

Municipality/Organization: City of Salem, Massachusetts

EPA NPDES Permit Number: MA041219

MassDEP Transmittal Number: W-040844

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

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

Part I. General Information

Contact Person: Dominick Pangallo **Title:** Chief Administrative Aide

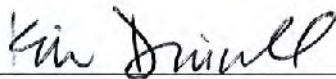
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Certification:

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: Kimberley Driscoll

Title: Mayor

Date:

4/24/14

Part II. Self-Assessment

As of the end of Permit Year 11, the City has achieved all of the measurable goals for the BMPs selected in the 2003 Notice of Intent and those added in subsequent years to reflect additional stormwater management activities by the City and Salem Sound Coastwatch. As required by Part II.D.1 of the 2003 *NPDES General Permit for Stormwater Discharges from Small MS4s*, as part of developing this annual report, the City has evaluated compliance of its stormwater management program with the conditions of the permit and determined it is in compliance with the permit conditions. Also, as required by Part II.D.2 of the General Permit, the City evaluated the appropriateness of selected BMPs in efforts towards achieving the defined measurable goals and has determined that BMPs and measurable goals continue to be appropriate.

Planned activities for the next permit term have not been designated unless a BMP under this permit term was not completed or is still in progress for completion. Once the General Permit for the next five years is available from EPA, the City will prepare and submit a Notice of Intent for compliance with the new General Permit.

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 – Next Permit Term
1	Website	Dept. of Public Services through the efforts of Salem Sound Coastwatch (SSCW)	Maintain and update website (provided funding is available).	The SSCW website continues to be updated with information on stormwater runoff/pollution and provides volunteering opportunities, community events, and water quality monitoring results. The SSCW also continued to update Facebook with events and information.	Measurable goals for 2003 General Permit have been met.
Revised					
2	Informational brochures	Dept. of Public Services (through the efforts of SSCW)	Provide and maintain brochures at SSCW office. Distribute brochures at public events (provided funding is available).	The SSCW continued to provide and maintain brochures at the office and at public events. Brochures were also made available at the City of Salem offices on the 4 th floor at 120 Washington Street. Brochures included <i>Make the Stormwater Connection</i> , <i>Salem Sound – A Sound Investment</i> , <i>Don't Trash Grass</i> , <i>Water Conservation</i> , and brochures about recycling and other brochures from Greenscapes. During Permit Year 11, an additional brochure on pet waste was made available at City offices.	Measurable goals for 2003 General Permit have been met.
Revised					

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 – Next Permit Term
3	Social Media	Dept. of Public Services (through the efforts of SSCW)	Provide information about SSCW events and other related information using Facebook	SSCW previously emailed monthly e-newsletters, <i>SoundNet</i> , which were available at http://www.salemsound.org/archivesSoundNet.html SSCW now provides information and relevant links to those interested in SSCW activities via Facebook. SSCW's page has 406 "Likes."	Measurable goals for 2003 General Permit have been met.
Revised					
4	Public event displays	Dept. of Public Services (through the efforts of SSCW)	Post display annually at the Maritime Festival, and other public events if possible (provided funding is available).	The Clean Salem/Green Salem event on May 4 th , 2013 included environmental displays. These included Greenscapes material and six different handouts with information on water conservation, proper recycling, etc. In addition, water conservation devices were handed out, including showerheads and nozzles for outdoor watering.	Measurable goals for 2003 General Permit have been met.
Revised					

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 – Next Permit Term
5	Local newspaper articles	Dept. of Public Services (through the efforts of SSCW)	One article per year.	Salem News continues to publish articles regarding water resources management. On May 14, 2013, an article titled “Salem gets \$3M grant for Canal St” describes the project that includes improvements to drainage and stormwater management on Canal Street.	Measurable goals for 2003 General Permit have been met.
Revised					
6	Training of volunteers	Dept. of Public Services (through the efforts of SSCW)	Annually (provided funding is available).	The SSCW continued to hold the Clean Beaches and Streams Program, training volunteers to collect water quality samples. Sampling took place from June to August, 2013..	Measurable goals for 2003 General Permit have been met.
Revised				In addition, SSCW continued to implement its “Adopt a Beach” program which included training sessions for volunteers as needed.	
7	Publish results of water quality monitoring	Dept. of Public Services (through the efforts of SSCW) and Board of Health	Year 1 – Publish upon receipt of results; Years 2 through 9 – Continue based on available funding.	SSCW’s Clean Beaches and Streams program continued to publish results of the water quality monitoring conducted during Permit Year 11 on its website (http://www.salemsound.org/CB&S.html)	Measurable goals for 2003 General Permit have been met.

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 – Next Permit Term
Revised				The Board of Health 2013 monitoring results for 15 beaches in Salem are published on the Massachusetts Department of Public Health – Bureau of Environmental Health website at: http://mass.digitalhealthdepartment.com/public_21/beaches.cfm	
31	North River Awareness Week	Dept. of Public Services (through the efforts of SSCW)	SSCW will sponsor the North River Awareness Week annually (provided funding is available) and discuss stormwater impacts on the river	SSCW did not hold the North River Awareness Week in 2013. However, SSCW did participate in Clean Salem, Green Salem on May 4 th , 2013. SSCW continued to participate in the 2013 COASTSWEEP beach cleanups in Salem, which included Baker's Island.	Measurable goals for 2003 General Permit have been met

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 – Next Permit Term
32	Low Impact Development (LID) Outreach	Dept. of Public Services (through the efforts of SSCW)	Year 3 – SSCW Speakers Series will focus on LID Year 4 & 5 – Continue to promote LID techniques for stormwater management	The City of Salem’s website continues to provide a Water Conservation Brochure that offers water conservation tips and interesting water facts and statistics. Brochure is available at http://www.salem.com/Pages/SalemMA_Water/waterconservationflyer.pdf The City also continued to provide rain barrels at discounted prices to Salem Residents (http://salem.com/Pages/SalemMA_Water/rainbarrels). The Department of Public Services hands out a variety of brochures covering the topics of nonpoint source pollution, water conservation, recycling, LID, and composting. Salem maintained its membership with Greenscapes in 2013. Greenscapes is a collaborative outreach effort that seeks to educate people about landscaping practices that have less impact on the environment, create environmental stewards, and generate support for water resources management. In permit year 11, the 6th Annual Living Green & Renewable Energy Fair was to be held on Saturday May 18, 2013 at Old Town Hall but was canceled. This fair previously had included exhibitors and green industry professionals to discuss products, services, and information that encourage sustainability.	Measurable goals for 2003 General Permit have been met. The City is planning to install LID structures on Commercial Street to mitigate flooding.

35	No Discharge Area Outreach	Dept. of Public Services (through the efforts of Salem Sound Working Group)	Year 4 – Use information from the 2005 survey to Improve Salem Sound Year 5 – Continue to promote Salem Sound Improvements	As of June 23, 2008, Salem Sound is a No Discharge Area (NDA). EPA Region 1 designated Salem Sound as an area where boaters with Marine Sanitation Device (MSD) type I & II no longer dump within 3 miles of shore. The Salem Harbormaster's website contains information about pump out stations. In Salem, the pump out boat operates 8 a.m. to 4 p.m. on weekends and holidays from Memorial Day to Columbus Day. There is a self service automated pump-out station at the Congress Street float open 24/7. Information about what boaters need to know, as well as information on pump out services, is available on SSCW's website http://www.salemsound.org/NDA.html In addition, information is available on EPA's website at http://www.epa.gov/region1/eco/nodisorg/ma.html	Measurable goals for 2003 General Permit have been met.
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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 – Next Permit Term
8	Water quality monitoring program	Dept. of Public Services (through the efforts of SSCW)	Annually (provided funding is available).	Under SSCW's Clean Beaches and Streams Program, trained volunteers collected samples from prioritized sites and performed testing every two weeks during summer 2013. Results are available on the SSCW website: http://www.salemsound.org/CB&S.html	Measurable goals for 2003 General Permit have been met.
Revised					
9	Beach cleanup program	Dept. of public Services (through the efforts of SSCW)	Conduct once per year, each summer (provided funding is available).	SSCW participated in the 2013 COASTSWEEP cleanups in Salem. Beach cleanups included Baker's Island.	Measurable goals for 2003 General Permit have been met.
Revised					
10	Storm drain stenciling	Dept. of Public Services (through the efforts of SSCW); Salem State College (through the efforts of MA Community Water Watch)	Evaluate once per year. Perform stenciling (provided funding is available).	Stenciling of storm drains has been done in previous permit years. No additional storm drain stenciling was conducted this permit year due to constraints of budget and staff time.	Measurable goals for 2003 General Permit have been met.
Revised					

30	Coastal Habitat Invasive Monitoring Program	Dept. of Public Services (through the efforts of SSCW)	Annually (provided funding is available).	Volunteers can be trained under SSCW's Coastal Habitat Invasive Monitoring Program to collect information on location and amount of invasive species.	Measurable goals for 2003 General Permit have been met.
Revised					
33	North River Clean-up	Dept. of Public Services (through the efforts of SSCW)	Year 3 – Remove trash and other debris from the river and banks.	SSCW did not hold the North River Awareness Week this Permit Year. However, SSCW participated in Clean Salem, Green Salem on May 4, 2013. SSCW participated in the 2013 COASTSWEEP clean-ups in Salem. See BMP 9. In addition, throughout 2013, SSCW held numerous clean-up trainings for volunteers as part of the Adopt a Beach program.	Measurable goals for 2003 General Permit have been met.
37	South River Drainage Improvement Project	City of Salem	Year 4 – Collect information regarding the South River Basin. Year 6 – No additional public participation goals this year Moved next phase of this BMP to Good Housekeeping Section as BMP 38	The City continues to implement several measures for the South River Drainage Project. See BMP 38. Two municipal meetings were held before the project started. The City's Engineering website contains information on public meetings.	Measurable goals for 2003 General Permit have been met. The City plans to keep the public informed and seek input as needed regarding project activities.
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 – Next Permit Term
11	Develop GIS database of the drainage system	Dept. of Public Services	Continue to improve the GIS database and mapping	100% of the City's outfalls and the water bodies into which the outfalls discharge are located in GIS or on paper/mylar maps. City maps show catch basins, drainage manholes, siphons, and some connectivity. City uses GIS as a tool to identify and track flooding problems. As part of ongoing IDDE field work, changes are noted and updates to map are made, including drainage connectivity.	Measurable goals for 2003 General Permit have been met. City continues to GPS locate catch basins, drainage manholes, and other structures, and will complete connectivity to develop a full drainage system map.
Revised					
12	Salem Sound Shoreline Survey (Project No. 2002–01/604)	Health Dept.	Obtain copies of the quarterly progress reports, as well as other information pertinent to Salem	There were no activities planned for Permit Year 11. BMP completed in a prior permit year.	Measurable goals for 2003 General Permit have been met.
Revised					

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 – Next Permit Term
13	Visually inspect outfalls for dry weather flows	Dept. of Public Services (through the efforts of SSCW)	Inspect a representative number of outfalls annually (provided funding is available).	During Permit Year 11, another fifty (50) outfalls were screened and sampled during dry weather conditions and 10 outfalls during wet weather conditions, in accordance with the City's IDDE Plan. Flow present during these screenings was sampled. Reports of work completed are available at the City Engineer's office.	Measurable goals for 2003 General Permit have been met.
Revised				Illicit discharge investigations were conducted by New England Civil Engineering Corp. at Derby Wharf, Palmer Cove, Juniper Beach, and Commercial Street MS4 drain outfalls to confirm the removal of illicit discharges from previous permit years. Work completed includes repairing sanitary sewer lines and drainage lines. Additionally, the City repaired a broken sewer line leaking into a catch basin on Langdon Street, and redirected illicit sewer laterals on Park Street and near Derby Square. The City completed approximately 18,300 feet of CCTV pipeline inspection this permit year.	Confirmatory sampling is planned for spring 2014.
14	Conduct water quality sampling at stormwater outfalls.	Dept. of Public Services (through the efforts of SSCW)	Year 1 – Publish results of sampling. Years 2 through 9 – Perform additional sampling (provided funding is available).	SSCW performed sampling every two weeks at various outfalls during the 2013 swimming season (June through the end of August). Results are published on SSCW's website (http://www.salemsound.org/CB&S.ht)	Measurable goals for 2003 General Permit have been met.

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 – Next Permit Term
Revised				<u>ml</u>).	
15	Conduct water quality sampling at beaches	Health Dept.	Perform weekly beach sampling during summer months in accordance with DEP criteria	Weekly beach sampling was performed at 15 locations during the period from June 25 to August 20, 2013. Health Department keeps records of results. Results are also published on the MA Department of Public Health (DPH) website. See BMP 7.	Measurable goals for 2003 General Permit have been met.
Revised					
16	Develop Stormwater Ordinance	Dept. of Public Services	Year 1 – Review existing bylaws & regulations; Year 2 – Propose changes; Year 3 – Implement changes, subject to City approval	The City determined it has adequate legal authority to effectively prohibit non-stormwater discharges to the MS4 and illegal dumping, and enforce violations. No further action is necessary to fulfill the requirements of the General Permit under this BMP.	Measurable goals for 2003 General Permit have been met.
Revised				On January 30, 2012, City Council vote approved the Stormwater Management Ordinance which regulates new/redevelopment and storm sewer connections.	

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 – Next Permit Term
29	Perform study to identify contamination sources(s)	Dept. of Public Services	Year 1 – Submit grant application to CZM; Year 2 – Initiate study (provide funding is available). Year 3 to 5 – Implement Recommendations	In Permit Year 11, the City continued to monitor the effectiveness of the Juniper Beach outfall duckbill through beach and outfall water quality monitoring. Approximately 100' of sewer line in the Juniper Beach area was replaced this permit year. See BMP 13 for information on City-wide IDDE monitoring efforts.	Measurable goals for 2003 General Permit have been met. Additional confirmatory sampling is planned for spring 2014.
Revised	... at Juniper Beach and Willows Park			The City continued trash collection at Willows Park.	

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 – Next Permit Term
17	Develop an ordinance requiring developers to prepare an Erosion & Sediment Control Plan for all sites disturbing one acre or greater	Dept. of Public Services; Planning Board; Conservation Commission	Year 1 – Review existing bylaws and regulations. Year 3 – Develop Ordinance. Year 4&5 – Implement changes, subject to City approval.	On January 30, 2012, City Council vote approved the Stormwater Management Ordinance. This ordinance regulates erosion and sediment controls at construction sites that ultimately disturb one or more acres of land. This ordinance includes sanctions to ensure compliance and includes the Massachusetts Stormwater Management Standards and Handbook as performance standards for projects subject to the ordinance.	Measurable goals for 2003 General Permit have been met. Implement ordinance and develop regulations supporting ordinance.
Revised					
18	Periodically check erosion control measures and construction material management on site inspections	Dept. of Public Services; Planning Board, Conservation Commission	Monitor and track violations	Construction sites, erosion control measures, and construction material management practices throughout the City were monitored and inspected as part of Conservation and/or Engineer inspections. Planning department maintains documentation of inspections.	Measurable goals for 2003 General Permit have been met.
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 – Next Permit Term
19	Develop an ordinance requiring stormwater controls for all new and redevelopment projects disturbing one acre or greater	Dept. of Public Services; Planning Board; Conservation Commission	Year 1 – Review existing bylaws & regulations; Year 2 – Propose changes; Year 3 – Develop Ordinance. Year 4&5 – Implement changes, subject to City approval	On January 30, 2012, City Council vote approved the Stormwater Management Ordinance. This ordinance regulates post-construction stormwater management on new development and re-development projects that ultimately disturb one or more acres of land. This ordinance includes sanctions to ensure compliance and includes the Massachusetts Stormwater Management Standards and Handbook as performance standards for projects subject to the ordinance.	Measurable goals for 2003 General Permit have been met. Implement ordinance and develop regulations supporting ordinance.
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 – Next Permit Term
20	Street Sweeping	Dept. of Public Services	Sweep streets between April & November (provided funding is available)	Entrance corridors (major routes) were swept three times in 2013 (April/May, July, and September). City uses rotary brush sweepers for all sweeping conducted. All residential streets were swept in both May and September 2013.	Measurable goals for 2003 General Permit have been met. Continue street sweeping as budget allows.
Revised					
21	Clean Sweep Program	Dept. of Public Services	Conduct sidewalk cleanup program each year for 1 week in May (provided funding is available).	City of Salem Beautification Committee and Salem Recycles held the annual Clean Sweeps, which is part of the Clean Salem Green Salem event during the morning of Saturday, May 4 th . Clean Sweeps includes volunteer teams that clean various locations throughout the City and separate recyclable materials which are picked up by Northside Carting and are delivered to the City's recycling processor.	Measurable goals for 2003 General Permit have been met. Continue program as budget allows.
Revised					
22	Catch basin cleaning	Dept. of Public Services	Inspect problem areas annually, and clean as needed (provided funding is available).	The Division of Public Works continued to implement its catch basin cleaning program. Catch basin cleaning is contracted, and daily	Measurable goals for 2003 General Permit have been met. The City plans to continue this

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Revised				records are kept noting condition of catch basins. Approximately 1,100 catch basins were cleaned during Permit Year 11. Focus was on areas with flooding issues and poor drainage. In addition, City has three Stormceptors. The City inspects and performs maintenance as necessary to keep BMPs properly functioning.	practice and use the information to optimize the catch basin cleaning program and identify problem areas in the system.
23	Trash collection program	Health Dept.; Dept. of Public Services; Parks & Recreation	Weekly curbside pickup (provided funding is available).	The City continued its weekly curbside trash collection program through Permit Year 11.	Measurable goals for 2003 General Permit have been met. Continue trash collection as budget allows.
Revised				The City has over 90 solar bins in parks, near beaches, and pedestrian area. The City also has at least 40 recycling stations.	
24	Recycling Program	Dept. of Public Services	Bi-weekly curbside pickup (provided funding is available).	The City continued its weekly curbside pickup recycling program.	Measurable goals for 2003 General Permit have been met. Continue recycling program as budget allows.
Revised					
25	Yard Waste Program	Dept. of Public Services	Curbside pickup 5 times per year (provided funding is available). Allow residents to drop off yard waste at City's transfer station year round.	The City continued its yard waste collection program in 2013. Yard waste is picked up five times per year. Residents may also drop off yard waste at the transfer station on Swampscott Road Monday through Friday during normal business hours and Saturday mornings.	Measurable goals for 2003 General Permit have been met. Continue yard waste program as budget allows.

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 – Next Permit Term
Revised					
26	Household hazardous waste program	Health Dept.	Hold twice over the 5-year permit term (provided funding is available).	Starting in 2009, the City of Salem and the Town of Beverly have continued to hold alternating, annual Household Hazardous Waste Days. The Household Hazardous Waste Day was held on September 28, 2013 at Salem High School. Salem residents will have access to the Town of Beverly's HHWD in April 2014 at Beverly High.	Measurable goals for 2003 General Permit have been met. Continue HHW program as budget allows.
Revised				During Permit Year 11, the City began to allow residents to drop off electronic waste at the DPW.	The City plans to implement a pilot program for composting during Spring 2014.
27	Animal Control Program	Police Dept. Animal control Officer	Track the number of animals collected (provided funding is available).	The Animal Control officer continued to handle stray dogs, neighborhood nuisance problems, injured animals, and rabies concerns. If the Animal Control officer is unavailable, the Police Department responds. The Animal Control officer continued to track the number of animals collected.	Measurable goals for 2003 General Permit have been met.
Revised					
28	Beach Cleanup Program	Parks & Recreation	Clean Beaches every week between May and September (provided funding is available).	Beaches were cleaned several times during the spring and summer of 2013 by Parks and Recreation and numerous volunteers. Cleanups were also sponsored by SSCW throughout 2013. The DPW supports cleanups by removing trash collected during cleanups.	Measurable goals for 2003 General Permit have been met. Continue beach cleanups as budgets and staff time allow.
Revised					

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 – Next Permit Term
34	Appliance Sticker Program for Curbside Pickup	Dept. of Public Services	Conduct curbside pickup of appliances twice per month (provided funding is available).	Residents continue to be able to purchase stickers for curbside collection of computer monitors, TVs, light ballasts and Freon-based appliances such as air conditioners, dehumidifiers, and refrigerators. Items are collected on the second and fourth Saturday of each month. White goods such as washers/dryers, stoves, microwaves, hot water heaters, dishwashers, and trash compactors are picked up free of charge by Northside Carting. Pickups are scheduled weekly. The City continued its e-cycling program. E-cycling containers are available at DPS-5 Jefferson Avenue, City Hall- 93 Washington Street; City Hall Annex -120 Washington Street, 4th floor, and the Senior Center- 5 Broad Street.	Measurable goals for 2003 General Permit have been met. Continue appliance sticker program for curbside pickup as budget allows.

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 – Next Permit Term
38	South River Drainage Improvement Project	City of Salem	Year 5 – Begin implementation of the short-term measures for the Phase I South River Drainage Improvement Project (if funding is available)	In 2012, the City implemented a cleaning and inspection program for approximately 5,000 feet of sanitary sewers in Canal Street. Also, in 2012, the City funded the preliminary design of the Canal Street Flood Mitigation Project and final design of the first phase of the project. Phase I of the project included the installation of a new drainage system as well as repairs to a portion of the sanitary sewer, South River Conduit, and water distribution system. The new drainage system will redirect stormwater runoff from approximately 70 acres to an underground storage facility and pump station to be constructed in Phase 2. Additionally, stormwater treatment devices will be installed for enhanced water quality treatment. Phase 2 is anticipated to begin construction in May 2015. A stipulation of the FEMA grant is to complete construction (Phase 1 and Phase 2) by May 2016.	Project is ongoing. Measurable goals for 2003 General Permit have been met.
Revised					

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 – Next Permit Term
39	Public Works Facility Environmental Compliance Assessment, Stormwater Pollution Prevention Plan (SWPPP), and Training	City of Salem	Year 5 – Conduct public works assessment, prepare SWPPP, and provide staff training	In April 2008, a DPW Facility assessment was conducted, and based on the assessment a SWPPP was prepared in June 2008. Staff were trained on the SWPPP. In September 2011, the City reviewed the SWPPP with DPW employees and refreshed employees on SWPPP activities and obligations. Engineering staff attended a training on October 15, 2013 hosted by Essex County on Municipal Stormwater Management including pollution prevention, BMP inspection, finding and reporting illicit discharges and other pertinent stormwater topics.	Measurable goals for 2003 General Permit have been met. Continue to implement SWPPP and SPCC Plan.
40	Ongoing Drain and Culvert Evaluation and Maintenance	Engineering Department	Continue ongoing maintenance of storm drain system and culverts	The City continued its maintenance of the drainage system and culverts in Permit Year 11. The City cleaned drain lines, catch basins (see BMP 22), and CCTV'd drain line in various portions of the City. See also BMPs 13 and 38. City continues to use the Northeast Massachusetts Mosquito Control District to clean sediment from culverts, and has a standing permit with the Salem Conservation Commission for drainage system and culvert cleaning.	Measurable goals for 2003 General Permit have been met. Continue drain and culvert evaluations and maintenance.

7. BMPs for Meeting Total Maximum Daily Load (TMDL) Waste Load Allocations (WLA)

Final Pathogen TMDL for the North Coastal Watershed approved by EPA in 2012. To address impairments, Salem will continue to implement extensive IDDE efforts as described above, require stormwater treatment under Stormwater Management Ordinance and through good housekeeping street sweeping and catch basin cleaning activities.

Part IV. Summary of Information Collected and Analyzed

- Salem Sound Coastwatch's Clean Beaches and Streams sampling results (BMP#14) are available at their website at <http://www.salemsound.org/CB&S.html>
- City of Salem Board of Health (BMP #15) maintains records of sampling results and beach closings.
- Results of illicit discharge investigations conducted by the Engineering Department and MassDEP, and subsequent work to correct the identified illicit discharges, is available at the Engineering Office at 120 Washington Street.