

South Carolina NPDES Permit # SCR030000
Small Municipal Separate Storm Sewer System (SMS4)
Annual Report Template

Permit Coverage #SCR 030304 Reporting Period: 2014 and 2015

Permittee: City of North Augusta

Program Name: Stormwater Management Department

Reporting for more than one Program:

(Prepare copies of this page for each Program and attach to this report.)

Responsible Official Information

(Enter the information of the principal executive officer, mayor, or other duly authorized employee/elected official.)

Name: Tom Zeaser, P. E. Title: Director of Public Works

Telephone Number: 803-441-4220 E-mail Address: tzeaser@northaugusta.net

Mailing Address: P. O. Box 6400, North Augusta, SC 29861-6400

Program Manager Information

(Enter the information of the person who is responsible for daily implementation of the program.)

Name: Tanya Strickland Title: Stormwater Manager

Telephone Number: 803-441-4246 E-mail Address: tstrickland@northaugusta.net

Mailing Address: P. O. Box 6400, North Augusta, SC 29861-6400

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.

Responsible Official Signature:  Date: 3/24/16

(The responsible official may authorize another person or person occupying a specific position to certify this report if this authorization is made in writing and submitted to the Department. Please attach a copy of the authorization with this report, if applicable)

Submit the annual report to:
South Carolina Department of Health and Environmental Control
Bureau of Water, Water Pollution Compliance Section
2600 Bull Street
Columbia, SC 29201-1708

Questions? Contact (803) 898-4300

I. Special Conditions Applicable to Stormwater Discharges to Sensitive Waters

A. General (3.1)

1. Has an assessment been conducted to determine if the MS4 discharges to sensitive waters as described in the Permit Part 3? Yes No (what is the target date of completion of the assessment?) Completed.

2. Does the SWMP specifically address these sensitive waters through BMP, system design, etc.? Yes No

3. Does the MS4 discharge to waters classified as Outstanding Resource, Trout, or Shellfish Harvesting? If so, list the waters (3.5): No Yes _____

B. TMDL Monitoring and Assessment Plan (3.2)

1. Does the MS4 discharge to receiving waters within a TMDL watershed? If yes, list the water body and the pollutant(s) of concern. No Yes Pretty Run Creek (aka unnamed tributary to Savannah River), Fecal coliform

2. Which of the TMDL pollutant(s) of concern listed above have the potential to occur within the MS4? Fecal coliform

3. Report the current stage of development of a monitoring and assessment plan. Mark one or more that most accurately reflects the current status of the program as a whole:

Not started Research/Development Implementation

4. Has the plan been submitted to the Department?

Yes No, target date for submission: _____

5. Has monitoring been conducted for the pollutant(s) of concern in the past reporting year?

Yes (summary of data attached) No, target date to begin monitoring: _____

6. Are there any updates to the plan for this reporting year?

No Yes (updates attached)

7. Provide a brief description of the progress made on the plan in this reporting year and evaluate its effectiveness. The plan was submitted to SCDHEC January 5, 2015. It was implemented in July 2015. To date one (1) dry weather background sample event and two (2) wet weather sampling events have occurred. Samples are analyzed for E. coli. Preliminary results are summarized in the attached report. The plan is effective and no significant changes are to be implemented during this phase of the monitoring.

C. Discharges to Impaired Water Bodies (3.4)

1. Does the MS4 discharge to receiving waters on the 303(d) list of impaired waters? If yes, list the water body and the pollutant(s) of concern. No Yes Pretty Run Creek (aka unnamed tributary to Savannah River; POC is Bio

2. Which of the 303(d) pollutant(s) of concern listed above have the potential to occur within the MS4? TSS

II. Storm Water Management Program

A. Ordinance Information (4.1)

(Insert your website address if the ordinance is posted online. If your ordinance is not posted online, please submit a hard copy with this report.)

Website: www.northaugusta.net (click "About us" and then "Municipal Code", search Stormwater) **Hard copy attached:**

B. Storm Water Management Plan (SWMP) (4.1, 4.5)

(Answer the questions below about the SWMP for the current reporting year.)

1. Have there been any changes to the area covered by the MS4? If yes, is this reflected by updates to the SWMP?
 No Yes (explain): Annexation of 4.2 acres into the city. The SWMP is inclusive of all of the city limits. No changes were necessary.

2. Are there any proposed changes to the goals or BMP (best management practices) in the SWMP?
 No Yes (explain): Staff changes are to be updated.

3. Do you have adequate resources to implement your SWMP?
 Yes No (explain): _____

4. Provide information below about staffing levels for each Minimum Control Measure (MCM). This information should be presented as the amount of individuals performing duties directly related to each MCM and the estimated percentage of their time spent doing so. If you share responsibility for the MCM with another entity, indicate that in the corresponding spaces.

- MCM 1: Public Ed & Outreach - 2 staff
- MCM 2: Public Involvement - 2 staff
- MCM 3: Illicit Discharge - 4.5 staff
- MCM 4: Construction - 2.5 staff
- MCM 5: Post Constr - 4.5 staff
- MCM 6: Pollution Prevention in house - 15 staff (several departments involved)

5. Has training been provided to staff as required by the permit in the last reporting year?
 Yes (fill in the table below) No (explain, and provide implementation dates): _____

Date	Topics Covered
04/14/2014	Operations Staff – Flexstorm proper operation and maintenance to protect water quality
07/18/2014	Property Maintenance Training – Stormwater BMPs
07/18/2014	Streets & Drains, Stormwater Staff: Training – Stormwater BMPs during Work Activities
11/06/2014	Material Recovery Facility: Stormwater Management at the MRF
11/08/2014	Streets & Drains, Stormwater Staff: Training – Stormwater Pollution Prevention at Claypit
05/05/2015	Parks & Recreation, Public Utilities_ Stormwater Pollution Prevention while at work
05/07/2015	Property Maintenance Stormwater Pollution Prevention while at work
05/15/2015	Streets & Drains Stormwater Pollution Prevention at work

05/28/2015	Material Recycling Facility: Stormwater Management at the MRF
07/19/2015	Public Safety & Fire Staff Pollution Prevention at work

III. Minimum Control Measures (MCM)

A. Sharing Responsibility (4.4)

1. Is responsibility shared for any minimum measures through an agreement with another entity?

No Yes (*name the entity in the chart below*)

MCM 1	
MCM 2	
MCM 3	
MCM 4	
MCM 5	
MCM 6	

If you have indicated that you are sharing responsibility above in any MCM, answer the questions below:

2. Have you submitted notice to the Department that you are relying on another entity?

Yes No (*submit a copy of any agreements that have not previously been sent to the Department*)

3. If applicable, provide the date of submission of the agreement(s) to the Department: _____

4. Are all control measures as stringent as the permit requires?

Yes No (*if no, provide an explanation*) _____

5. Did the other entity agree in writing to implement the measure on your behalf?

Yes No (*if no, provide an explanation*) _____

6. Did the other entity implement the measure and agree to report on your behalf?

Yes No (*if no, provide an explanation*) _____

7. Is the agreement maintained as part of the SWMP?

Yes No (*if no, provide an explanation*) _____

8. Have you dissolved any agreements with entities this reporting year?

No Yes (*if yes, who?*) _____

III. Minimum Control Measures (MCM)

B. Minimum Control Measure 1: Public Education and Outreach on Storm Water Impacts (4.2.1, 5.3)

1. Use the table below to summarize outreach strategies, goals, and progress for the current reporting year. In the "activities conducted and planned" section, focus on activities that were conducted in the last reporting year and those that are planned for the upcoming reporting year, providing implementation dates. Add rows where needed and attach additional sheets if necessary.

Pollutant of Concern	Outreach Strategy <i>(include target audiences)</i>	Measurable Goal(s)	Progress on Goal(s)	Activities Conducted and Planned <i>(specific implementation dates)</i>	Number of People Reached
Solid waste, VOCs, Bacteria, Nutrients	Use the BPP Stormwater Treatment Wetlands for outdoor education about stormwater pollution impacts and prevention	Number of people reached.	<input type="checkbox"/> In Planning <input checked="" type="checkbox"/> Ongoing <input checked="" type="checkbox"/> Completed <input type="checkbox"/> Evaluation	02/21/2014 05/01/2014 06/09/2014 06/10/2014 06/11/2014 06/19/2014 06/26/2014 07/01/2014 07/10/2014 10/30/2014 11/11/2014 03/27/2015 06/08/2015 06/10/2015 06/12/2015 06/16/2015 06/23/2015 06/24/2015 09/15/2015 10/21/2015 11/18/2015 12/01/2015	125 70 13 29 50 42 48 34 38 135 112 160 20 20 61 51 51 100 20 115 89 77
Solid Waste VOCs Bacteria Nutrients	Earth Day Event	Number of people reached.	<input type="checkbox"/> In Planning <input checked="" type="checkbox"/> Ongoing <input checked="" type="checkbox"/> Completed <input type="checkbox"/> Evaluation	04/26/14 2015 rained out	300 0
Illicit Discharges TSS, Bacteria, Chemicals	Inform citizens of how to spot and report SWMD	Number of people reached	<input type="checkbox"/> In Planning <input checked="" type="checkbox"/> Ongoing <input checked="" type="checkbox"/> Completed <input type="checkbox"/> Evaluation	09/19/2015 (TV News) 01/30/2015 News Ltr 01/23/2015 Utility bill 02/09/2015 Utility bill	22,000+ 9500 5000 5000
Household chemicals	Household Hazardous Waste Collection and Outreach	Number of people reached Number of HHAZ Collected	<input type="checkbox"/> In Planning <input checked="" type="checkbox"/> Ongoing <input checked="" type="checkbox"/> Completed <input type="checkbox"/> Evaluation	05/17/2014 05/16/2015	240 200
Solid waste, VOCs Bacteria Nutrients	Reach out to local groups to present stormwater pollution prevention	Number of people reached	<input type="checkbox"/> In Planning <input checked="" type="checkbox"/> Ongoing <input checked="" type="checkbox"/> Completed <input type="checkbox"/> Evaluation	04/02/2014 10/22/2014 10/29/2014 11/13/2014 03/10/2015 07/14/2015 07/15/2015	17 13 30 12 30 15 20
Solid waste VOCs Bacteria Nutrients	Train future stormwater professionals	Number of people reached	<input type="checkbox"/> In Planning <input checked="" type="checkbox"/> Ongoing <input checked="" type="checkbox"/> Completed <input type="checkbox"/> Evaluation	06/18/2014 10/14/2014 07/14/2015 07/15/2015 09/09/2015 09/15/2015	50 125 15 20 30 20
Solid waste VOCs Bacteria	Train city leaders	Number of people reached in city government	<input type="checkbox"/> In Planning <input checked="" type="checkbox"/> Ongoing <input checked="" type="checkbox"/> Completed	06/06/2014 08/21/2014	30 15

Nutrients			<input type="checkbox"/> Evaluation		
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C. Control Measure Evaluation (5.3)

1. Evaluate the success of this MCM. Refer to goals implemented and achieved, and adherence to the implementation schedule: The city has been very successful with this MCM. We have maintained and met our implementation schedule. We will continue to do so.

2. Provide an evaluation of where the program needs improvement and explain any actions that will be taken to achieve objectives: This program is a great success. No improvement needed.

III. Minimum Control Measures (MCM)

D. Minimum Control Measure 2: Public Involvement/Participation (4.2.2, 5.3)

1. How can the public find information about the SWMP? On-line; at public meetings; contact SWMD

2. Use the table below to summarize public involvement opportunities, goals, and progress for the current reporting year. In the “activities conducted and planned” section, focus on activities that were conducted in the last reporting year and those that are planned for the upcoming reporting year, providing implementation dates. Add rows where needed and attach additional sheets if necessary.

Public Involvement Opportunity	Measurable Goal(s)	Progress on Goal(s)	Activities Conducted and Planned (specific implementation dates)	Number of Participants
Construction Permitting & Development	Have citizens reach out, attend and speak concerning development. # Attending	<input type="checkbox"/> In Planning <input checked="" type="checkbox"/> Ongoing <input checked="" type="checkbox"/> Completed <input type="checkbox"/> Evaluation	City Planning Commission Meetings Monthly	120
Volunteer or participate in SWMD programs	Number of volunteers Number of participants	<input type="checkbox"/> In Planning <input checked="" type="checkbox"/> Ongoing <input checked="" type="checkbox"/> Completed <input type="checkbox"/> Evaluation	01/27/2014 03/27/2014 05/01/2014 05/17/2014 06/03/2014 6 weeks volunteer 01/23/2015 5 weeks volunteer 04/15/2015 05/16/2015 09/08/2015 6 mos volunteer weekly 10/29/2015 11/18/2015 12/01/2015	1 2 5 250 1 1 1 210 1 2 10 10
Participate in Earth Day Event	Number of participants	<input type="checkbox"/> In Planning <input checked="" type="checkbox"/> Ongoing <input checked="" type="checkbox"/> Completed <input type="checkbox"/> Evaluation	04/26/2014 2015 Rained out	250

E. Control Measure Evaluation (5.3)

1. Evaluate the success of this MCM. Refer to goals implemented and achieved, and adherence to the implementation schedule: This has been a very successful program. We have reached our goals consistently to involve the citizens in the SW management activities. At every opportunity, we invite and accept

participants to assist in our training activities, development permitting decisions and our programs.

2. Provide an evaluation of where the program needs improvement and explain any actions that will be taken to achieve objectives: The program has been successful for 11 years. The public is very receptive and outspoken about our ongoing programs and city stormwater infrastructure. We would like to interact with them with social media in 2016 & 2017 to continue the conversations and share opportunities.

III. Minimum Control Measures (MCM)

F. Minimum Control Measure 3: Illicit Discharge Detection and Elimination (IDDE) (4.2.3, 5.3)

1. How can the public notify the MS4 of suspected illicit discharges? On-line website reporting, call our office, email, post on our FB page, or contact public safety 24 hours per day.

2. Complete the list below for the last reporting year:

- Total number of suspected illicit discharges: 2015 = 15
- Total number of illicit discharges found: 2015 = 6
- Number of illicit discharges with enforcement escalation (action taken beyond written warning): 0
- Total number of illicit discharges eliminated: 2015 = 6

3. Use the table below to summarize priority areas (and associated rationale for selection) for screening. If these areas have changed since the last reporting year, provide a brief explanation. Add rows where needed and attach additional sheets if necessary.

Priority Areas	Rationale for Selection	Changed within last reporting year? (If so, provide an explanation.)
6 Watershed Basins (1st)	Basins with high density resid, commer, ind or TMDL	No
6 Watershed Basins (2nd)	Basins with med density residential or commercial.	No
4 Watershed Basins (3rd)	Basins are low density residential or light commerc.	No

4. Use the table below to summarize IDDE action items, goals, and progress for the current reporting year. In the "activities conducted and planned" section, focus on activities that were conducted in the last reporting year and those that are planned for the upcoming reporting year, providing implementation dates. Add rows where needed and attach additional sheets if necessary.

IDDE Action Item	Measurable Goal(s)	Progress on Goal(s)	Activities Conducted and Planned (specific implementation dates)
Create Field Screening and Monitoring SOP 2014 Conduct Field Screening 2015	Completed SOP 2014 Conducted Screening 2015	<input type="checkbox"/> In Planning <input checked="" type="checkbox"/> Ongoing <input checked="" type="checkbox"/> Completed <input type="checkbox"/> Evaluation	Complete the monitoring for 2016 and 2017 (see attached report). Assessing the results and implementing BMP strategy to correct any found problems.
2014 Create Priority Map Conduct field assessments 2015 2016 Continue assmt.	Created Priority Map Conducted Priority 1 Field Assessments	<input type="checkbox"/> In Planning <input checked="" type="checkbox"/> Ongoing <input checked="" type="checkbox"/> Completed <input type="checkbox"/> Evaluation	Map was refined and prioritized in 2014 & 2015. Continue to conduct field assessments based on priority.
Visit & verify GIS Map of SW Infrastructure 2014 20% & 2015 20% 2016 20%	Completed 20% 2014 Completed 20% 2015	<input type="checkbox"/> In Planning <input checked="" type="checkbox"/> Ongoing <input checked="" type="checkbox"/> Completed <input type="checkbox"/> Evaluation	40% if drains were inspected and determined if they correctly mapped during routine visits in 2014 & 2015. Continue to verify

Assess BMPs to Reduce 3 Priority POCs Implement small scale project based on results 2016 Increase BMP use	Improve city stormwater ponds to reduce pollutants and increase storm water infrastructure maintenance and cleaning.	X In Planning X Ongoing X Completed <input type="checkbox"/> Evaluation	Priority 1 targeted storm drain cleaning in 2014 & 2015. Continue this. Maintain and improve treatment capability of ponds 2014 & 2015. Continue. Prioritized capital projects 2015, Budgeted based on priority 2016.
Maintain, repair SW infrastructure 20% in 2014 & 20% in 2015 2016 Continue 20%	Complete 20% 2014 Complete 20% 2015	<input type="checkbox"/> In Planning X Ongoing X Completed <input type="checkbox"/> Evaluation	Completed 20% in 2014 & 2015 Continue maintaining and repairing infrastructure in a prioritized manner.
Education Workshops 2014 Professionals 2015 Contractors	Conduct education and outreach to a broad group of professionals and contractors.	X In Planning X Ongoing X Completed <input type="checkbox"/> Evaluation	Workshops have been ongoing in the city. Please see Education & Outreach table for specific dates.
Website & Reporting 2014 Update Website 2015 Reporting Contin 2016 Continue use	Completed. Monitor usage.	<input type="checkbox"/> In Planning X Ongoing X Completed <input type="checkbox"/> Evaluation	Website overhaul in 2014 & 2015 On-line reporting mechanism established. Monitor usage. Conduct further outreach to get more usage.
Enforcement Program 2014 Track Compliance 2015 Track Compliance 2016 Track Compliance	Get compliance.	<input type="checkbox"/> In Planning X Ongoing X Completed <input type="checkbox"/> Evaluation	All inspections were logged. Enforcement activities were logged. The city enforcement tracking system is being developed for GIS.
Facility Inspections 2014 100% City 20% Ind 2015 Continue same 2016 Continue same	Completion of inspections	<input type="checkbox"/> In Planning X Ongoing X Completed <input type="checkbox"/> Evaluation	2014 & 2015 100% of City Facilities were inspected, and 20% of industrial areas were inspected. 2016 we will continue.
Pollutant Removal 2014 Conduct HHAZ 2015 Conduct HHAZ 2016 Conduct HHAZ	Conduct events	<input type="checkbox"/> In Planning X Ongoing X Completed <input type="checkbox"/> Evaluation	2014 - May 17 event 2015 - May 16 event 2016 event is scheduled.

G. Control Measure Evaluation (5.3)

1. Evaluate the success of this MCM. Refer to goals implemented and achieved, and adherence to the implementation schedule: The illicit discharge investigation and elimination MCM for the city is very effective. We have identified and eliminated discharges when found without enforcement escalation. We are continually conducting outreach and education to inform citizens what not to do and how to report if something is being done that may be impacting our streams or river. We conduct inspections and educate staff on better ways to accomplish tasks without impacting our watersheds. The program is effective.

2. Provide an evaluation of where the program needs improvement and explain any actions that will be taken to achieve objectives: This is one of our strongest programs. Now with additional field screening and assessment of our TMDL watershed, we are learning more about the issue. We will continue our outreach activities and focus on identifying problems and resolving them within the community. This program is effective and our plans for the next couple of years will provide continued successful implementation of the BMP.

III. Minimum Control Measures (MCM)

H. Minimum Control Measure 4: Construction Site Storm Water Runoff Control (4.2.4, 5.3)

1. How can the public notify the MS4 of possible noncompliance at construction sites? On-line reporting; contact SWMD; phone in complaints; call public safety after hours

2. How does the MS4 communicate with construction operators to ensure understanding of requirements and improvements that may be needed? On-site inspections; preconstruction meetings; in office meetings; written concerns; construction permitting

3. Has an enforcement response plan (ERP) been developed and utilized?

Yes No (*explain*):

4. Complete the list below for the last reporting year:

- Number of new construction sites: 2014 = 21; 2015 = 20
- Total number of active construction sites: 2014 = 41; 2015 = 35
- Total number of inspections performed: 2014 = 297; 2015 = 306
- Number of sites with unsatisfactory/noncompliant inspection results: 2014 = 24; 2015 = 62
- Number of sites with enforcement escalation (action taken beyond written warning): 2014 = 3 2015 = 3
- Number of sites inspected past the deadline specified in the permit: None

5. Use the table below to summarize construction site action items, goals, and progress for the current reporting year. In the “activities conducted and planned” section, focus on activities that were conducted in the last reporting year and those that are planned for the upcoming reporting year, providing implementation dates. Add rows where needed and attach additional sheets if necessary.

Construction Site Action Item	Measurable Goal(s)	Progress on Goal(s)	Activities Conducted and Planned <i>(specific implementation dates)</i>
Complete 100% Permit review 2014, 2015, and 2016	100% of Development plans reviewed and issued permits by qualified personnel.	<input type="checkbox"/> In Planning <input checked="" type="checkbox"/> Ongoing <input checked="" type="checkbox"/> Completed <input type="checkbox"/> Evaluation	Continue program as is.
Site inspections At least 2x per month 2014, 2015 and 2016	2014 & 2015 site inspections at least two times per month for projects by qualified personnel	<input type="checkbox"/> In Planning <input checked="" type="checkbox"/> Ongoing <input checked="" type="checkbox"/> Completed <input type="checkbox"/> Evaluation	Continue program as is.
Review and update SESC and WQ Manual to establish and or maintain standards for new or redeveloped sites.	2014 – update manuals done 2015 – maintain updated manuals as changes are implemented, done	<input type="checkbox"/> In Planning <input checked="" type="checkbox"/> Ongoing <input checked="" type="checkbox"/> Completed <input type="checkbox"/> Evaluation	Continue to update manuals to reflect program changes. 2016 Review WQM and SESC Manual for proprietary devices updates or changes based on results in the field.
Compliance tracking.	2014 & 2015 – Track compliance to determine repeat noncompliance and establish more strict controls if necessary.	<input type="checkbox"/> In Planning <input checked="" type="checkbox"/> Ongoing <input checked="" type="checkbox"/> Completed <input type="checkbox"/> Evaluation	Completed tracking compliance for 2014 & 2015. 2016 – Two ongoing projects have routinely failed inspections based on tracking and are under corrective action plans to improve compliance.

Enforcement Program	Enforcement program working to bring sites into compliance.	<input type="checkbox"/> In Planning <input checked="" type="checkbox"/> Ongoing <input checked="" type="checkbox"/> Completed <input type="checkbox"/> Evaluation	2014 & 2015 Enforcement program was effective to bring sites into compliance. 2016 – update enforcement response plan to update corrective action plans for repeat violators.
Training program 2014 Update Website 2015 Training event for subcontractors	2014 – Website updated 2015 – Training conducted extensively in the field	<input type="checkbox"/> In Planning <input checked="" type="checkbox"/> Ongoing <input checked="" type="checkbox"/> Completed <input type="checkbox"/> Evaluation	Continue program. 2016 – Develop new outreach materials for contractors and subcontractors.
Public Input	2014 Attend & Provide Planning Commission with update, water quality and rankings. 2015 Review and document public input in annual report	<input type="checkbox"/> In Planning <input checked="" type="checkbox"/> Ongoing <input checked="" type="checkbox"/> Completed <input checked="" type="checkbox"/> Evaluation	2014 Attended and presented information to planning commission 2015 Reviewing and documenting public involvement, <u>not effectively, as we should.</u> 2016 Enhance the documentation process for public involvement for this MCM, update SWMP with findings and recommendations.

I. Control Measure Evaluation (5.3)

1. Evaluate the success of this MCM. Refer to goals implemented and achieved, and adherence to the implementation schedule: The city has implemented and achieved a successful construction permitting and inspection program to prevent illicit discharges in the community. Continuation of the training programs in house and in the field and working more closely with the repeat offenders should provide positive results during 2016. Through our 2014 and 2015 compliance tracking by projects, it allowed us to see clearly, where the problems were. In early 2016, we began confronting the repeat offenders individually through increased enforcement measures up to stopping the projects in their entirety. We used several steps in our enforcement measures to help the offenders to understand the city expects full compliance. One method that worked was pointing out the percentage of their failure rate compared to other developers/contractors working in the city. The numbers were upsetting to learn and they stated it gives them incentive to do more to keep their projects in compliance. We will continue to implement our BMPs to bring better compliance from repeat offenders at projects. We will also continue to provide education and outreach to all involved to facilitate a better outcome from these offenders.

2. Provide an evaluation of where the program needs improvement and explain any actions that will be taken to achieve objectives: To improve the public participation part of this program, we plan to track citizen involvement more effectively in 2016. Public participation occurs at city council meetings, zoning meetings, and planning commission meetings in addition to contact with the SWMD and our building standards staff. We will work with those groups to begin to capture more accurately the numbers and concerns of people that participate. We will use the information to improve tracking methods and public comment. Their concerns will be reviewed to determine if there is a consistency regarding stormwater issues that can be addressed.

III. Minimum Control Measures (MCM)

J. Minimum Control Measure 5: Post-Construction Storm Water Management (4.2.5, 5.3)

1. Complete the list below for the last reporting year:

- Number of newly completed construction sites: 2014 = est (5) 2015 = est (6)
- Number of inspections performed within 30 days of construction completion: 2014 & 2015 (est 8)
- Total number of inspections performed: 2014 = 48 (34 by SW) 2015 = 45 (36 by SW)
- Number of sites with unsatisfactory/noncompliant inspection results: 2015=11 Ponds – (for newly completed projects we generally only check for final stabilization so they can submit their termination. SW infrastructure and BMPs are inspected prior to issuance of certificate of occupancy, so we have verified everything is built correctly, implemented accurately and being maintained.
- Number of sites with enforcement escalation (action taken beyond written warning): 0

2. Use the table below to summarize post-construction action items, goals, and progress for the current reporting year. In the “activities conducted and planned” section, focus on activities that were conducted in the last reporting year and those that are planned for the upcoming reporting year, providing implementation dates. Add rows where needed and attach additional sheets if necessary.

Post-Construction Action Item	Measurable Goal(s)	Progress on Goal(s)	Activities Conducted and Planned <i>(specific implementation dates)</i>
2014 Create an inventory of installed post construction structural SW control devices to include maintenance, or corrective action. 2015 Update & maintain inventory & inspections & compliance.	2014 Inventory Created, maintenance inspections conducted. 2015 Maintain the inventory as projects are developed or redeveloped. Continue inspections. Conduct inspections at 20% of post construction sites per year during permit period.	<input type="checkbox"/> In Planning <input checked="" type="checkbox"/> Ongoing <input checked="" type="checkbox"/> Completed <input type="checkbox"/> Evaluation	2014: The SW staff pulled together all information for each project site developed within the city. 20% of inventory had inspections 2015: The inventory is being used to develop a comprehensive mapping tool for inspectors in the field. 20% of inventory had inspections. 2016: IPad type devices to conduct post construction field inspections are to be added. Inventory uploaded into the city GIS map program will provide real time information for sites inspectors.
Post construction maintenance assurance & enforcement	Bringing sites into compliance, using enforcement if necessary.	<input type="checkbox"/> In Planning <input checked="" type="checkbox"/> Ongoing <input checked="" type="checkbox"/> Completed <input type="checkbox"/> Evaluation	2014 – 48 Inspections Private & City; 24 city ponds cleaned; Private ponds were brought into compliance if necessary. 2015 – 45 Inspections Private & City; 35 city ponds were cleaned; Private ponds were brought into compliance if necessary. 2016 Program will be enhanced with electronic field equipment tied to GIS
2014 Identify all devices that discharge into TMDL or 303d stream. Highest priority. 2015 Conduct inspections at high priority devices (50 to 100%)	2014 – devices identified and put on city map as highest priority 2015 – inspections completed	<input type="checkbox"/> In Planning <input checked="" type="checkbox"/> Ongoing <input checked="" type="checkbox"/> Completed <input type="checkbox"/> Evaluation	Continue ongoing program targeting highest priority devices for inspection and maintenance needs annually. 2016 & 2017 Determine which high priority devices can be modified to provide additional BMPs to protect TMDL or 303d listed streams. Approach private owners to share incentive information for retrofitting these ponds.

<p>2014 Prepare education materials for pond owners 2015 Meet with owners to inform them of the issues in the watershed. 2015 Update water quality manual with retrofitting section.</p>	<p>2014 Materials prepared and shared with owners with unsatisfactory inspections. 2015 Meeting with owners with unsatisfactory inspections Manual updated (No)</p>	<p><input type="checkbox"/> In Planning <input checked="" type="checkbox"/> Ongoing <input checked="" type="checkbox"/> Completed <input type="checkbox"/> Evaluation</p>	<p>2014 Prepared letters and handouts for land owners with pond or stormwater infrastructure that requires maintenance 2015 Met with or discussed these devices within the watershed and the importance of proper working conditions, opportunities for retrofitting, and how to assess feasibility. The water quality manual was not updated with a specific retrofitting section. This will be a focus in 2016. 2016 Update the water quality manual with latest technologies and methods that have proven success for pollutant of concern removal. A stormwater device and pond maintenance workshop for residential, private and city infrastructure owners will be completed. In 2017, a commercial owner workshop will be held.</p>
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K. Control Measure Evaluation (5.3)

1. Evaluate the success of this MCM. Refer to goals implemented and achieved, and adherence to the implementation schedule: The post construction MCM is effective. The city has conducted extensive surveys of the stormwater infrastructure, prioritized our watershed for maintenance activities, completed cleaning of hundreds of drains per year, assessed our city owned buildings and parks, and worked with private stormwater infrastructure owners to bring their sites into compliance for proper operation. A few projects took an escalation of written notices to get compliance, but they were brought into compliance. In the coming year we will implement GIS based tools to help field inspection and maintenance staff to update and track work flow and identify problem areas. We will spend some time to update the water quality manual with the latest information on effective BMPs that can be implemented to retrofit existing structures. The program is effective.

2. Provide an evaluation of where the program needs improvement and explain any actions that will be taken to achieve objectives: The program is effective and continues to build into a strong program. The goals for the next two years are to target a more comprehensive approach tracking compliance and outreach that will increase effectiveness of this MCM.

III. Minimum Control Measures (MCM)

L. Minimum Control Measure 6: Pollution Prevention/Good Housekeeping for Municipal Operations (4.2.6, 5.3)

1. Has a comprehensive assessment of the pollutant discharge potential for all municipally owned facilities been conducted? If not, indicate a status and planned completion date in the chart below.

Yes No In Progress (explain): _____

2. Have yearly comprehensive inspections been conducted at high priority facilities? If not, indicate a status and planned completion date in the chart below.

Yes No In Progress (explain): _____

3. Has training been conducted for employees? If not, indicate a status and planned completion date in the chart below.

Yes No In Progress (explain): _____

4. Use the table below to summarize municipal facility pollution prevention action items, goals, and progress for the current reporting year. In the “activities conducted and planned” section, focus on activities that were conducted in the last reporting year and those that are planned for the upcoming reporting year, providing implementation dates. Ensure that the maintenance and inspection of MS4 catch basins and structural storm water controls are addressed in the chart. Add rows where needed and attach additional sheets if necessary.

Pollution Prevention Action Item	Measurable Goal(s)	Progress on Goal(s)	Activities Conducted and Planned <i>(specific implementation dates)</i>
Employee training	All designated employees attend	<input type="checkbox"/> In Planning <input checked="" type="checkbox"/> Ongoing <input checked="" type="checkbox"/> Completed <input type="checkbox"/> Evaluation	2014 & 2015 Employee training was conducted through safety meetings with their supervisors, or specific departmental meetings with SWMD staff. See training information page 3. 2016 continue employee training events
2014 Conduct comprehensive assessment of all city facilities potential to impact water quality 2015 Assess develop and review ways to prevent impacts or implement BMPS 2015 Create SOPs for high priority facilities	2014 Evaluation conducted for 100% of facilities. 2015 Assessment of facilities for improvement 2015 Creation of SOPs for high priority facilities.	<input type="checkbox"/> In Planning <input checked="" type="checkbox"/> Ongoing <input checked="" type="checkbox"/> Completed <input type="checkbox"/> Evaluation	2014 & 2015: A comprehensive evaluation GIS based desk-top, was completed in 2014. Field visits were conducted for 100% of facilities and parks April to July of 2015. An assessment of each location with each facility manager/or director along with staff that supervised activities at the facility were conducted. The facilities were ranked. SOPs were developed for the high priority facilities. The facility managers working with the SWMD developed the SOPs. 2016 – we will continue and conduct annual comprehensive inspections
Conduct inspections, maintenance and or repair of 20% of catch basins annually in Priority 1 watersheds.	2014 Number of catch basins cleaned = 20% 2015 Number of catch basins cleaned = 20%	<input type="checkbox"/> In Planning <input checked="" type="checkbox"/> Ongoing <input checked="" type="checkbox"/> Completed <input type="checkbox"/> Evaluation	2014 - 282 drains cleaned (high priority) 2015 – 419 drains cleaned (high priority) 2016 continue.
Develop pollution reduction plans for city operations.	2014 Develop plan for pavement & right of way maintenance 2015 Develop plan for festivals and events.	<input checked="" type="checkbox"/> In Planning <input checked="" type="checkbox"/> Ongoing <input checked="" type="checkbox"/> Completed <input type="checkbox"/> Evaluation	2014 Property maintenance & Streets/Drains continually work to reduce pollution from operations. 2015 All festivals and events planners are provided with stormwater pollution prevention handouts and signage to promote reduction of pollutant impacts. All vendors are provided flyers. 2016 Focus on festival visitors

Maintenance of city owned stormwater control structures.	2014 Maintain 20% of structures 2015 Maintain 20% of structures	<input type="checkbox"/> In Planning <input checked="" type="checkbox"/> Ongoing <input checked="" type="checkbox"/> Completed <input type="checkbox"/> Evaluation	2014 & 2015 Most all of the city stormwater structures are inspected and maintained twice a year. 2016 Continue
Education materials	2014 Develop training materials 2015 Develop training for SOP/SWPPP for high priority facilities	<input type="checkbox"/> In Planning <input checked="" type="checkbox"/> Ongoing <input checked="" type="checkbox"/> Completed <input type="checkbox"/> Evaluation	2014 Training materials were developed for different city activities or departments. 2015 Training materials and kits were developed and put together in November and December 2015 for high priority facilities or activities. 2016 The city's highest priority facility staff participated in a training presentation meeting on spill prevention and clean up. Over 40 spill kits developed in 2015 were provided to each high-risk vehicle (trash trucks, heavy equipment, knuckle boom trucks, transfer trailers, etc.). <i>Additional training meetings will be held at other high ranked facilities in 2016 & 2017.</i>
Establish contractor oversight for city projects.	Develop language and make sure it is city contracts.	<input type="checkbox"/> In Planning <input checked="" type="checkbox"/> Ongoing <input checked="" type="checkbox"/> Completed <input type="checkbox"/> Evaluation	The information was developed and passed to all staff that enter into contracts. SWMD inspection programs for city projects continue to be effective to maintain compliance or regain it if necessary.

M. Control Measure Evaluation (5.3)

1. Evaluate the success of this MCM. Refer to goals implemented and achieved, and adherence to the implementation schedule: _____ The city has adhered to its implementation schedule. We reached goals set for this MCM and continue to measure the success of the program. This has been an effective program and we have learned quite a lot over the past two years. The facility wide assessments were a prime opportunity to conduct education and we actually identified several areas where improvement is needed. Employees were eager to participate and learn how they can reduce pollution and protect our environment. This program is effective.

2. Provide an evaluation of where the program needs improvement and explain any actions that will be taken to achieve objectives: _____ The program is effective. We will continue to develop ways to reduce pollutants and manage city property and events so that our activities do not impact our streams and the river. We will implement our SWMD goals and objectives in a way that we remain effective. With our community growing and our festivals becoming huge, we have more to do during those events. The vendors are learning and following our guidance, but the festival visitors are not getting the message as well. We will work to correct that in 2016 & 2017.

City of North Augusta TMDL Monitoring and Assessment Plan Implementation Summary

The data collected and presented as follows are the summary information gathered through four (4) sampling events prescribed in the City of North Augusta TMDL Monitoring and Assessment Plan. They constitute preliminary information and are from the first completed rounds of our Summer, Fall, Winter sampling along with one follow-up investigative sampling event. The sampling plan is as follows:

SEASON	MONTHS	DATES (24 mos):
• Summer Sampling 2016	(June – August)	June 2015 and July
• Fall Sampling	(September – October)	TBD 2015 and 2016
• Winter Sampling or 2017	(November – February)	TBD 2015 and 2016
• Spring Sampling	(March – May)	TBD 2016 and 2017

To date the Summer dry weather, Fall wet weather and first Winter Wet weather samples have been completed and on schedule. This report summarizes the results of the sampling events and follow-up sampling based on those results. There is one remaining sample event for this first year implementation. All samples analyzed for *E. coli* were processed via IDEXX Quantitray enumeration procedures.

Samples taken at prescribed sample locations within the Pretty Run Basin during a representative wet weather event in the Fall on October 27, 2015 all exceeded the high range of the testing method at >2419.2 mpn/100 ml. That data was inconclusive since it was all above the testing range. Subsequent rounds of sampling were conducted as the result of elevated *E. coli* levels observed in previously taken background samples. Dry weather background samples were taken on July 07, 2015. One sample at a downstream location, NA-PR-02 resulted in 1120 mpn/100 ml. This is above the standard 349 mpn/100 ml and also is the highest result of all the background samples. Therefore, three sample points were added to the sampling plan upstream of NA-PR-02 along two branches of an unnamed tributary of Pretty Run

Creek. A third branch on that tributary was not sampled. One point was chosen along the western branch, NA-PR-HP2 and two points along the eastern branch, NA-PR-HP and NA-PR-HPb respectively. Please refer to illustrations provided. The NA-PR-HP2 (western branch) upstream location is an area within the basin where the sole source of impact is from urban animal activity. The two eastern branch samples NA-PR-HP and NA-PR-HPb are on a stream segment that is adjacent to a sanitary sewer line.

NA-PR-02 is located downstream of the confluence of these two branches. When the elevated *E. coli* level of 1120 mpn/100 ml was seen at NA-PR-02 during a dry weather event, it was suspected that illicit discharge from nearby sanitary sewer lines along the eastern branch could be the cause. This nearby sewer line services neighborhoods located above the 171 sq. acre wooded area surrounding the three branches in question. Follow-up sampling was conducted on November 3, 2015 to potentially identify if the source of *E. coli* was the sewer service line. This set of samples, which was not a representative wet or dry weather sampling event, showed highest *E. coli* levels (1300 mpn/ 100ml) were from NA-PR-HP2. Lower levels were shown from NA-PR-HP and NA-PR-HPb (816 mpn/ 100 ml, and 488 mpn/ 100 ml respectively). Since NA-PR-HP2 does not run adjacent to any waste water sewer lines and has no impact from human activity, we suspect the cause of elevated levels is not the nearby waste water line that was impacting this unnamed tributary.

Research found involving similar situations with elevated *E. coli* levels suggested that elevated levels such as these during rain events can arise from urban animal sources alone. To further elucidate potential wastewater sources we also conducted nutrient testing (Phosphorus, TKN, Ammonia, and Nitrite/Nitrate) concurrently with the *E. coli* samples during October 27, 2015. The results imply that sanitary sewer leakages are unlikely to be the cause of the elevated *E. coli* levels. Subsequent to those samples, we conducted DNA source tracking analysis at NA-PR-HP2 during the February 16, 2016. It revealed the *E. coli* and other bacteria found in NA-PR-HP2 samples were of ruminant, not human, origin. Based on this information, it is our belief that these results show no cause for concern of illicit discharge impact upon the Pretty Run Basin from waste water lines. To further our understanding of this

reach of Pretty Run, the city will conduct smoke testing of these wastewater lines prior to our Spring wet weather sample event.

Previous research conducted by Pitt and Shergill of the University of Alabama have shown similar levels of *E. coli* in a study conducted on a section of Cribbs Mill Creek in Tuscaloosa, Alabama. These levels were observed in wet weather samples collected from areas where sanitary sewage contamination was not possible. In their samples taken during a wet weather event on 25-Sep-02, areas that were both prone and not prone to use by urban animal life and where contamination from sanitary sewage was not a possibility, levels of *E. coli* regularly exceeded 2419.2 mpn/100 ml. In areas prone to urban animal use alone, all but one of Pitt and Shergill's samples exceeded 2419.2 mpn/100 ml. The one sample that was lowest was measured at 344.8 mpn/100 ml, only 4.2 mpn/100 ml below the SCDHEC TMDL standard of 349. Animals that live in the surrounding area frequently seek refuge in this location. While conducting sampling, visible evidence of ruminant in habitation was seen throughout the area. This included deer scat and tracks. Therefore, it is reasonable to assume that this increased animal activity has led to the elevated levels of *E. coli* observed in the unnamed tributary affecting the downstream locations including RS-04544 (aka NA-PR-01).

At the time that the *E. coli* samples were gathered on the 27-Oct-15 wet weather event, nutrient samples were also taken. The results of these test can be seen in the chart below. Also in the chart are average levels of nutrients observed in the National Stormwater Quality Database (NSQD) in residential areas as well as the average levels of nutrients of all samples taken within North Augusta from 2005 until 2013. All nutrient levels reported in the 27-Oct-15 sampling event were below the city average as well as those observed in the NSQD. Having nutrient levels within accepted ranges reinforces our belief that sanitary sewage is not impacting these branches in question.

	27-Oct-15 Event	NSQD Observed Residential (Avg. Conc)	City of North Augusta (Avg for all streams N=88) (2005-2013)
Ammonia (mg/L)	0.22	0.31	0.38
Nitrate (mg/L)	0.1	0.6	0.7
Phosphorus (mg/L)	0.053	0.3	0.19
TKN (mg/L)	0.52	1.4	0.89

Further tests were conducted on samples gathered on 16-Feb-2016. In addition to the IDEXX Quantitray analysis for *E. coli*, two DNA source tracking test were performed by SourceMolecular Laboratories to determine if (1) human or (2) ruminant sources could be identified. Observed *E. coli* levels in the February 16, 2016 wet weather sample at NA-PR-HP2 were 534 mpn/100ml, however, the DNA source tracking analyses showed that in this sample, none of the bacterial contamination had human origins. The contaminating bacteria that was present in the sample originated from ruminant sources.

Despite our reported *E. coli* levels exceeding the standard 349 mpn/100ml in the Pretty Run Basin we believe we have provided ample evidence that these levels potentially arise from natural sources, not from city wastewater infrastructure or illicit discharges to stormwater systems. This elevation in *E. coli* levels are most likely the result of large amounts of animal activity and not deficiencies in local infrastructure. This is concurrent with the current TMDL for Pretty Run Creek in the City of North Augusta.

MCM #01 Educational Outreach Summary Jan 1, 2014 – Dec 31, 2015

Date	Item/Event - Audience	Topic Covered/Discussed	Participants/Group
02/21/14	NA Elem Math/Science Day	Stormwater Education	115 kids 10 adults
04/02/2014	Leadership North Augusta Present/Tour	Brick Pond Park stormwater treatment system	
04/26/2014	Earth Day at Brick Pond Park	Stormwater model activity & giveaways	75 adults 225 kids
05/01/2014	Mossy Creek Elem. 5 th Grade	BPP SW Treatment Wetlands educ.	62 kids 8 adults
05/17/2014	Household Hazardous Waste	Stormwater, disposal HHAZ, Survey	120 cars (x 2 adults per car)
06/06/2014	North Augusta Forward - City Council	Presented 2014 Stormwater Permit requirements and goals	30 adults
06/09/2014	Fairview Presbyterian Daycare	Stormwater at Brick Pond Park	9 kids 4 adults
06/10/2014	Fairview Presbyterian Daycare	Stormwater at Brick Pond Park	25 kids 4 adults
06/11/2014	Adventure Camp at BPP	SW Education BPP tour and activity	44 kids 6 adults
06/18/2014	EPA Stormwater Workshop (Columbia)	Training future MS4s about Illicit Discharge Detection	50 adults
06/19/2014	Adventure Camp	SW Education BPP tour and activity	38 kids 4 adults
06/26/2014	Adventure Camp	SW Education BPP tour and activity	44 kids 4 adults
07/01/2014	Adventure Camp	SW Education BPP tour and activity	30 kids 4 adults
07/10/2014	Adventure Camp	SW Education BPP tour and activity	33 kids 5 adults
08/21/2014	North Augusta Planning Commission	Stormwater Water Quality update	15 adults
09/19/2014	News Story – WRDW Ch. 12	Protecting storm drains	25,000+
10/14/2014	SC Water Resources Conference	Transitioning a Community to Natural Resource Management	125 adults
10/22/2014	Johnston Garden Club	Stormwater treatment at BPP	13 adults
10/29/2014	Augusta Photo Festival Tour	BPP SW Treatment Wetlands educ.	30 adults
10/30/2014	NA Elementary tour of BPP	SW Education BPP Tour & activity	120 kids 15 adults
11/11/2014	Belvedere Elem.	BPP SW Treatment Wetlands educ.	100 kids 12 adults
11/13/2014	Terrace Garden Club	Stormwater in North Augusta	12 adults
01/30/2015	Blue Bag Newsletters to all Customers-SW Message	Illicit Discharge Reporting directions	9500 customers
01/23/2015	North Augusta Utility Bills	Illicit Discharge Reporting directions	5,000 customers
02/09/2015	North Augusta Utility Bills	Illicit Discharge Reporting directions	5,000 customers
03/10/2015	Lions Club	Stormwater treatment wetlands BPP	30 adults
03/27/2015	Mossy Creek Elem 3 rd G Science Day	BPP SW Treatment Wetlands educ.	150 kids 10 adults
05/16/2015	Household Hazardous Waste Collection Day	Speaking with each participant	100 cars (x 2 adults per car)
06/08/2015	Fairview Presbyterian Daycare	BPP SW Treatment Wetlands Educ.	16 kids 4 adults
06/10/2015	Fairview Presbyterian Daycare	BPP SW Treatment Wetlands Educ.	16 kids 4 adults
06/11/2015	SCASM Presentation	Stormwater Enforcement MS4 Training	150 adults
06/12/2015	Adventure Camp	SW Education BPP tour and activity	55 kids 6 adults
06/16/2015	Adventure Camp	SW Education BPP tour and activity	45 kids 6 adults
06/23/2015	Adventure Camp	SW Education BPP tour and activity	45 kids 6 adults
06/24/2015	Aiken County Reading	SW Education BPP tour and activity	90 Kids 10 adults
07/14/2015	SC State University	GIS and Stormwater training	15 adults
07/15/2015	SC State University	GIS and Stormwater training	20 adults
09/09/2015	GRU Presentation – Ecotoxicology	Stormwater, Water Quality & BPP	30 adults
09/15/2015	GRU Students Seminar	Learn water quality sampling	20 adults
10/21/2015	North Augusta Elem.	BPP SW Treatment Wetlands Educ.	100 kids 15 adults
11/18/2015	Belvedere Elem	BPP SW Treatment Wetlands Educ.	79 kids 10 adults
12/01/2015	Paul Knox Middle	BPP SW Treatment Wetlands Educ.	69 Kids 8 adults
<i>Approx. Total of Individuals Reached 01/01/14– 12/31/15</i>			47,220

MCM #2 Summary Activities for Jan 1, 2014 – Dec. 31 2015

Date	Activity	Participants
01/27/2014	Ross Henley - Volunteer 2014	1
03/27/2014	Volunteer Cleanup Crystal Lake Basin	2
04/26/2014	Earth Day at Brick Pond Park	20
05/01/2014	Mossy Creek Elem. Tour Volunteers	5
05/17/2014	Household Hazardous Waste Collection Day	250
06/03/2014	Abigale Aldread - Volunteer 2014	1
10/30/2014	North Augusta Elem. Tour Volunteers	10
11/11/2014	Belvedere Elem. Tour Volunteers	10
01/23/2015	Paul Jackson - Volunteer	1
04/15/2015	Volunteer Trash Collection	1
05/16/2015	Household Hazardous Waste Collection Day	210
09/08/2015	Lawanda Dandy-Volunteer 2015	1
10/21/2015	North Augusta Elem. Tour Volunteers	10
10/29/2015	GRU Students conducted water sampling	2
11/18/2015	Belvedere Elem. Tour Volunteers	10
12/01/2015	Paul Knox 6 th Grade Field Trip Volunteers	10
	<i>Total for period</i>	<i>544</i>

MCM #3 Total Wastes Removed from Community**Storm Drain Cleaning**

Year	Item	Number of Drains Cleaned	Pollutants Removed (tons estimated)
2014	Storm drains cleaned	282	5.64
2015	Storm drains cleaned	419	8.38

Litter Pick-up Program

Year	Item	Pollutants Removed (tons)
2014	Litter pickup roadsides	8.5 (est)
2015	Litter pickup roadsides	11.9

Street Sweeping

Year	Street Sweeping	Actual Pollutants Removed (tons)
2014	Street Sweeping (977 miles)	390
2015	Street Sweeping (1339 miles)	486

Household Hazardous Waste Collections

Year	Types of items collected	Potential Pollutants Removed (not landfilled, tons)
2014	Paint, oils, gasoline, pesticides, herbicides	3.985 (see table next page)
2015	Paint, oils, gasoline, pesticides, herbicides	5.995 (see table next page)

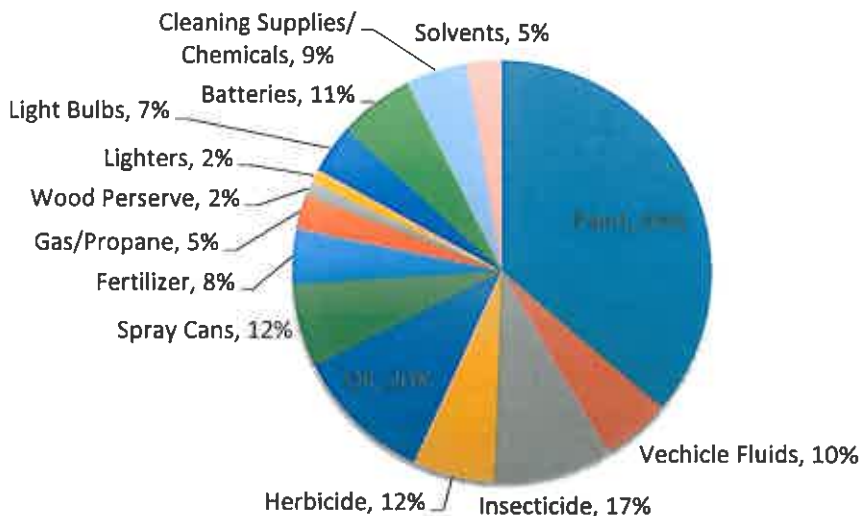
Storm Pipe Repairs

Year	Item	(linear ft.)
2014	Storm Pipes repaired or installed	1082
2015	Storm Pipes repaired or installed	642

Detailed Account of Household Hazardous Waste collected**May 17, 2014 HHAZ**

Profile Name	Weight (in pounds)	Tons
SOLVENTS & OIL BASED PAINT POUR OFF	440.0	0.22
PAINT CANS	310.0	0.155
AEROSOLS	230.0	0.115
FOAMING AEROSOLS FROM HHW	5.0	0.0025
PESTICIDE LIQUIDS	647.0	0.323
PESTICIDE SOLID	719.0	0.36
ACID-LOOSE PACK	172.0	0.086
BASE-LOOSEPACK	104.0	0.052
ANTIFREEZE	183.0	0.091
NICD / NIMH BATTERIES	14.0	0.007
ALKALINE BATTERIES	85.0	0.042
LEAD ACID BATTERIES	89.0	0.044
LITHIUM BATTERIES	5.0	0.0025
FLUORESCENT LIGHT BULBS	21.0	0.01
FLUORESCENT LIGHT BULBS	43.0	0.021
MERCURY VAPOR BULBS / HIGH DENSITY DISCH	4.0	0.002
OIL BASED PAINT CANS	1080.0	0.54
LATEX PAINT IN CANS FOR LANDFILL	3642.0	1.82
LAB PACK QUANTITIES OF MERCURY FOR RETOR	5.0	0.0025
INORGANIC OXIDIZERS FROM REPRESENTED GEN	6.0	0.003
ASBESTOS CONTAINING MATERIAL IN LAB PACK	40.0	0.02
REACTIVE LAB PACK MATERIAL NOT INLCUDING	4.0	0.002
INORGANIC CHLORINATED OXIDIZERS FROM REP	36.0	0.018
FLAMMABLE SOLIDS LAB PACK THAT ARE R.C.R	4.0	0.002
REACTIVE LAB PACK MATERIAL NOT INLCUDING	27.0	0.013
HAND HELD PROPANE CYLINDERS WITH NON-RCR	6.0	0.003
CYLINDERS OF INERT GASSES	10.0	0.005
CYLINDERS OF INERT GASSES	4.0	0.002
CYLINDERS OF FLAMMABLES, ACIDS, BASES	50.0	0.025
	7985.0	3.9885

2015 HHAZ Collection Results Based on Survey



May 16, 2015 HHAZ EVENT

Substances Collected	Weight in pounds	Weight in Tons	Percentage
Flammable Liquids	1417	0.71	12%
Fluorescent bulbs	29	0.01	0%
CFL	1	0	0%
Solvents (liquid)	536	0.27	4%
Lead Acid Batteries	163	0.08	1%
Alkaline Batteries	63	0.03	1%
Lithium Batteries	1	0	0%
Nicad Batteries	1	0	0%
Acids (loose pack, dry)	1	0	0%
Base (loose pack, dry)	181	0.09	2%
Pesticide Liquids	1040	0.52	9%
Flammable Liquids	480	0.24	4%
Aerosols	290	0.145	2%
Hand held propane cylinder	1	0	0%
Inorganic Chlorinated Oxidizers	39	0.02	0%
Inorganic Oxidizers	1	0	0%
Mercury containing material	1	0	0%
Flammable Solids	1	0	0%
Non PCB ballasts	1	0	0%
Oil based Paint	2762	1.38	23%
Waste oil	2000	1	17%
Latex Paint	3001	1.5	25%
	12010	5.995	100%