

Municipality/Organization: City of Salem

EPA NPDES Permit Number: MA041219

MassDEP Transmittal Number: W-040844

Annual Report Number Year 15
& Reporting Period: April 1, 2017 – March 31, 2018

NPDES PII Small MS4 General Permit Annual Report

Part I. General Information

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Certification:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature:  _____

Printed Name: Kimberly Driscoll _____

Title: Mayor _____

Date: 4/30/18 _____

Part II. Self-Assessment

As of the end of Permit Year 15 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 and 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. For compliance with the reissued permit, the City will prepare and submit a Notice of Intent. Nevertheless, the City would like to highlight the following program accomplishments:

The City continues to stay fully involved with Salem Sound Coastwatch (SSCW). SSCW is a non-profit coastal watershed organization that works with government agencies, businesses, other non-profit organizations and citizens, through municipal partnering, scientific investigation, education, and stewardship. The SSCW organization strives for restoring and protecting coastal waters, beaches, salt marshes, and marine habitats of Salem Sound and its tributary rivers and streams.

During Permit Year 15, the City and SSCW participated in clean-ups at the following locations: Bakers Island, Salem Willows, Collins Cove, Palmer Cove, Forest River Park, Dead Horse Beach, Winter Island, and Furlong Park. SSCW also engaged over 400 students, as well teachers and adult volunteers, through several stormwater education programs including “Talking Trash for Clean Oceans” and “Keeping Water Clean”. In 2017, The City of Salem Public Art Commission continued its storm drain art program with SSCW.

The City received a Community Block Grant and used the funds to purchase 84 catchbasin trash racks to prevent floatables from entering Salem Harbor. The DPW is continuing installation of the racks and hopes to purchase more for grant eligible neighborhoods.

The City maintains a strong Illicit Discharge Detection and Elimination (IDDE) program. Outfall screening and sampling is the primary step in eliminating illicit discharges into municipal drainage systems. During Permit Year 15, several areas where illicit discharges were detected have been eliminated.

In 2015, the City implemented a new Automated Waste and Recycling Services program that has reduced the amount of trash entering storm drains and waterways.

In January 2018, the City implemented a single use plastic bag ban which was well received by the community.

In 2017, the City conducted a tree inventory to GPS and evaluate the condition of street trees and empty trees pits.

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 15 (Reliance on non-municipal partners indicated, if any)	Planned Activities
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.
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 are also available at SSCW and City of Salem offices. Brochures included Make the Stormwater Connection, Salem Sound– A Sound Investment, Don't Trash Grass, Water Conservation, "Scoop It" and brochures about recycling and other brochures from Greenscapes	Measurable goals for 2003 General Permit have been met.
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, SoundNet, 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 1232 "Likes."	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)	The Clean Salem/Green Salem event on May 6, 2017, and the Maritime Festival on August 4-6, 2017, included environmental displays. These included Greenscapes material and several different handouts with information on water conservation, proper recycling, etc.	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.	Salem News continues to publish articles regarding water resources management. An article about the City receiving a Dept of Conservation and Recreation grant to conduct a street tree survey was published on June 15, 2017. Local access TV (SATV) continues to run public service announcements (PSAs) on stormwater quality when airtime is available.	Measurable goals for 2003 General Permit have been met.
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 2017. In addition, SSCW continued to implement its "Adopt a Beach" program that included a training session for volunteers on May 10, 2017.	Measurable goals for 2003 General Permit have been met.
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 15 on its website at http://www.salemsound.org/CB&S.htm l. The Board of Health 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 .	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.	The North River Awareness Week has been discontinued. SSCW continued to participate in the COASTSWEEP beach cleanups in Salem.	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. This brochure is available at http://www.salem.com/water-sewer/pages/downloadable-forms-documents.</p> <p>The City also continued to provide rain barrels at discounted prices to Salem Residents (http://www.salem.com/water-sewer/pages/rain-barrels).</p> <p>The Department of Public Services distributes brochures covering the topics of nonpoint source pollution, water conservation, recycling, LID, and composting. Salem maintained its membership with Greenscapes during Permit Year 15. 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.</p> <p>City staff and SSCW were involved in the development of a “Coastal Stormwater Management Through Green Infrastructure” manual released by MassBays in December 2014. City staff and SSCW continued to implement this guidance document throughout Permit Year 14, and participated in a MassBays’ Upper North Shore Stormwater Management Workshops held in Spring 2016.</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 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.</p> <p>Information about what boaters need to know, as well as information on pump out services, is available on SSCW’s website at http://www.salemsound.org/NDA.html.</p> <p>In addition, information about no discharge zones 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 15 (Reliance on non-municipal partners indicated, if any)	Planned Activities
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 2016. Results are available on the SSCW website at http://www.salemsound.org/CB&S.htm 1	Measurable goals for 2003 General Permit have been met.
9	Beach cleanup program	Dept. of Public Services (through the efforts of SSCW)	Conduct once per year, each summer (provided funding is available).	During Permit Year 15, the City and SSCW participated in clean-ups at the following locations: Bakers Island, Salem Willows, Collins Cove, Palmer Cove, Forest River Park, Dead Horse Beach, Winter Island, and Furlong Park.	Measurable goals for 2003 General Permit have been met.
10	Storm drain stenciling	Dept. of Public Services (through the efforts of SSCW);	Evaluate once per year. Perform stenciling (provided funding is available).	Stenciling of 30 storm drains was completed during Permit Year 14 as part of a SSCW educational program involving middle school students.	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).	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.
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 participated in several clean-ups during Permit Year 15. See BMP 9. In addition, SSCW held 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. The City's Engineering website contains information on public meetings. Public meetings about the project were held March 15, 2017. The City also gave a presentation to the South Salem Neighborhood Association on January 19, 2016. On March 15, 2016, the City presented "A 21st Century Approach to Stormwater – Commercial & Canal Streets" at SSCW's 25th Anniversary Symposium on Finding Solutions to Our Coastal Challenges.	Measurable goals for 2003 General Permit have been met. Continue to keep the public informed and seek input as needed regarding project activities.

3. Illicit Discharge Detection and Elimination

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 15 (Reliance on non-municipal partners indicated, if any)	Planned Activities
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 the database are made, including drainage connectivity.	Measurable goals for 2003 permit have been met. Continue to GPS locate catch basins, drainage manholes, and other structures, and will refine connectivity as needed.
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 conducted during Permit Year 14. This BMP was completed in a prior permit year.	Measurable goals for 2003 permit have been met.
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 14, the City completed wet-weather screening and sampling of 26 outfalls, conducted CCTV pipeline inspection of approximately 1,600-feet of stormwater pipe and 28,061-feet of sanitary sewer pipe, and addressed 1 direct illicit connection. A drain manhole invert was sealed. Further information can be found in the Annual Report submitted to EPA under Administrative Order No. 11-021.	Measurable goals for 2003 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).	In addition to the activities described under BMP 13, SSCW performed regular sampling at various outfalls during the 2017 swimming season (June through the end of August). Results are published on SSCW's website at http://www.salemsound.org/CB&S.htm	Measurable goals for 2003 permit have been met.

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 multiple locations from June 13 to August 22, 2017. Health Department maintains records of sampling 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.
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. On January 30, 2012, City Council vote approved the Stormwater Management Ordinance which regulates new/redevelopment and storm sewer connections.	Measurable goals for 2003 General Permit have been met.
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.	The City continues to monitor the effectiveness of the Juniper Beach outfall duckbill through beach and outfall water quality monitoring. Approximately 330 feet of sanitary sewer pipe were relined near the Juniper Beach outfall during Permit Year 14 to address indirect discharge. See BMP 13 for information on City-wide IDDE monitoring efforts. The City continues trash collection at Willows Park. Through its educational program “Talking Trash for Clean Oceans”, SSCW hosted Paint for the Park! in June 2015 during which high school students worked with local artists to paint trash barrels at Willows Park. Trash barrels throughout the City are emptied as needed.	Measurable goals for 2003 General Permit have been met.

4. Construction Site Stormwater Runoff Control

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 15 (Reliance on non-municipal partners indicated, if any)	Planned Activities
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. It 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 permit have been met. Continue to implement the ordinance and develop supporting regulations.
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 Engineering inspections. The Planning Department maintains documentation of inspections. The City has obtained the services of an outside engineer to conduct peer reviews for larger projects. State projects are reviewed by the Engineering Department. Salem’s Conservation Agent conducts inspections on projects disturbing more than 1 acre.	Measurable goals for 2003 permit have been met.

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 15 (Reliance on non-municipal partners indicated, if any)	Planned Activities
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. It 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. Continue to implement the ordinance and develop supporting regulations.

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 15 (Reliance on non-municipal partners indicated, if any)	Planned Activities
20	Street Sweeping	Dept. of Public Services	Sweep streets between April & November (provided funding is available).	The City has a contract with a third party to conduct street sweeping. Entrance corridors (major routes) were swept using rotary brush sweepers during Permit Year 15. An additional round of street sweeping in the downtown area to capture missed tree seeds.	Measurable goals for 2003 General Permit have been met. Continue street sweeping as budget allows.
21	Clean Sweeps 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 Day at Lafayette Park on May 6, 2016. Clean Sweeps includes volunteer teams that clean various locations throughout the City and separate recyclable materials that are picked up by a recycling contractor and delivered to the City's recycling processor.	Measurable goals for 2003 General Permit have been met. Continue Clean Sweeps program as budget allows.

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 continued to implement its catch basin cleaning program. Catch basin cleaning is contracted, and records are kept noting condition of catch basins.</p> <p>The City is currently working to clean all catchbasins with a clamshell truck. Approximately 120 catch basins were cleaned during Permit Year 14. Focus was on areas with flooding issues and catchbasins requiring a Vactor truck to clean the structure.</p> <p>In addition, the City has three Stormceptors. The City inspects and performs maintenance as necessary to keep BMPs properly functioning.</p> <p>A grant to procure 87 catchbasin trash racks was secured and will be installed by Public Services in 2017 through 2018. In anticipation of the installation all basins were cleaned with a Vactor truck.</p>	<p>Measurable goals for 2003 General Permit have been met.</p> <p>Continue catch basin cleaning as budget allows and use the information to optimize the catch basin cleaning program and identify problem areas in the system.</p>
23	Trash collection program	Health Dept.; Dept. of Public Services; Parks & Recreation	Weekly curbside pickup (provided funding is available).	<p>The City implemented a new Automated Waste and Recycling Services program that has reduced the amount of trash entering storm drains and waterways. In October 2015, the City's new trash and recycling collection contractor delivered two wheeled, covered carts – a 64-gallon black cart for trash and a 96-gallon blue cart for single-stream recycling – to each household throughout the City. Automated curbside collection began in November 2015. Trash is collected on a weekly basis. In addition, the City maintains over 90 solar bins for public trash in parks, near beaches, and pedestrian area.</p>	<p>Measurable goals for 2003 General Permit have been met.</p> <p>Continue Automated Waste and Recycling Services program as budget allows.</p>
24	Recycling Program	Dept. of Public Services	Bi-weekly curbside pickup (provided funding is available)	<p>See BMP 23. Single-stream recycling is collected every other week</p> <p>In addition, the City maintains over 40 public recycling stations.</p>	<p>Measurable goals for 2003 General Permit have been met.</p> <p>Continue Automated Waste and Recycling Services program as budget allows.</p>
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.	<p>The City continues to implement its yard waste collection program. Yard waste is picked up five times per year on the same day as trash pickup. Residents may also drop off yard waste at the transfer station on Swampscott Road on Saturdays and Sundays from 7:30 A.M. to 4:00 P.M.</p>	<p>Measurable goals for 2003 General Permit have been met.</p> <p>Continue yard waste collection program as budget allows.</p>

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 City of Beverly host alternating, annual Household Hazardous Waste Days (HHWDs). Salem's HHWD was held on September 30, 2017 at Salem High School. Beverly's HHWD was held on April 22, 2017 at Beverly High. Salem residents were able to participate in both HHWDs During Permit Year 15, the City implemented a "Food Scraps Plus" Pilot Program during which compost was picked up every other Wednesday and Thursday. The pilot program started in December 2015 and will continue through April 14, 2016. Four electronic waste (E-Waste) events were held at Salem High School during Permit Year 15: March 25, 2017, June 24, 2017, September 30, 2017, and December 30, 2017.	Measurable goals for 2003 General Permit have been met. Continue to hold HHWDs as budget allows.
27	Animal Control Program	Police Dept. Animal control Office	Track the number of animals collected (provided funding is available)	The Animal Control Officer continues 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 is responsible for tracking the number of animals collected.	Measurable goals for 2003 General Permit have been met.
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 2017 by Parks and Recreation and numerous volunteers. Clean-ups were also sponsored by SSCW throughout Permit Year 15. See BMP 9. The DPW supports clean-ups by removing trash collected during cleanups.	Measurable goals for 2003 General Permit have been met. Continue beach clean-ups as budget and staff time allow
34	Appliance Sticker Program for Curbside Pickup	Dept. of Public Service	Conduct curbside pickup of appliances twice per month (provided funding is available)	The Appliance Sticker Program was discontinued during Permit Year 15 due to the implementation of the City's new Automated Waste and Recycling Services program. White goods such as washers/dryers, stoves, microwaves, hot water heaters, dishwashers, and trash compactors are picked up free of charge by the City's trash collection contractor. White goods pick-ups can be scheduled directly with the contractor. The City continued its E-Waste recycling program. See BMP 26	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>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.</p> <p>Phase 2 began construction in 2016. A stipulation of the FEMA grant is to complete construction (Phase 1 and Phase 2) by 2017</p>	The South River Drainage Improvements Project is ongoing. Measurable goals for 2003 General Permit have been met
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. Periodically, the City reviews the SWPPP with DPW employees and refreshed employees on SWPPP activities and obligations	<p>Measurable goals for 2003 General Permit have been met.</p> <p>Continue to implement SWPPP and SPCC Plan</p>
40	Ongoing Drain and Culvert Evaluation and Maintenance	Engineering Department	Continue ongoing maintenance of storm drain system and culverts	<p>The City continued its maintenance of the drainage system and culverts during Permit Year 15. The City cleaned stormwater pipes and catch basins, and inspected stormwater pipes via CCTV as part of illicit discharge investigations. See BMPs 13, 22, and 38.</p> <p>New and redevelopment projects are required to clean the municipal drainage system where private drainage connects prior to sign-off on completion of the development project</p>	<p>Measurable goals for 2003 General Permit have been met.</p> <p>Continue drain and culvert evaluations and maintenance as budget allows</p>

7. BMPs for Meeting Total Maximum Daily Load (TMDL) Waste Load Allocations (WLA) <<if applicable>>

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 on 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, are available at the City's Engineering Office at 90 Washington Street.