and test known outfalls.</p> |
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|----|---|---|--|---|--|
| 15 | Identification/description of problem areas | Public Works | Palmer will develop and implement an Illicit Discharge Detection and Elimination (IDDE) plan, contingent on Town Council approval of funding | Palmer developed an Illicit Connections and Discharges to the Municipal Storm Drain Ordinance, which was presented at a public hearing on July 14, 2008 and was passed by the Town Council on August 11, 2008. Palmer's Wastewater Treatment Plant personnel perform quarterly inspection of CSO outfalls and outfalls that were abandoned during or prior to the Town's CSO separation project. Suspended flows are immediately investigated for source identification and removal. | Quarterly inspections on all CSO outfalls and outfalls abandoned during or prior to the Town's CSO separation project will continue. |
| 16 | Enforcement procedures addressing illicit discharges | Planning Board Town Council Board of Health | Palmer will review whether local authority is appropriate and able to respond to potential illicit discharges. New ordinances, if necessary, will be proposed to Town Council. | The Town has local regulations prohibiting illicit discharges into the storm drain system | The Town will continue to enforce and critique its illicit discharge regulations. |
| 17 | Public information program regarding hazardous wastes and dumping | Public Works Board of Health | Palmer will provide educational brochures to residents promoting proper disposal household hazardous wastes and conditions for regional collections | The Town maintains an active partnership with Wilbraham for disposal of household waste. | This partnership with Wilbraham will continue into the future. |
| 18 | Initiation of recycling programs | Public Works Board of Health | Palmer will apply for funding assistance from DEP's Recycling Grant Program for assistance in public education and in the purchase of recycling materials. | The Town of Palmer utilized printed materials from MADEP to encourage recycling by Palmer residents and businesses. | The Town will continue to identify funding sources and opportunities to encourage recycling. |

| | | | | | |
|----|-----------------------------------|---|---|--|--|
| 19 | Watershed assessments and studies | Public Works Conservation Commissions Board of Health | Palmer will identify opportunities for funding assistance from DEP's 604(b) and 319 grant programs and the Department of Environmental Management's Lakes and Ponds Grant Program to support watershed assessment and implementation activities. Tasks can include design and installation of stormwater BMPs and public outreach including storm drain stenciling. Emphasis will be on assessments and remediation of stormwater related problems. | Palmer continues to identify funding opportunities to support its protection of local bodies of water. | There is potential that limited funding for a watershed assessment is forthcoming from a program initiated from the Pioneer Valley Planning Commission (PVPC). |
|----|-----------------------------------|---|---|--|--|

| | | | | | |
|----|-----------------------------------|---|--|---|--|
| 20 | Watershed assessments and studies | Public Works Palmer Water & Fire Districts | The Town of Palmer will encourage the Palmer Water Districts to apply for funding assistance fro DEP's Source Water Protection Program for grant assistance to develop wellhead protection plans and stormwater management plans within Zone II. These plans can include stormwater management programs. The proposed tasks will include a public education component. | Palmer implemented town-wide Storm Water Management Plans during Permit Year 6. | The Town of Palmer will continue to encourage the Water Districts to seek funding for individual Zone II Storm Water Management Plans. |
|----|-----------------------------------|---|--|---|--|

4. Construction Site Stormwater Runoff Control

| BMP ID # | BMP Description | Responsible Dept./Person Name | Measurable Goal(s) | Progress on Goal(s) – Permit Year 11 (Reliance on non-municipal partners indicated, if any) | Planned Activities |
|----------|---|---|--|--|--|
| 21 | Ordinance: Storm water management regulations for construction sites 1 acre or larger | Planning Board Conservation Commission Town Council Board of Health Zoning Board of Appeals | Palmer will review model ordinances developed by DEP in consultation with the Attorney General's Office. | Storm Water Management regulations were passed during Permit Year 6. | No additional action is planned for the BMP. |
| Revised | | | | | |

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 11 (Reliance on non-municipal partners indicated, if any) | Planned Activities |
|----------|--|---|--|---|---|
| 22 | Ordinance: Require post-construction runoff controls | Planning Board Conservation Commission Town Council Board of Health Zoning Board of Appeals | Palmer will review model ordinances developed by DEP in consultation with the Attorney General's Office. | The Planning Board rules and regulations for all new developments require a stormwater management plan during and post construction | No additional action is planned for this BMP. |
| 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 11 (Reliance on non-municipal partners indicated, if any) | Planned Activities |
|----------|---|-------------------------------|---|--|--|
| 23 | Develop a municipal Operations and Maintenance Plan | Public Works | Using regulations from DEP and EPA, Palmer will develop and update an operations and maintenance plan to include proper disposal of street sweepings, catch basin cleanout, snow disposal, roadway deicing procedures, vehicle washing, and outside storage of materials. | <p>A formal O&M plan is still being developed in Permit Year 11 and beyond.</p> <p>Street sweeping occurs from April to October each year. Palmer’s DPW cut down the rate of salt and sand over the permit year during winter perception to limit the amount of material buildup during spring melt. The winter of 2013-2014 was, however very intensive as to road treatment and plowing needs.</p> | The Town of Palmer’s DPW and WWTP personnel will continue their efforts to finalize the O&M Plan. |
| Revised | | | | | |
| 24 | Develop a municipal Operations and Maintenance Plan | Public Works | Palmer will implement a formal inspection program, including maintenance logs and scheduling, for catch basin cleaning, repairs, and new installation. | <p>A formal inspection is being developed as part of the formal O&M Plan.</p> <p>Palmer owns a vacuum truck, which is used by the DPW and WWTP personnel for catch basin cleaning on a daily basis. Structural conditions or suspended illicit discharges are noted for future maintenance or follow-up action respectively.</p> <p>Palmer’s DPW performs manhole inspections on a regularly scheduled basis and records results per MIIA recommendations.</p> | Palmer will continue its current inspection and cleaning routine while the O&M Plan is being developed |
| Revised | | | | | |

| | | | | | |
|---------|---|--------------|--|--|--|
| 25 | Develop and implement training programs for municipal employees | Public Works | Palmer will send a minimum of 3 public works employees annually to training seminars sponsored by MassHighway, BayState Roads, and other relevant agencies or vendors. | During the past year, DPW employees have participated in the following training sessions: Flagmen training, hot mix asphalt inspection, dig-safe training and NEWEA specialty conferences. | The Town will continue to send employees to relevant training seminars and forums. |
| Revised | | | | | |
| 26 | Review storm drainage infrastructure needs | Public Works | Palmer will incorporate storm drain infrastructure review in Palmer's Chapter 90 project utilization | In conjunction with the CSO Phase IV project, the Town of Palmer installed over 25 new catch basins during permit year 8 for stormwater maintenance. The Town has also repaired, substantially replaced or installed new drainage structures, numbering approximately 35 in Permit Year 8. | Palmer will continue to identify opportunities for storm sewer infrastructure improvements in connection with Chapter 90 projects. The upcoming Sewer Replacement Project includes the installation of 36 new catch basins throughout town. |
| Revised | | | | | |

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 11 (Reliance on non-municipal partners indicated, if any) | Planned Activities |
|----------|-----------------|-------------------------------|--------------------|---|--------------------|
| Revised | | | | | |
| Revised | | | | | |
| Revised | | | | | |
| Revised | | | | | |
| Revised | | | | | |
| Revised | | | | | |

7a. Additions

| | | | | | |
|--|--|--|--|--|--|
| | | | | | |
| | | | | | |

7b. WLA Assessment

Part IV. Summary of Information Collected and Analyzed

Part V. Program Outputs & Accomplishments (OPTIONAL)

(Since beginning of permit coverage unless specified otherwise by a **, which indicates response is for period covering April 1, 2010 through March 31, 2011)

Programmatic

(Preferred Units) Response

| | | |
|---|-------|--------------|
| Stormwater management position created/staffed | (y/n) | No |
| Annual program budget/expenditures ** | (\$) | None |
| Total program expenditures since beginning of permit coverage | (\$) | |
| Funding mechanism(s) (General Fund, Enterprise, Utility, etc) | | General Fund |
| | | |

Education, Involvement, and Training

| | | |
|--|---------------|-------------|
| Estimated number of property owners reached by education program(s) | (# or %) | 70% |
| Stormwater management committee established | (y/n) | No |
| 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.) | |
| Household Hazardous Waste Collection Days | | |
| ▪ days sponsored ** | (#) | 0 |
| ▪ community participation ** | (# or %) | Regional |
| ▪ material collected ** | (tons or gal) | Not Tracked |
| 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 |
| ▪ 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 |

Mapping and Illicit Discharges

| | (Preferred Units) | Response |
|--|-------------------------|-----------|
| Outfall mapping complete | (%) | 100 |
| Estimated or actual number of outfalls | (#) | |
| System-Wide mapping complete (complete storm sewer infrastructure) | (%) | Started |
| Mapping method(s) | | |
| ▪ Paper/Mylar | (%) | |
| ▪ CADD | (%) | |
| ▪ GIS | (%) | x |
| Outfalls inspected/screened ** | (# or %) | CSOs only |
| Outfalls inspected/screened (Since beginning of permit coverage) | (# or %) | |
| Illicit discharges identified ** | (#) | 3 |
| Illicit discharges identified (Since beginning of permit coverage) | (#) | |
| Illicit connections removed ** | (#); and (est. gpd) | 3 ~700 |
| Illicit connections removed (Since beginning of permit coverage) | (#); and (est. gpd) | |
| % of population on sewer | (%) | 80% |
| % of population on septic systems | (%) | 20% |

Construction

(Preferred Units) Response

| | | |
|--|------------|------|
| Number of construction starts (>1-acre) ** | (#) | 2 |
| Estimated percentage of construction starts adequately regulated for erosion and sediment control ** | (%) | 100% |
| Site inspections completed ** | (# or %) | 4 |
| Tickets/Stop work orders issued ** | (# or %) | 0 |
| Fines collected ** | (# and \$) | 0 |
| Complaints/concerns received from public ** | (#) | 0 |
| | | |
| | | |

Post-Development Stormwater Management

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

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 ** | (#) | 39 |
| Qty. of storm drain cleaned ** | (%, LF or mi.) | 1,000 L.F. |
| Qty. of screenings/debris removed from storm sewer infrastructure ** | (lbs. or tons) | |
| Disposal or use of screenings (landfill, POTW, compost, beneficial use, etc.) ** | (location) | |

| | | |
|---|-------------------------|-----|
| Basin Cleaning Costs | | |
| • Annual budget/expenditure (labor & equipment)** | (\$) | |
| • Hourly or per basin contract rate ** | (\$/hr or \$ per basin) | |
| • Disposal cost** | (\$) | |
| Cleaning Equipment | | |
| • Clam shell truck(s) owned/leased | (#) | 0 |
| • Vacuum truck(s) owned/leased | (#) | 1 |
| • Vacuum trucks specified in contracts | (y/n) | N |
| • % Structures cleaned with clam shells ** | (%) | 0 |
| • % Structures cleaned with vector ** | (%) | 25% |

(Preferred Units) Response

| | | |
|---|--------------------|------|
| 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) | 1 |
| Qty. of sand/debris collected by sweeping ** | (lbs. or tons) | |
| Disposal of sweepings (landfill, POTW, compost, beneficial use, etc.) ** | (location) | |
| Annual Sweeping Costs | | |
| • Annual budget/expenditure (labor & equipment)** | (\$) | |
| • Hourly or lane mile contract rate ** | (\$/hr. or 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) | 0 |
| • % 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) | |

(Preferred Units) Response

| | | |
|--|---|------|
| 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 | |
| Pre-wetting techniques utilized ** | (y/n or %) | |
| Manual control spreaders used ** | (y/n or %) | |
| Zero-velocity spreaders used ** | (y/n or %) | |
| Estimated net reduction or increase in typical year salt/chemical application rate | (±lbs/ln mi. or %) | |
| Estimated net reduction or increase in typical year sand application rate ** | (±lbs/ln mi. or %) | |
| % 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) | Y |
| | | |
| | | |

Water Supply Protection

| | | |
|---|----------|---|
| Storm water outfalls to public water supplies eliminated or relocated | # or y/n | N |
| Installed or planned treatment BMPs for public drinking water supplies and their protection areas | # or y/n | N |
| Treatment units induce infiltration within 500-feet of a wellhead protection area | # or y/n | N |

| Month & Year | | OPERATION CODES | | | | SITE DESCRIPTION | | | | | |
|----------------|---------------|-------------------|-------------------|--------------|----------------|------------------|-----------------|------------------|--------------------------------|---|------|
| 2013 | | 1-Jet Rod | 7- Root Cutting | | | A-Catch Basin | F- Pump Station | | | | |
| Vehicle # V307 | | 2- Vactored | 8- Root Foam | | | B- Mainline | G- POTW | | | | |
| | | 3- TV Inspect | 9- Hand Rod | | | C- Manhole | H- CSO's | | | | |
| | | 4- Visual Inspect | 10- Cleaned Basin | | | D- Inteceptor | I- Drainage | | | | |
| | | 5- GIS | 11- Repair | | | E- Syphon | J- Other | | | | |
| | | 6- Dye Test | 12- Other | | | | | | | | |
| Date | Name(s) | Site Descp | P/M or Emer | Overtime Y/N | Operation Code | Start House # | Stop House # | Distance in Feet | Location | Description of Work | |
| 2/1/2013 | JIM,SCOTTY | A | P/M | N | 2,11 | | | | NORTH ST THREE RIVER | VACTOR OUT MANHOLE AT NORTH ST THREE RIVER SO THEY CAN REPAIR MANHOLE THERE DID THAT 2 TIME DURING THE DAY | NORT |
| 4/8/2013 | JIM,SCOTTY | A | P/M | N | 10 | | | | MAIN ST BONDSVILLE | CLEAN CATCHBASIN MAIN & MAPLE ST BONDSVILLE | MAIB |
| 4/8/2013 | JIM,SCOTTY | A | P/M | N | 10 | | | | MAPLE ST BONDSVILLE | CLEAN 3 CATCHBASIN MAPLE & MAIN ST BONDSVILLE | MAPB |
| 4/8/2013 | JIM,SCOTTY | A | P/M | N | 10 | | | | MAIN ST BONDSVILLE | CLEAN OUT CATCHBASIN MAIN & CENTER ST BONDSVILLE | MAIB |
| 4/8/2013 | JIM,SCOTTY | I,C | P/M | N | 1,2 | | | | MAIN ST BONDSVILLE | JET ROD MAIN & CENTER ST BONDSVILLE BACK UP MAIN ST TO MAPLE ST DRAIN LINE WAS FULL OF ROCKS | MAIB |
| 4/9/2013 | JIM,RAY | I,J | P/M | N | 1 | | | 84 | ANDERSON AVE THREE RIVER | ANDERSON AVE TOP OF HILL JET ROD DRAIN LINE FOR THREE RIVER WATER DEPT 84 FT TO DEAD IN LINE FOR PIT UP THERE | ANDT |
| 4/9/2013 | JIM,RAY | I,J | P/M | N | 1 | | | 318 | NORMA ST PALMER | JET ROD NORMA ST BACK TO DOWN NORMA ST 318FT | NORP |
| 4/17/2013 | JIM,RAY | A | P/M | N | 10 | | | | MAIN ST BONDSVILLE | CLEAN OUT CATCHBASIN MAIN7 PINE ST BONDSVILLE | MAIB |
| 4/17/2013 | JIM,RAY | A | P/M | N | 10 | | | | KELLY ST THREE RIVER | CLEAN OUT 4 CATCHBASIN KELLY & HIGH ST THREE RIVER | KELT |
| 4/17/2013 | JIM,RAY | A | P/M | N | 10 | | | | KELLY ST THREE RIVER | CLEAN OUT 4 CATCHBASIN KELLY THREE RIVER | KELT |
| 4/18/2013 | JIM,RAY | A,B,C | P/M | N | 1,2 | | | | SOUTH ST THREE RIVER | CLEAN OUT 2 CATCHBASIN AND 2 SEWER MANHOLE HOLE SOUTH ST THREE RIVER | SOUT |
| 4/19/2013 | JIM,RAY | A | P/M | N | 10 | | | | PALMER RD THREE RIVER | CLEAN 2 CATCHBASIN PALMER RD & SOUTH ST THREE RIVER INCLUDING DOUBLE CATCHBASIN | PALT |
| 4/19/2013 | JIM,RAY | A | P/M | N | 10 | | | | HIGH ST THREE RIVER | CLEAN 4 CATCHBASIN HIGH ST THREE RIVER | HIGT |
| 4/19/2013 | JIM,RAY | A | P/M | N | 10 | | | | PALMER RD THREE RIVER | CLEAN 1 CATCHBASIN PALMER RD THREE RIVER | PALT |
| 4/19/2013 | JIM,RAY | A | P/M | N | 10 | | | | KELLY ST THREE RIVER | CLEAN 1 CATCHBASIN KELLY ST THREE RIVER | KELT |
| 4/19/2013 | JIM,RAY | A | P/M | N | 10 | | | | MAPLE ST THREE RIVER | CLEAN 1 CATCHBASIN MAPLE ST THREE RIVER | MAPT |
| 4/23/2013 | JIM,RAY | A | P/M | N | 10 | | | | FRONT ST THREE RIVER | CLEAN OUT 3 CATCHBASIN FRONT ST THREE RIVER | FROT |
| 4/25/2013 | JIM,RAY | C,I | P/M | N | 2,6 | | | | SOUTH MAIN ST PALMER | VACTOR OUT DRAIN LINE TO SEE IF SEWER LINE GOES INTO DRAIN ANSWER IS NO | SOUT |
| 4/30/2013 | JIM,RAY | I,J | P/M | N | 10 | | | | SMITH ST PALMER | CLEAN OUT DROP INLET SMITH & BEECH ST PALMER | SMIP |
| 4/30/2013 | JIM,RAY | A | P/M | N | 10 | | | | PETERSON RD PALMER | CLEAN OUT 2 CATCHBASIN EACH SIDE OF RD | PETP |
| 4/30/2013 | JIM,RAY | I | P/M | N | 2 | 207 | | | 207 OLD WARREN RD PALMER | CLEAN OUT DRAIN PIPE AT 207 OLD WARREN RD PALMER | OLDP |
| 4/30/2013 | JIM,RAY | A | P/M | N | 10 | | | | PETERSON RD PALMER | CLEAN OUT 2 CATCHBASIN EACH SIDE OF RD | PETP |
| 4/30/2013 | JIM,RAY | A | P/M | N | 10 | | | | STIMSON RD THORNDIKE | CLEAN OUT 2 CATCHBASIN EACH SIDE OF RD STIMSON RD & GATE ST THORNDIKE | STIT |
| 5/1/2013 | JIM,RAY | A | P/M | N | 10 | | | | SPRINGFIELD ST THREE RIVER | CLEAN OUT 5 CATCHBASIN EACH SIDE SPRINGFIELD ST THREE RIVER | SPRT |
| 5/2/2013 | JIM,RAY | A | P/M | N | 10 | 238 | 239 | | FLINT ST PALMER | CLEAN 2 CATCHBASIN 238 & 239 FLINT ST PALMER 2 DOWN ST FROM THERE TOO | FLIP |
| 5/2/2013 | JIM,RAY | A | P/M | N | 10 | 180 | | | THOMPSON ST PALMER | CLEAN CATCHBASIN AT 180 THOMPSON ST PALMER | THOP |
| 5/2/2013 | JIM,RAY | A | P/M | N | 10 | 2 | | | MASON ST PALMER | CLEAN CATCHBASIN AT 2 MASON ST PALMER | MASP |
| 5/16/2013 | JIM,RAY | A | P/M | N | 10 | | | | FLINT ST PALMER | CLEAN 2 CATCHBASIN AND DRAIN MANHOLE FLINT & NIPMUCK ST | FLIP |
| 5/17/2013 | JIM,RAY | A | P/M | N | 10 | | | | NIPMUCK ST PALMER | CLEAN 7 CATCHBASIN ON NIPMUCK ST PALMER | NIPP |
| 5/22/2013 | JIM,RALPH | I | P/M | N | 4 | | | | RONDO RD PALMER | CHECK OUT DRAIN PIPE ON RONDO RD IT WAS OK | RONP |
| 5/22/2013 | JIM,RALPH | A | P/M | N | 10 | | | | STATE ST BONDSVILLE | CLEAN OUT 3 CATCHBASIN STATE ST BONDSVILLE | STAB |
| 5/28/2013 | JIM,RAY | A | P/M | N | 10 | | | | NORTH MAIN ST PALMER | CLEAN 6 CATCHBASIN NORTH MAIN ST PALMER STARTING AT STATION # 1 DOWN TO CUMBERLYNN FARMS | NORP |
| 5/29/2013 | JIM,RAY | A | P/M | N | 10 | 116 | | | 116 SPRINGFIELD ST THREE RIVER | 4 CATCHBASIN SPRINGFIELD ST THREE RIVER CLEAN OUT MANHOLE DRAIN WAS NOT DRAINING WAS BLOCKED WITH ROOTS 116 SPRINGFI | SPRT |
| 5/29/2013 | JIM,RAY | I | EMER | N | 1,2 | 1686 | | 168 | 1686 NORTH MAIN ST PALMER | JET ROD 168 FT 1686 N MAIN ST PALMER LINE WAS CLEAR | NORP |
| 5/30/2013 | JIM,RAY | I | P/M | N | 1,2 | 116 | | 10 | 116 SPRINGFIELD ST THREE RIVER | JET ROD DRAIN PIPE 116 SPRINGFIELD ST 3 RIVERS ONLY COULD GO 10 BLOCK OFF | SPRT |
| 5/30/2013 | JIM,RAY | A | P/M | N | 10 | | | | SPRINGFIELD ST THREE RIVER | CLEAN 4 CATCHBASIN AND 4 MANHOLES SPRINGFIELD ST THREE RIVER | SPRT |
| 6/4/2013 | RALPH,KENNY,K | I | P/M | N | 1,2,3 | | | 25 | SPRINGFIELD ST THREE RIVER | INGFIELD ST JET ROD MANHOLE IN ST JET ROD MANHOLE IN YARD CAMERA LINE LINE WAS BROKE AT SIDEWALK ONLY COULD JET ROD 2 | SPRT |
| 6/5/2013 | JIM,RALPH | I | P/M | N | 2,4 | | | | SPRINGFIELD ST THREE RIVER | VACTOR OUT MANHOLE SPRINGFIELD ST FOR DRAIN LINE THAT GOES TO RIVER | SPRT |
| 6/6/2013 | JIM,MIKE B | I | P/M | N | 2,4,11 | | | | SPRINGFIELD ST THREE RIVER | VACTOR OUT MANHOLE SPRINGFIELD ST FOR DRAIN LINE THAT GOES TO RIVER | SPRT |
| 6/6/2013 | JIM,MIKE B | A | P/M | N | 10 | | | | SPRINGFIELD ST THREE RIVER | CLEAN OUT 2 CATCHBASIN SPRINGFIELD ST | SPRT |
| 6/6/2013 | JIM,MIKE B | A | P/M | N | 10 | | | | MAIN ST THORNDIKE | CLEAN OUT CATCHBASIN IN FRONT OF PALMER HIGH SCHOOL BY TENNIS COURT | MAIT |
| 6/7/2013 | JIM,MIKE B | A | P/M | N | 10 | | | | CALKIN RD THREE RIVER | CLEAN CATCHBASIN ON CALKINS RD THREE RIVER NEAR TURNPIKE | CALT |

| | | | | | | | | | | |
|------------|------------|-------|-----|---|----------|-----|--|----------------------------|--|------|
| 6/7/2013 | JIM,MIKE B | A | P/M | N | 10 | | | CALKIN RD THREE RIVER | CLEAN CATCHBASIN ON CALKINS RD THREE RIVER BEHIND KMART | CALT |
| 6/7/2013 | JIM,MIKE B | A,B | P/M | N | 4 | | | BATIST HILL RD THREE RIVER | BATIST HILL RD THREE RIVER FLOWING AROUND CATCHBASIN HAS TO BE FIXED SINK HOLE FORMED FROM TRUCK CALLED CRAIG OUT TO L | BATT |
| 6/18/2013 | JIM,RALPH | A | P/M | N | 10 | | | SCHOOL ST PALMER | CLEAN OUT 3 CATCHBASIN ON SCHOOL ST PALMER | SCHP |
| 7/29/2013 | JIM,MIKE B | A,I,J | P/M | N | 1,,10,11 | | | LONGVIEW DR MONSON | MONSON LONGVIEW DR DRAIN LINE UNDER DRIVEWAY WAS BLOCKED JET ROD TO OPEN IT UP CLEAN CATCHBASIN AT END OF RD THE | LONM |
| 8/1/2013 | JIM,RALPH | I | P/M | N | 4 | | | RONDO RD PALMER | CHECK OUT RONDO RD PALMER DRAIN LINE WAS OK | RONP |
| 8/19/2013 | JIM,MIKE B | A | P/M | N | 10 | | | KELLY ST THREE RIVER | CLEAN OFF CATCHBASIN KELLY ST THREE RIVER | KELT |
| 9/6/2013 | JIM,RALPH | C,I | P/M | N | 2 | | | MAIN ST BONDSVILLE | JET ROD MAIN & CENTER ST BONDSVILLE TO MAPLE ST 265 FT OF 290 FT | MAIB |
| 9/9/2013 | JIM,KEVIN | C,I | P/M | N | 3 | | | MAIN ST BONDSVILLE | MAIN & CENTER ST BONDSVILLE CAMERA LINE MAPLE & MAIN ST CAMERA LINE & HIGH & CENTER ST CAMERA LINE WITH CHARLIE BROWN | MAIB |
| 9/16/2013 | JIM,MIKE B | A | P/M | N | 10 | | | BRECKRIDGE ST PALMER | CLEAN OUT 3 CATCHBASIN ON BRECKRIDGE& PINNEY ST PALMER FORM WATER BREAK THERE | BREP |
| 9/17/2013 | JIM,RALPH | A | P/M | N | 10 | | | BRECKRIDGE ST PALMER | CLEAN OUT 5 CATCHBASIN ON BRECKRIDGE& PINNEY ST PALMER FORM WATER BREAK THERE | BREP |
| 9/25/2013 | JIM,MIKE B | C,I | P/M | N | 2 | | | SOUTH MAIN ST PALMER | CLEAN OUT DRAINS ON SOUTH MAIN ST PALMER SO CHARLIE BROWN CAN CAMERA LINES | SOUP |
| 9/26/2013 | JIM,MIKE B | I | P/M | N | 1 | | | PARK ST PALMER | JET ROD PIPE UNDER RT 20 ACROSS TO BRECKRIDGE ST PARP | PARP |
| 9/26/2013 | JIM,MIKE B | I | P/M | N | 1 | | | PARK ST PALMER | TRY TO GO UNDER TRACK STOP BECAUSE DID NOT KNOW WHERE IT WAS GOING JET RODDER | PARP |
| 9/26/2013 | JIM,MIKE B | I | P/M | N | 1 | | | SOUTH MAIN ST PALMER | SIMON SIDE UNDER TRACK STOP BECAUSE I DIDN'T KNOW WHERE IT WAS GOING WENT INTO WOODS TO CHECK OUTLET TO OVER GROW | SOUP |
| 9/26/2013 | JIM,MIKE B | I | P/M | N | 1 | | | CHURCH ST THORNDIKE | CHECK OUT MANHOLE BEHIND JUNCTION IT WAS OK SPRAY IT DOWN | CHUT |
| 10/7/2013 | JIM,DENNIS | C,I | P/M | N | 4 | | | HIGH ST BONDSVILLE | CHECK BEHIND WAREHOUSE IN HIGH ST BONDSVILLE FOR MANHOLE NO LUCK THERE | HIGB |
| 10/22/2013 | JIM,MIKE B | A | P/M | N | 10 | | | SPRING ST BONDSVILLE | VACTOR OUT CATCHBASIN AT SPRING & HIGH ST BONDSVILLE OFF SIDE OF ROAD IN GRASS | SPRB |
| 11/12/2013 | JIM,MIKE | C,I | P/M | N | 2,11 | | | OAKLAND ST PALMER | VACTOR OUT MANHOLE SO MORRISON CONSTRUCTION CAN REPAIR | OAKP |
| 12/2/2013 | JIM,DENNIS | A | P/M | N | 10 | | | SUMMER ST THORNDIKE | CLEAN CATCHBASIN WAS FULL TO INVERT | SUMT |
| 12/2/2013 | JIM,DENNIS | I,C | PM | N | 1,2 | 85 | | PLEASANT ST THORNDIKE | CLEAN MANHOLE PLEASANT & CHURCH & SUMMER ST FULL TO TOP JET ROD 85FT UP SUMMER ST | PLET |
| 12/2/2013 | JIM,DENNIS | I,C | P/M | N | 1,2 | 10 | | PLEASANT ST THORNDIKE | JET ROD 10 FEET IN BOTH DIRECTION ON CHURCH AND PLEASANT ST | PLET |
| 12/3/2013 | JIM,MIKE B | I,C | P/M | N | 1,2 | 175 | | PLEASANT ST THORNDIKE | JET ROD SUMMER & CHURCH ST UP PLEASANT ST 175 FT | PLET |
| 12/3/2013 | JIM,MIKE B | I,C | P/M | N | 1,2 | 85 | | PLEASANT ST THORNDIKE | JET ROD SUMMER & CHURCH ST UP SUMMER ST 85 | PLET |