

Municipality/Organization: City of Salem, Massachusetts

EPA NPDES Permit Number: MA041219

MassDEP Transmittal Number: W-040844

Annual Report Number & Reporting Period: Year 7
April 1, 2009 – March 31, 2010

NPDES PII Small MS4 General Permit Annual Report (Due: May 1, 2010)

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: Kimberley Driscoll

Printed Name: Kimberley Driscoll

Title: Mayor

Date: April 26, 2010

Part II. Self-Assessment

As of the end of Year 7, the City has achieved nearly all of the measurable goals for the BMPs selected in the 2003 Notice of Intent and those added in subsequent years to reflect unplanned stormwater activities by the City and Salem Sound Coastwatch. The City is still in progress implementing some BMPs:

- Illicit discharge detection activities are ongoing (BMP 13 and 14), and these investigations have resulted in the disconnection of numerous illicit connections and other sources of pollution. To date, the City has focused efforts on priority areas as identified in their IDDE Plan but plans to investigate additional outfalls when budget and staff resources become available.
- While the City currently reviews construction site runoff (BMP 17) and post-construction stormwater management (BMP 19) practices for most development and redevelopment projects, the City plans to continue efforts to implement a new Ordinance that will formalize current expectations and, at a minimum, expand jurisdiction to all projects that disturb one acre or greater. The draft Ordinance was completed as a result of interdepartmental meetings held during permit year 6 and it is now going through the final review and approval process.

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 to MassDEP and EPA 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 7 (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).	SSCW website was maintained and updated with volunteering opportunities and results of water quality monitoring in Salem.	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).	Provided and maintained brochures at SSCW office and distributed brochures at public events during Permit Year 7. Brochures are also made available at the City offices on the 4 th floor at 120 Washington Street.	Measurable goals for 2003 General Permit have been met.
3 Revised	Newsletter	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).	Discontinued <i>Salem Sound Monitor</i> . Instead, sent out monthly e-newsletter, <i>Soundnet</i> , which is available at http://www.salemsound.org/newsletters.htm	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).	SSCW, in conjunction with the Massachusetts Bays Estuary Association (MBEA), displayed 15-foot tall Stormy the Duck at the 3 rd Annual Swim n' Fin OceanFest on Saturday July 25, 2009 at Forest River Park. Stormy is the mascot for the <i>Think Again. Think Blue.</i> campaign	Measurable goals for 2003 General Permit have been met.
Revised					
5	Local newspaper articles	Dept. of Public Services (through the efforts of SSCW)	One article per year.	An article titled <i>Capturing Rainwater Reduces Floods, Protects Water Sources</i> was published in the Salem News on April 17, 2009. This article discusses various ways to capture rainwater.	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 Clean Beaches and Streams Orientation and Training was conducted by SSCW staff in June 2009. Volunteers were trained to collect water quality samples every two weeks for the 2009 swimming season from June 11 through August 20, 2009.	Measurable goals for 2003 General Permit have been met.
Revised					
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 5 – Continue based on available funding.	Results of water quality monitoring performed during Permit Year 7 are published on SSCW's website (http://www.salemssound.org/clean_beaches.htm) Results of BOH beach water quality monitoring are published on the Massachusetts Department of Public Health – Bureau of Environmental Health website at: http://mass.digitalhealthdepartment.com/public_21/beaches.cfm?bID=12628&func=details	Measurable goals for 2003 General Permit have been met.
Revised					

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>The 7th Annual SSCW North River Awareness Week was from May 2 through 9, 2009.</p> <p>On May 2, SSCW held a Furlong Park Design Meeting. A Clean-up was held following the meeting as part of Salem Clean Sweep.</p> <p>On May 5, SSCW and the Division of Marine Fisheries held the Annual Fish Sampling Demonstration and Smelt Count Update on the North River.</p> <p>On May 9, the Proctor Brook Walk and Tour was held. Barbara Warren, Salem Sound Coast Watch Director led an hour long walk and talk along the banks of Proctor Brook.</p>	Measurable goals for 2003 General Permit have been met
----	----------------------------	--	---	---	--

<p>32</p>	<p>Low Impact Development (LID) Outreach</p>	<p>Dept. of Public Services (through the efforts of SSCW)</p>	<p>Year 3 – SSCW Speakers Series will focus on LID Year 4 & 5 – Continue to promote LID techniques for stormwater management</p>	<p>The City of Salem’s website contains a Water Conservation Brochure that offers water conservation tips, rain barrels at discounted prices and free water conservation devices to Salem Residents (www.salem.com).</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> brochure • <i>Water Conservation</i> <p>A Subgroup of the Advisory Group met twice in March 2010 to finalize their review of the draft Stormwater Ordinance, which incorporated LID. The Ordinance has been review by the City Solicitor and final comments are being reviewed and addressed. (see BMPs 17 & 19).</p> <p>SSCW collaborated with GreenScapes to form a planning committee in January 2006 to set up workshops, contact landscapers, nurseries and garden centers, identify demonstration sites, and help with outreach to educate on the use of less pesticides and fertilizers and the affects of such chemicals on streams and other water bodies; focus is on stormwater quality. Salem has continued to renew membership.</p> <p>Workshops in Permit Year 7 included: <i>Environmentally-Friendly Lawn and Yard Care Practices</i>, on March 20, 2010. Topics included building your soil to support beautiful lawns without fertilizers and pesticides, composting (kitchen scraps/tea), capturing rainwater, & mowing techniques.</p>	<p>Measurable goals for 2003 General Permit have been met</p>
6					

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. There are eight pumpout facilities in the area, and two pending pumpout facilities. Information about what boaters need to know and a chart of NDA boundaries is available here: http://www.salemsound.org/SalemSoundNDAposter.pdf In addition, information is available on EPA's website at http://www.epa.gov/region1/eco/nodiscrg/ma.html	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 7 (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 2009. Results are available on the SSCW website: http://www.salemssound.org/clean_beaches.htm	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).	Under SSCW's Beach Buddies / COASTSWEEP Program, volunteers removed marine debris and trash from coastal recreation areas twice at the end of September 2009.	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).	No additional storm drain stenciling was conducted this permit year.	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).	Under SSCW's Coastal Habitat Invasive Monitoring Program, trained volunteers collected information on location and amount of invasive species. In Summer 2009, SSCW 4 Marine Induced Species (MIS) monitoring events at docks and rocky shore areas in Salem. More information is available on the SSCW website at: http://www.salemsound.org/chimp.htm	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.	The 7 th Annual SSCW North River Awareness Week was from May 2 through 9, 2009. On April 20, 2009 from 1-4pm, SSCW held the North River Clean-up.	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	The initial goal for public participation was met in Year 4. The City plans to keep the public informed 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 7 (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.	All outfalls are located in GIS or on paper/Mylar maps. City GPS located 80% of their drainage structures from 2002 to 2003 and developed a GIS map. The City has paper/Mylar drainage maps in areas not included on the GIS map. City uses GIS as a tool to identify and track flooding problems.	Measurable goals for 2003 General Permit have been met. Continuing to GPS locate stormwater structures and approaching 100% completion.
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 7.	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).	In June 2008, developed proactive IDDE Plan to locate illicit discharges to the MS4, including sampling procedures, and provided standard methods to remove/correct sources of illicit discharges. Formalized documentation actions. Begin to implement plan in priority areas. Inspected and sampled the drainage system near South River outlet, Derby Warf, and North River.	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 5 – Perform additional sampling (provided funding is available).	SSCW performed sampling every two weeks at various outfalls during the 2009 swimming season (April through the end of August). Results are published on SSCW's website and attached (http://www.salemssound.org/clean_beaches.htm). Phase 1 IDDE Sampling: In 2008 (Year 6) the City inspected and sampled the drainage system near South River outlet, Derby Warf, and North River. Illicit connections were located and eliminated in the South River drainage area and Derby Wharf drainage area. Phase II: In July 2009 (Year 7), the Derby Wharf and North River Areas were re-sampled and 5 illicit connections were found and removed. The sites were re-sampled again, after connection removal, and test results confirmed their removal.	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 July 7 to Aug 18, 2009. Results are 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	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	Continued to monitor the effectiveness of the Juniper Beach outfall tide gate and improved trash collection at Willows Park through beach and outfall water quality monitoring. Juniper Beach sampling showed much improvement in water quality from 2005, following installation of the tide gate, to 2009. Willows Park has also showed improvement. The City has a total of 9 solar trash bins that are placed around the City, including Willows Park. There were no activities planned for Permit Year 7.	Measurable goals for 2003 General Permit have been met.
Revised					

4. Construction Site Stormwater Runoff Control

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 7 (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	Advisory Group met to review and modify the 2005 draft Stormwater & LID Ordinance based on changes in the Massachusetts Stormwater Management Policy, evolving BMPs, and applicability to the City's current needs. Advisory Group meetings were held in May and June 2008. A Subgroup of the Advisory Group met twice in March 2010 to finalize their review of the draft Ordinance. The Ordinance has been reviewed by the City Solicitor and final comments are being reviewed and addressed.	Although the City currently reviews construction site runoff controls for most projects, the City will continue efforts to implement the new Ordinance to formalize current expectations and, at a minimum, expand jurisdiction to all projects that disturb one acre or greater.
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	Continued to monitor sites and inspect erosion control measures and construction material management as part of regular City inspections. In March 2010, the City observed a stormwater violation at the outfall to Forest River as part of the construction of Salem State College's new dormitory. The construction site is located outside of the 100 foot buffer zone, however sediment from the site was being carried in the stormwater into the wetlands. Salem State College implemented erosion control measures to stop runoff from the site.	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 7 (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	Advisory Group met to review and modify the 2005 draft Stormwater & LID Ordinance based on changes in the Massachusetts Stormwater Management Policy, evolving BMPs, and applicability to the City's current needs. Advisory Group meetings were held in May and June 2008. A Subgroup of the Advisory Group met twice in March 2010 to finalize their review of the draft Ordinance. The Ordinance has been reviewed by the City Solicitor and final comments are being reviewed and addressed.	Although the City currently reviews stormwater management practices for most projects, the City will continue efforts to implement the new Ordinance to formalize current design expectations and, at a minimum, expand jurisdiction to all projects that disturb one acre or greater.
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 7 (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 May 2009, swept all streets. In November 2009, swept major routes. Purchased new vacor truck in 2008.	Measurable goals for 2003 General Permit have been met.
21 Revised	Clean Sweep Program	Dept. of Public Services	Conduct sidewalk cleanup program each year for 1 week in May (provided funding is available).	Completed annual sweeping program.	Measurable goals for 2003 General Permit have been met.

22	Catch basin cleaning	Dept. of Public Services	Inspect problem areas annually, and clean as needed (provided funding is available)	<p>The Division of Public Works implemented a catch basin cleaning program for the entire City. The catch basin cleaning was divided into two phases, and all catch basins were added to the City's GIS data base and plotted onto field maps.</p> <p>The Division of Public Works created a worksheet so that the contractor can record the following information at each catch basin:</p> <ul style="list-style-type: none"> • Catch Basin ID • Depth to Debris • Depth to Sump • # of Pipes • Depth to Invert of Outlet • Frame & Grate Condition • Corbel Condition • Wall Condition • Date Cleaned • Comments • Volume of debris removed <p>The City Engineer trained contractors on the form and data collection. This information is added to the City's GIS database by catch basin ID. As a result of this program, 1631 catch basins cleaned and 1,830 cy of materials removed/disposed of in PY7.</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.</p>
Revised				Completed weekly curbside trash collection program.	Measurable goals for 2003 General Permit have been met.
23	Trash collection program	Health Dept., Dept. of Public Services, Parks & Recreation	Weekly curbside pickup (provided funding is available).		
Revised					

24	Recycling Program	Dept. of Public Services	Bi-weekly curbside pickup (provided funding is available).	Completed bi-weekly curbside recycling program.	Measurable goals for 2003 General Permit have been met.
Revised					
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.	Completed yard waste collection program.	Measurable goals for 2003 General Permit have been met.
Revised					
26	Household hazardous waste program	Health Dept.	Hold twice over the 5-year permit term (provided funding is available).	Beginning in 2009, the City of Salem and the Town of Beverly are teaming to hold alternating, annual Household Hazardous Waste Days. In Year 7, the Hazardous Waste Day was held on October 3, 2009 from 8:00am – 12:00pm at the Salem High School. On April 24, 2010 the Hazardous Waste Day was held in Beverly from 8am – 12pm at the Beverly High School.	Measurable goals for 2003 General Permit have been met.
Revised					
27	Animal Control Program	Police Dept. Animal control Officer	Track the number of animals collected (provided funding is available).	Completed tracking 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 2009.	Measurable goals for 2003 General Permit have been met.
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>Salem's recycling and trash pickup policy changed, but 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.</p> <p>The City also started a pilot e-cycling program E-cycling containers are located at the Department of Public Services and at the Senior Center. Some examples of materials that can be recycled as part of the new program are:</p> <ul style="list-style-type: none"> • Batteries • Cell Phones • GPS Units • Laptops • Gaming Equipment 	Measurable goals for 2003 General Permit have been met.
----	---	--------------------------	--	--	---

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)	<p>As part of the South River Flood Mitigation Project, the City and its consultant conducted a data collection survey of the South River Basin. This survey included gathering aerial, topographical information and inspecting the South River culverts, major infrastructure components, and evaluating the Ocean Avenue Pump Station.</p> <p>A computer model of the watershed was developed and calibrated with flow meter, depth gage and rainfall data in order to simulate flooding under existing conditions in the South River Basin.</p> <p>As a result of the computer model, upgrades and improvements were recommended to mitigate flooding in the basin. These measures include:</p> <ul style="list-style-type: none"> • Ocean Avenue Stormwater Pump Station Upgrades • Jefferson Avenue/Brook Street Levee Upgrades • Municipal Golf Course Flood Control Reservoir Implementation • South River Conduit Upgrades • Salem State Parking Lot Flooding Relief Implementation 	Project is ongoing. Measurable goals for 2003 General Permit have been met.
Revised					
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>Conducted DPW Facility assessment in April 2008.</p> <p>SWPPP prepared in June 2008.</p> <p>Implemented some recommendations in SWPPP, and will continue to do more as funding allows. Seeking funding for implementation of other SWPPP recommendations.</p>	Measurable goals for 2003 General Permit have been met.

6a. Additions

40	Ongoing Drain and Culvert Evaluation and Maintenance	Engineering Department	Continue ongoing maintenance of storm drain system and culverts	<p>In June 2008, the City hired a consultant to map and inspect all of the culverts and drainage structures in the City. Culverts were located in the Forest River Basin, North River, South River, Rosie's Pond Overflow and Mill Pond Bypass. As a result of the Drainage Culvert Mapping and Inspection, in Permit Year 7:</p> <ul style="list-style-type: none"> • 23 culverts were cleaned • 3 manholes were cleaned <p>In October 2008, the Orleans Avenue Drainage Investigation was completed. Drain Cleaning /Improvements recommended in this investigation were completed in Permit Year 7.</p> <p>In November 2008, the Forrester Street Drainage Study was completed. Cleaning, debris removal and improvements recommended in this investigation were completed in Permit Year 7.</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. No summary report was prepared for the 2009 swimming season. http://www.salemsound.org/clean_beaches.htm
- 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.