

Municipality/Organization: City of Salem, Massachusetts
EPA NPDES Permit Number: MA041219
MassDEP Transmittal Number: W-040844
Annual Report Number & Reporting Period: Year 9
April 1, 2011 – March 31, 2012

NPDES PII Small MS4 General Permit Annual Report (Due: May 1, 2012)

Part I. General Information

Contact Person: Jason Silva Title: Chief Administrative Aide
Telephone #: (978) 745-9595 ext. 5603 Email: jsilva@Salem.com
Mailing Address: Office of Kimberley Driscoll, 93 Washington Street, Salem, MA 01970

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: 4/12/12

Part II. Self-Assessment

As of the end of Permit Year 9, 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. In Permit Year 9, the City completed BMPs, including:

- In 2011, the City revised its IDDE Plan to reflect EPA New England's December 2008 IDDE Protocol and began implementation of IDDE activities in specific priority areas dictated by EPA.
- In January 2012, the City adopted a new Stormwater Management Ordinance that regulates stormwater runoff from construction sites and post-construction stormwater management on new development and re-development projects that ultimately disturb one or more acres.

This Ordinance also applies to projects that will initially disturb less than one acre but are part of a common plan of development that will ultimately disturb one or more acres. Regulations are in progress.

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 9 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Next Permit Term
1 Revised	Website	Dept. of Public Services through the efforts of Salem Sound Coastwatch (SSCW)	Maintain and update website (provided funding is available).	Volunteering opportunities, community events, results of water quality monitoring, and information on stormwater runoff/pollution continued to be provided on the SSCW website. SSCW also continued to update Facebook with events and information.	Measurable goals for 2003 General Permit have been met.
2 Revised	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).	SSCW continued to make brochures available at the office and distribute brochures at public events. City of Salem offices on the 4 th floor at 120 Washington Street continue to make brochures available, including Make the Stormwater Connection, Salem Sound – A Sound Investment, Don't Trash Grass, Water Conservation, and brochures about recycling and other brochures from Greenscapes.	Measurable goals for 2003 General Permit have been met.
3 Revised	Newsletter <i>Social Media</i>	Dept. of Public Services (through the efforts of SSCW)	Provide and maintain newsletters at SSCW office. Mail newsletters to dues paying SSCW members and others on a quarterly basis (provided funding is available). <i>Provide information about SSCW events and other related information using Facebook</i>	SSCW previously emailed monthly e-newsletters, <i>SoundNet</i> , which available at http://www.salemsound.org/archivesSoundNet.html SSCW now provides information and relevant links to those interested in SSCW activities via Facebook.	Measurable goals for 2003 General Permit have been met.

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).	At the Clean Salem/Green Salem on May 7 th , 2011, local artists and citizens came together to create a one-day public art display and education project called "A Mighty Wave: Public Art using Plastic Bottles Collected in Salem" that shows how quickly non-biodegradable, single-use plastic accumulates.	Measurable goals for 2003 General Permit have been met.
5	Local newspaper articles	Dept. of Public Services (through the efforts of SSCW)	One article per year.	In 2011, there were numerous articles published in the Salem News about flooding and drainage system issues. An article titled "Update: Major flooding swamps North Shore," dated October 4, 2011, discussed how the drainage system's capacity has been reached during a heavy rainfall event. The October 18, 2011 article titled "Salem looks for flood help", explains steps the City was taking to address the results of the flooding. The January 9, 2012 article titled "Salem Neighborhood gets flood help" details the completion of tide gate installation to remedy the flooding and how the drainage system works.	Measurable goals for 2003 General Permit have been met.

6	Revised	Training of volunteers	Dept. of Public Services (through the efforts of SSCW)	Annually (provided funding is available).	SSCW trained volunteers to conduct the 2011 Clean Beaches and Streams water quality monitoring. Volunteers were trained to collect water quality samples every two weeks for the 2011 swimming season from June 2 through August 16, 2011. In addition, SSCW continued to implement its "Adopt a beach" program which included training sessions for volunteers as needed.	Measurable goals for 2003 General Permit have been met.
7	Revised	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.	Results of water quality monitoring conducted as part of SSCW's Clean Beaches and Streams Program performed during Permit Year 9 are published on SSCW's website (http://www.salemsound.org/CB&S.html) The Board of Health 2011 monitoring results for beaches are published on the Massachusetts Department of Public Health – Bureau of Environmental Health website at: http://mass.digitalhealthdepartment.com/public_21/beaches.cfm	Measurable goals for 2003 General Permit have been met.

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	<p>SSCW did not hold the North River Awareness Week in 2011. However, SSCW did participate in Clean Salem, Green Salem on May 7, 2011.</p> <p>SSCW also participated in the 2011 COASTSWEEP cleanups in Salem. In 2011, cleanups included Forest River Park and Dead Horse Beach. Fifty seven (57) volunteers collected 650 pounds of trash.</p> <p>In April 2011, SSCW and the Division of Marine Fisheries held the Annual Fish Sampling Demonstration and Smelt Count Update on the North River. The Division of Marine Fisheries displayed the catch from the morning's sampling and provided an update on the status of spawning smelt based on eggs found in the North River.</p>	Measurable goals for 2003 General Permit have been met
----	----------------------------	--	---	---	--

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	<p>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</p> <p>The City also continued to provide rain barrels at discounted prices to Salem Residents (http://salem.com/Pages/SalemMA_Water/rainbarrels).</p> <p>The Department of Public Services hands out a variety of brochures covering the topics of nonpoint source pollution, water conservation, recycling, LID, and composting. Some publications to note include:</p> <ul style="list-style-type: none"> • <i>Greenscapes Guide</i> • <i>SSCW’s Nonpoint Source Pollution & Salem Sound</i> • <i>Water Conservation</i> <p>In 2011, Salem again renewed membership with Greenscapes. Greenscapes is a collaborative and 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.</p> <p>In permit year 9, the 4th Annual Living Green & Renewable Energy Fair was held on Saturday May 21, 2011 at Old Town Hall. This fair included over 50 exhibitors and green industry professionals to discuss products, services, and information that encourage sustainability. Rainbarrels, composters, water conservation garden spray nozzles and recycling bins were demonstrated and available for purchase, as well as ethical electronics recycling.</p>	Measurable goals for 2003 General Permit have been met
----	---------------------------------------	--	---	---	--

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	<p>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.</p> <p>The Salem Harbormaster's website contains information about pump out stations. In Salem, the pump out boat operates 8 to 4 pm on weekends and holidays from Memorial Day to Columbus Day. There is a self service automated pump-out station at the Congress St float open 24/7.</p> <p>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</p> <p>In addition, information is available on EPA's website at http://www.epa.gov/region1/eco/nodiscrg/ma.html</p>	Measurable goals for 2003 General Permit have been met.
----	----------------------------	---	---	---	---

2. Public Involvement and Participation

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 9 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Next Permit Term
8 Revised	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 2011. Results are available on the SSCW website: http://www.salemsound.org/CB&S.html	Measurable goals for 2003 General Permit have been met.
9 Revised	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 2011 COASTSWEEP cleanups in Salem. In 2011, cleanups included Forest River Park and Dead Horse Beach. Fifty seven (57) volunteers collected 650 pounds of trash.	Measurable goals for 2003 General Permit have been met.
10 Revised	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.

30	Coastal Habitat Invasive Monitoring Program	Dept. of Public Services (through the efforts of SSCW)	Annually (provided funding is available).	Under SSCW's Coastal Habitat Invasive Monitoring Program, trained volunteers collected information on location and amount of invasive species throughout 2011.	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 in 2010. However, SSCW participated in Clean Salem, Green Salem on May 7, 2011. SSCW also participated in COASTSWEEP cleanups in Salem. In 2011, cleanups included Forest River Park and Dead Horse Beach. Fifty seven (57) volunteers collected 650 pounds of trash. In addition, throughout 2011, SSCW held numerous cleanup 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	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 9 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Next Permit Term
11 Revised	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.	Measurable goals for 2003 General Permit have been met. City continues to GPS locate catch basins, drainage manholes, and other structures, and well as complete connectivity to develop a full drainage system map.
12 Revised	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 9. BMP completed in a prior permit year.	Measurable goals for 2003 General Permit have been met.
13 Revised	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 9, fifty (50) outfalls were screened during dry 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. Additional IDDE work including in-system sampling, dye testing, and CCTVing was conducted in Derby Wharf, Juniper Beach, Palmer Cove, Commercial Street (at footbridge), and Commercial Street (near overpass) drainage areas. Reports of work completed are available at the City Engineer's office.	Measurable goals for 2003 General Permit have been met.

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 2011 swimming season (April through the end of August). Results are published on SSCW's website (http://www.salemsound.org/clean_beaches.htm). During Permit Year 9, fifty outfalls (5) were screened during dry 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					
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 24 to August 23, 2011. Health Dept. keeps records of results. Results are also published on the MA Department of Public Health (DPH) website.	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					

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 9, the City continued to monitor the effectiveness of the Juniper Beach outfall duckbill through beach and outfall water quality monitoring. Also continued trash collection at Willows Park. In addition, IDDE investigations and CCTV inspections of portions of contributing drainage area to Juniper Beach were conducted.	Measurable goals for 2003 General Permit have been met. CCTV work is planned to inspect nearby sewer lines, and based on results of CCTV inspections, sewer lines and manholes will be repaired or replaced as needed.
Revised					

4. Construction Site Stormwater Runoff Control

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 9 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Next Permit Term
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.	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 9 (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 9 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Next Permit Term
20 Revised	Street Sweeping	Dept. of Public Services	Sweep streets between April & November (provided funding is available)	In April and June 2011, both sides of all residential streets were swept. Entrance corridors (major routes) were swept three times in 2011 (April/May, June, and August). City uses rotary brush sweepers for all sweeping conducted.	Measurable goals for 2003 General Permit have been met. Continue street sweeping as budget allows.
21 Revised	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 CLEAN SALEM, GREEN SALEM during the morning of Saturday, May 7 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.

<p>22</p> <p>Revised</p>	<p>Catch basin cleaning</p>	<p>Dept. of Public Services</p>	<p>Inspect problem areas annually, and clean as needed (provided funding is available)</p>	<p>The Division of Public Works continued to implement its catch basin cleaning program. Focus was on areas with flooding issues and poor drainage.</p> <p>City owns new vector truck and uses it for catch basin cleanings.</p> <p>In addition, City has three stormceptors. The City inspects and performs maintenance as necessary to keep BMPs properly functioning.</p>	<p>Measurable goals for 2003 General Permit have been met.</p> <p>The City plans to continue this practice and use the information to optimize the catch basin cleaning program and identify problem areas in the system. City has contracted for all catch basins to be cleaned in 2012 with a clamshell truck.</p>
<p>23</p> <p>Revised</p>	<p>Trash collection program</p>	<p>Health Dept.; Dept. of Public Services; Parks & Recreation</p>	<p>Weekly curbside pickup (provided funding is available).</p>	<p>The City's weekly curbside trash collection program was continued through Permit Year 9.</p> <p>The City has over 90 solar bins in parks, near beaches, and pedestrian area. The City also has at least 40 recycling stations.</p>	<p>Measurable goals for 2003 General Permit have been met. Continue trash collection as budget allows.</p>
<p>24</p> <p>Revised</p>	<p>Recycling Program</p>	<p>Dept. of Public Services</p>	<p>Bi-weekly curbside pickup (provided funding is available).</p>	<p>The City continued its weekly curbside pickup recycling program.</p>	<p>Measurable goals for 2003 General Permit have been met. Continue recycling program as budget allows.</p>

25	Yard Waste Program	Dept. of Public Services	Curbside pickup 6 times per year (provided funding is available). Allow residents to drop off yard waste at City's transfer station year round. <i>Curbside pickup 5 times per year (provided funding is available). Allow residents to drop off yard waste at City's transfer station year round.</i>	The City's yard waste collection program was continued in 2011. Yard waste is picked up five times per year (weeks of April 25, June 27, Sept 26, October 24, and November 28). Residents may also drop off yard waste at the transfer station on Swamscott 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.
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 teamed to hold alternating, annual Household Hazardous Waste Days. In Year 9, on October 1, 2011, the Hazardous Waste Day was held in Salem at the Salem High School from 8am – 12pm.	Measurable goals for 2003 General Permit have been met. Continue HHW program as budget allows.
Revised					
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 2011 by Parks and Recreation and numerous volunteers. Cleanups were also sponsored by SSCW throughout 2011. The DPW supports cleanups by removal trash collected during cleanups.	Measurable goals for 2003 General Permit have been met. Continue beach cleanups as budgets and staff time allow.
Revised					

34	Appliance Sticker Program for Curbside Pickup	Dept. of Public Services	Conduct curbside pickup of appliances twice per month (provided funding is available).	<p>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.</p> <p>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.</p>	Measurable goals for 2003 General Permit have been met. Continue appliance sticker program for curbside pickup as budget allows.
----	---	--------------------------	--	---	--

<p>38</p> <p>South River Drainage Improvement Project</p>	<p>City of Salem</p>	<p>Year 5 – Begin implementation of the short-term measures for the Phase I South River Drainage Improvement Project (if funding is available)</p>	<p>In 2010, the City completed a number of upgrades and improvements recommended as part of the South River Flood Mitigation Project, including:</p> <ul style="list-style-type: none"> • Ocean Avenue Stormwater Pump Station Upgrades • Municipal Golf Course Flood Control Reservoir Implementation. <p>To address the additional upgrades and improvements, the City applied for Flood Hazard Mitigation Grants from FEMA for at the Canal Street/SSU Area and the Jefferson Avenue/Brook Street/Rosies Pond Berm Upgrades. In 2011, City was notified it tentatively is awarded the work for the Canal Street project.</p> <p>Also, in 2011, conducted a condition assessment of four drainage and sanitary sewer siphons. Based on this assessment, recommendations for improvements were made. Plans for implementing improvements will be developed in 2012.</p>	<p>Project is ongoing. Measurable goals for 2003 General Permit have been met.</p>
---	----------------------	--	--	--

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	<p>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.</p> <p>Also, City updated Spill Prevention Control and Countermeasure (SPCC) Plan for the DPW facility, which prevents pollution and improves good housekeeping in municipal operations.</p>	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	<p>In 2011, the City continued its maintenance of the drainage system and culverts. The City cleaned drain lines, catch basins (see BMP 22), and CCTV'd drain line in various portions of the City. Approximately 3,000 linear feet of drainage pipe were CCTV'd.</p> <p>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.</p>	
----	--	------------------------	---	--	--

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

Not Applicable - None of Salem's receiving waters have approved TMDL reports at this time. A Draft Pathogen TMDL Report was developed for the North Coastal Watersheds. This TMDL is not final.

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.