

# Commonwealth of Pennsylvania MS4 Annual Report

March 2017 - 2018

Prepared For



York City City, York County







## ANNUAL MUNICIPAL SEPARATE STORM SEWER SYSTEM (MS4) STATUS REPORT

FOR THE PERIOD 4/01/2017 TO JUNE 30, 2018

GENERAL INFORMATION					
Permittee Name:	City of York		NPDES Permit No.:	PAG133596	
Mailing Address:	101 S. George Street		Effective Date:	April 1, 2013	
City, State, Zip:	York, PA 17401		Expiration Date:	NA	
MS4 Contact Person:	Lettice Brown		Renewal Due Date:	NA	
Title:	MS4 Coordinator		Municipality:	City of York	
Phone:	717-324-6532		County:	York	
Email:	lbrown@yorkcity.org				
Co-Permittees (if applicable): NA					
Appendix(ces) that permittee is subject to (select all that apply):					
<input type="checkbox"/> Appendix A <input type="checkbox"/> Appendix B <input type="checkbox"/> Appendix C <input checked="" type="checkbox"/> Appendix D <input checked="" type="checkbox"/> Appendix E <input type="checkbox"/> Appendix F					
WATER QUALITY INFORMATION					
Are there any discharges to waters within the Chesapeake Bay Watershed? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No					
Identify all surface waters that receive stormwater discharges from the permittee's MS4 and provide the requested information (see instructions).					
Receiving Water Name	Ch. 93 Class.	Impaired?	Cause(s)	TMDL?	WLA?
Codorus Creek	WWF	Yes	Aquatic Life	No	No
UNT to Codorus Creek (Poorhouse Run)	WWF	Yes	Aquatic Life	No	No
UNT to Codorus Creek (Tyler Run)	WWF	Yes	Aquatic Life	No	No
Mill Creek	WWF	Yes	Aquatic Life	No	No
Willis Run	WWF	Yes	Aquatic Life	No	No
UNT to Willis Run	WWF	Yes	Aquatic Life	No	No
UNT to Codorus Creek (Lightners Run)	WWF	Yes	Aquatic Life	No	No



### GENERAL MINIMUM CONTROL MEASURE (MCM) INFORMATION

Have you completed all MCM activities required by the permit for this reporting period? ☒ Yes ☐ No

List the current entity responsible for implementing each MCM of your SWMP, along with contact name and phone number.

MCM	Entity Responsible	Contact Name	Phone
#1 Public Education and Outreach on Storm Water Impacts	City of York	Lettice Brown	717-324-6532
#2 Public Involvement/Participation	City of York	Lettice Brown	717-324-6532
#3 Illicit Discharge Detection and Elimination (IDD&E)	City of York	Lettice Brown	717-324-6532
#4 Construction Site Storm Water Runoff Control	YCCD & City of York	Lettice Brown	717-324-6532
#5 Post-Construction Storm Water Management in New Development and Redevelopment	City of York	Lettice Brown	717-324-6532
#6 Pollution Prevention / Good Housekeeping	City of York	Lettice Brown	717-324-6532

### MCM #1 – PUBLIC EDUCATION AND OUTREACH ON STORM WATER IMPACTS

#### BMP #1: Develop, implement and maintain a written Public Education and Outreach Program.

1. For new permittees only, has the written PEOP been developed and implemented within the first year of permit coverage?

☐ Yes ☐ No

2. Date of latest annual review of PEOP: January 29, 2017 Were updates made? ☐ Yes ☒ No

3. What were the plans and goals for public education and outreach for the reporting period?

To increase our public education and outreach to the public by attending public events, handing out information, refining our webpage, and create a social media page. More activities listed in MCM 1 Appendix.

4. Did the MS4 achieve its goal(s) for the PEOP during the reporting period? ☒ Yes ☐ No

5. Identify specific plans and goals for public education and outreach for the upcoming year:

The City of York will continue to utilize all platforms of information including WRTV, street fairs and public events, meetings, volunteer opportunities, new distribution materials, and putting information on the stormwater vehicle.

#### BMP #2: Develop and maintain lists of target audience groups present within the areas served by your MS4.

1. For new permittees only, have the target audience lists been developed and implemented within the first year of permit coverage?

☐ Yes ☐ No

2. Date of latest annual review of target audience lists: January 19, 2017 Were updates made? ☐ Yes ☒ No

#### BMP #3: Annually publish at least one educational item on your Stormwater Management Program.

1. For new permittees only, were stormwater educational and informational items produced and published in print and/or on the Internet within the first year of permit coverage?



☐ Yes ☐ No

2. Date of latest annual review of educational materials: March 15, 2017      Were updates made?      ☒ Yes ☐ No
3. Do you have a municipal website?      ☒ Yes ☐ No      (URL:  
www.yorkcity.org/city-services/departments/public-  
works/stormwater-management)



If Yes, what MS4-related material does it contain?

Green Action Plan, Learn more about Water Conservation Organizations, Education Materials, Links.

4. Describe any other method(s) used during the reporting period to provide information on stormwater to the public:  
In addition to the website and newsletters, the City has a kiosk of information located in the the lobby of City Hall. The City also utilizes door to door information handouts along with WRTV videos. Environmental education is taught at schools yearly
5. Identify specific plans for the publication of stormwater materials for the upcoming year:  
Current methods and mediums will continue and be updated and refined along the way. Other ideas for publications will be discussed.

**BMP #4: Distribute stormwater educational materials to the target audiences.**

Identify the two additional methods of distributing stormwater educational materials during the previous reporting period (e.g., displays, posters, signs, pamphlets, booklets, brochures, radio, local cable TV, newspaper articles, other advertisements, bill stuffers, posters, presentations, conferences, meetings, fact sheets, giveaways, or storm drain stenciling).

Door to door information hangers, WRTV videos.

**MCM #1 Comments:**

**MCM #2 – PUBLIC INVOLVEMENT/PARTICIPATION**

**BMP #1: Develop, implement and maintain a written Public Involvement and Participation Program (PIPP)**

1. For new permittees only, was the PIPP developed and implemented within one year of permit coverage?  
☐ Yes ☐ No
2. Date of latest annual review of PIPP: January 19, 2017      Were updates made? ☐ Yes ☒ No

**BMP #2: Advertise to the public and solicit public input on ordinances, SOPs, Pollutant Reduction Plans (PRPs) (if applicable) and TMDL Plans (if applicable), including modifications thereto, prior to adoption or submission to DEP:**

1. Was an MS4-related ordinance, SOP, PRP or TMDL Plan developed during the reporting period? ☐ Yes ☒ No
2. If Yes, describe how you advertised the draft document(s) and how you provided opportunities for public review, input and feedback:
3. If an ordinance, SOP or plan was developed or amended during the reporting period, provide the following information:

Ordinance / SOP / Plan Name	Date of Public Notice	Date of Public Hearing	Date Enacted or Submitted to DEP



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**BMP #3: Regularly solicit public involvement and participation from the target audience groups using available distribution and outreach methods.**

1. At least one public meeting or other MS4 event must be held during the 5-year permit coverage period to solicit participation and feedback from target audience groups. Was this meeting or event held during the reporting period?

☒ Yes ☐ No If Yes, Date of Meeting or Event: May 24, 2017

2. Report instances of cooperation and participation in MS4 activities; presentations the permittee made to local watershed and conservation organizations; and similar instances of participation or coordination with organizations in the community.

MS4 Coordinator active with WAY and other watershed groups. The City partners with WAY for various activities including litter pick ups, tending to community gardens, and other activities.

3. Report activities in which members of the public assisted or participated in the meetings and in the implementation of the SWMP, including education activities or efforts such as cleanups, monitoring, storm drain stenciling, or others.

Artist project held to add relevant artwork on sidewalks near storm water inlets in the downtown to promote when it rains it drains.

**MCM #2 Comments:**

**MCM #3 – ILLICIT DISCHARGE DETECTION AND ELIMINATION (IDD&E)**

**BMP #1: Develop and implement a written program for the detection, elimination, and prevention of illicit discharges into the regulated small MS4.**

1. For new permittees only, was the written IDD&E program developed within one year of permit coverage?

☐ Yes ☐ No

2. Date of latest annual review of IDD&E program: January 19, 2017 Were updates made? ☐ Yes ☒ No

**BMP #2: Develop and maintain map(s) that show permittee and urbanized area boundaries, the location of all outfalls and, if applicable, observation points, and the locations and names of all surface waters that receive discharges from those outfalls. Outfalls and observation points shall be numbered on the map(s).**

1. Have you completed a map(s) that includes all components of BMP #2? ☒ Yes ☐ No

If Yes and you are a new permittee and have not submitted the map(s) previously, attach the map(s) to this report.

If No, date by which permittee expects map(s) to be completed:

2. Date of last update or revision to map(s): March 15, 2017

3. Total No. of Outfalls in MS4: 369 Total No. of Outfalls Mapped: 369

4. Total No. of Observation Points: 8 Total No. of Observation Points Mapped: 8

5. During the reporting period, have you identified any existing outfalls that have not been previously reported to DEP in an NOI, application or annual report, or are any new MS4 outfalls proposed for the next reporting period?

☐ Yes ☒ No If Yes, select: ☐ Existing Outfall(s) Identified ☐ New Outfall(s) Proposed



**BMP #3: In conjunction with the map(s) created under BMP #2 (either on the same map or on a different map), the permittee shall develop and maintain map(s) that show the entire storm sewer collection system within the permittee's jurisdiction that are owned or operated by the permittee (including roads, inlets, piping, swales, catch basins, channels, and any other components of the storm sewer collection system), including privately-owned components of the collection system where conveyances or BMPs on private property receive stormwater flows from upstream publicly-owned components.**

1. Have you completed a map(s) that includes all components of BMP #3? ☒ Yes ☐ No

If Yes and you are a new permittee and have not submitted the map(s) previously, attach the map(s) to this report.

If No, date by which permittee expects map(s) to be completed:

2. If Yes to #1, is the map(s) on the same map(s) as for outfalls and receiving waters? ☒ Yes ☐ No

3. Date of last update or revision to map(s): March 15, 2017

**BMP #4: Conduct dry weather screenings of MS4 outfalls to evaluate the presence of illicit discharges. If any illicit discharges are present, the permittee shall identify the source(s) and take appropriate actions to remove or correct any illicit discharges. The permittee shall also respond to reports received from the public or other agencies of suspected or confirmed illicit discharges associated with the storm sewer system, as well as take enforcement action as necessary. The permittee shall immediately report to DEP illicit discharges that would endanger users downstream from the discharge, or would otherwise result in pollution or create a danger of pollution or would damage property.**

For new permittees, all identified outfalls (and if applicable observation points) must be screened during dry weather at least twice within the 5-year period following permit coverage. For existing permittees, all identified outfalls (and if applicable observation points) must be screen during dry weather at least once within the 5-year period following permit coverage and, for areas where past problems have been reported or known sources of dry weather flows occur on a continual basis, outfalls must be screened annually during each year of permit coverage.

1. How many unique outfalls (and if applicable observation points) were screened during the reporting period? 106
2. Indicate the percentage of all outfalls screened in the past five years. 100%
3. Indicate the percent of outfalls screened during the reporting period that revealed dry weather flows: 10%
4. Did any dry weather flows reveal color, turbidity, sheen, odor, floating or submerged solids? ☐ Yes ☒ No
5. If Yes for #4, attach all sample results to this report with a map identifying the sample location. Explain the corrective action(s) taken in the attachment.
6. Do you use the MS4 Outfall Field Screening Report form (3800-FM-BCW0521) provided in the permit?

☒ Yes ☐ No

If No, attach a copy of your screening report form.

**BMP #5: Enact a Stormwater Management Ordinance or SOP to implement and enforce a stormwater management program that includes prohibition of non-stormwater discharges to the regulated small MS4.**

1. Do you have an ordinance (municipal) or SOP or other mechanism (non-municipal) that prohibits non-stormwater discharges? ☒ Yes ☐ No

If Yes, indicate the date of the ordinance or SOP: October 4, 2011

2. If Yes to #1, is the ordinance or SOP consistent with DEP's 2022 Model Stormwater Management Ordinance (3800-PM-BCW0100j) with respect to authorized non-stormwater discharges? ☒ Yes ☐ No

If Yes to #2 and the ordinance or SOP has not been submitted to DEP previously, attach the ordinance or SOP.



3. Were there any violations of the ordinance or SOP during the reporting period? ☒ Yes ☐ No

If Yes to #3, complete the table below (attach additional sheets as necessary).

Violation Date	Nature of Violation	Responsible Party	Enforcement Taken
	See Attachments		

4. Did you approve any waiver or variance during the reporting period that allowed an exception to non-stormwater discharge provisions of an ordinance or SOP? ☐ Yes ☒ No

If Yes to #4, identify the entity that received the waiver or variance and the type of non-stormwater discharge approved.

**BMP #6: Provide educational outreach to public employees, business owners and employees, property owners, the general public and elected officials (i.e., target audiences) about the program to detect and eliminate illicit discharges.**

1. Was IDD&E-related information distributed to public employees, businesses, and the general public during the reporting period? ☒ Yes ☐ No

If Yes, what was distributed? IDDE information was distributed through flyers, WRTV, on the City website, and the 24-hour phone number, contact person, and email has been distributed to the public as well.

2. Is there a well-publicized method for employees, businesses and the public to report stormwater pollution incidents?

☒ Yes ☐ No

3. Do you maintain documentation of all responses, action taken, and the time required to take action? ☒ Yes ☐ No

**MCM #3 Comments:**

**MCM #4 – CONSTRUCTION SITE STORMWATER RUNOFF CONTROL**

Are you relying on PA's statewide program for stormwater associated with construction activities to satisfy this MCM?

☒ Yes ☐ No

(If Yes, respond to questions for BMP Nos. 1, 2 and 3 only in this section. If No, respond to questions for all BMPs in this section)

**BMP #1: The permittee may not issue a building or other permit or final approval to those proposing or conducting earth disturbance activities requiring an NPDES permit unless the party proposing the earth disturbance has valid NPDES Permit coverage (i.e., not expired) under 25 Pa. Code Chapter 102.**

During the reporting period, did you comply with 25 Pa. Code § 102.43 (relating to withholding building or other permits or approvals until DEP or a county conservation district (CCD) has approved NPDES permit coverage)?

☒ Yes ☐ No ☐ Not Applicable (no building permit applications received)



**BMP #2: A municipality or county which issues building or other permits shall notify DEP or the applicable CCD within 5 days of the receipt of an application for a permit involving an earth disturbance activity consisting of one acre or more, in accordance with 25 Pa. Code § 102.42.**

During the reporting period, did you comply with 25 Pa. Code § 102.42 (relating to notifying DEP/CCD within 5 days of receiving an application involving an earth disturbance activity of one acre or more)?

☒ Yes ☐ No ☐ Not Applicable (no building permit applications received)

**BMP #3: Enact, implement and enforce an ordinance or SOP to require the implementation and maintenance of E&S control BMPs, including sanctions for non-compliance, as applicable.**

1. Do you have an ordinance (municipal) or SOP or other mechanism (non-municipal) that requires implementation and maintenance of E&S control BMPs? ☒ Yes ☐ No

If Yes, indicate the date of the ordinance or SOP: October 4, 2011

2. If Yes to #1, is the ordinance or SOP consistent with DEP's 2022 Model Stormwater Management Ordinance (3800-PM-BCW0100j)? ☒ Yes ☐ No

3. If Yes to #2 and the ordinance or SOP has not been submitted previously, attach a copy of the ordinance or SOP.

**BMP #4: Review Erosion and Sediment (E&S) control plans to ensure that such plans adequately consider water quality impacts and meet regulatory requirements.**

Specify the number of E&S Plans you reviewed during the reporting period:

**BMP #5: Conduct inspections regarding installation and maintenance of E&S control measures during earth disturbance activities. Maintain records of site inspections, including dates and inspection results, in accordance with the record retention requirements in this permit.**

Specify the number of E&S inspections you completed during the reporting period:

**BMP #6: Conduct enforcement when installation and maintenance of E&S control measures during earth disturbance activities does not comply with permit and/or regulatory requirements.**

Specify the number of enforcement actions you took during the reporting period for improper E&S:

**BMP #7: Develop and implement requirements for construction site operators to control waste at construction sites that may cause adverse impacts to water quality. The permittee shall provide education on these requirements to construction site operators.**

Specify the method(s) by which you are educating construction site operators on controlling waste at construction sites:

**BMP #8: Develop and implement procedures for the receipt and consideration of public inquiries, concerns, and information submitted by the public to the permittee regarding local construction activities.**

1. A tracking system has been established for receipt of public inquiries and complaints. ☐ Yes ☐ No

2. Specify the number of inquiries and complaints received during the reporting period: 0

**MCM #4 Comments:**



**MCM #5 – POST-CONSTRUCTION STORM WATER MANAGEMENT IN NEW DEVELOPMENT AND REDEVELOPMENT**

**BMP #1: Enact, implement and enforce an ordinance or SOP to require post-construction stormwater management from new development and redevelopment projects, including sanctions for non-compliance.**

1. Do you have an ordinance (municipal) or SOP or other mechanism (non-municipal) that requires implementation and maintenance of post-construction stormwater management (PCSM) BMPs? ☒ Yes ☐ No

If Yes, indicate the date of the ordinance or SOP: October 4, 2011

2. If Yes to #1, is the ordinance or SOP consistent with DEP's 2022 Model Stormwater Management Ordinance (3800-PM-BCW0100j)? ☒ Yes ☐ No

3. If Yes to #2 and the ordinance or SOP has not been submitted previously, attach a copy of the ordinance or SOP.

**BMP #2: Develop and implement measures to encourage and expand the use of Low Impact Development (LID) in new development and redevelopment. Measures should also be included to encourage retrofitting LID into existing development. Enact ordinances consistent with LID practices and repeal sections of ordinances that conflict with LID practices.**

1. Do you have an ordinance (municipal) or SOP or other mechanism (non-municipal) that encourages and expands the use of LID in new development and redevelopment? ☒ Yes ☐ No

If Yes, indicate the date of the ordinance or SOP: October 4, 2011

2. If Yes to #1, is the ordinance or SOP consistent with DEP's 2022 Model Stormwater Management Ordinance (3800-PM-BCW0100j)? ☒ Yes ☐ No

3. If Yes to #2 and the ordinance or SOP has not been submitted previously, attach a copy of the ordinance or SOP.

**BMP #3: Ensure adequate O&M of all post-construction stormwater management BMPs that have been installed at development or redevelopment projects that disturb greater than or equal to one acre, including projects less than one acre that are part of a larger common plan of development or sale.**

1. Do you have an inventory of all PCSM BMPs that were installed to meet requirements in NPDES Permits for Stormwater Discharges Associated with Construction Activities approved since March 10, 2003? ☒ Yes ☐ No

If Yes to #1, complete Table 1 on the next page.

2. Has proper O&M occurred during the reporting period for all PCSM BMPs? ☒ Yes ☐ No

3. If No to #2, explain what action(s) the permittee has taken or plans to take to ensure proper O&M.

*If you are relying on PA's statewide program for stormwater associated with construction activities, you may skip to MCM #6, otherwise complete all questions for BMPs #4 - #6 in this section.*

**BMP #4: Require the implementation of a combination of structural and/or non-structural BMPs that are appropriate to the local community, that minimize water quality impacts, and that are designed to maintain pre-development runoff conditions.**

1. Specify the number of PCSM Plans reviewed during the reporting period for projects disturbing greater than or equal to one acre (including projects less than one acre that are part of a larger common plan of development or sale):

2. Has a tracking system been established and maintained to record qualifying projects and their associated BMPs?

☒ Yes ☐ No



### PCSM BMP INVENTORY

**Table 1.** To complete the information needed for MCM #5, BMP #3, list all existing structural BMPs that discharge stormwater to the permittee's MS4 that were installed to satisfy PCSM requirements for earth disturbance activities under Chapter 102, and provide the requested information (see instructions).

BMP No.	BMP Name	DA (ac)	Entity Responsible for O&M	Latitude	Longitude	Date Installed	O&M Requirements	NPDES Permit No.
1				o 1 "	o 1 "			
2				o 1 "	o 1 "			
3				o 1 "	o 1 "			
4				o 1 "	o 1 "			
5				o 1 "	o 1 "			
6				o 1 "	o 1 "			
7				o 1 "	o 1 "			
8				o 1 "	o 1 "			
9				o 1 "	o 1 "			
10				o 1 "	o 1 "			
11				o 1 "	o 1 "			
12				o 1 "	o 1 "			
13				o 1 "	o 1 "			
14				o 1 "	o 1 "			
15				o 1 "	o 1 "			
16				o 1 "	o 1 "			



**BMP #5: Ensure that controls are installed that shall prevent or minimize water quality impacts. The permittee shall inspect all qualifying development or redevelopment projects during the construction phase to ensure proper installation of the approved structural PCSM BMPs. A tracking system (e.g., database, spreadsheet, or written list) shall be implemented to track the inspections conducted and to track the results of the inspections (e.g., BMPs were, or were not, installed properly).**

1. During the reporting period have you inspected all qualifying development and redevelopment projects during the construction phase to ensure proper installation of approved structural BMPs?  
☒ Yes ☐ No ☐ Not Applicable (no qualifying projects during reporting period)
2. Has a tracking system been established and maintained to record results of inspections?  
☒ Yes ☐ No

**BMP #6: Develop a written procedure that describes how the permittee shall address all required components of this MCM.**

Have you developed a written plan that addresses: 1) minimum requirements for use of structural and/or non-structural BMPs in plans for development and redevelopment; 2) criteria for selecting and standards for sizing stormwater BMPs; and 3) implementation of an inspection program to ensure that BMPs are properly installed? ☒ Yes ☐ No

**MCM #5 Comments:**

#### **MCM #6 – POLLUTION PREVENTION / GOOD HOUSEKEEPING**

**BMP #1: Identify and document all operations that are owned or operated by the permittee and have the potential for generating pollution in stormwater runoff to the MS4. This includes activities conducted by contractors for the permittee.**

1. Have you identified all facilities and activities owned and operated by the permittee that have the potential to generate stormwater runoff into the MS4? ☒ Yes ☐ No
2. When was the inventory last reviewed? January 19, 2017
3. When was it last updated? January 19, 2017

**BMP #2: Develop, implement and maintain a written O&M program for all operations that could contribute to the discharge of pollutants from the MS4, as identified under BMP #1. This program shall address stormwater collection or conveyance systems within the regulated MS4.**

1. Have you developed a written O&M program for the operations identified in BMP #1? ☒ Yes ☐ No
2. Date of last review or update to written O&M program: January 19, 2017

**BMP #3: Develop and implement an employee training program that addresses appropriate topics to further the goal of preventing or reducing the discharge of pollutants from operations to the regulated small MS4. All relevant employees and contractors shall receive training.**

1. Have you developed an employee training program? ☒ Yes ☐ No
2. Date of last review or update to training program: January 19, 2017      Date of latest training: April 20, 2018



3. Training topics covered:

Role of monitoring, New and improved BMP's, Paying for watershed improvements, Stream restoration.

4. Name(s) of training presenter(s):

Various

5. Names of training attendees:

Lettice Brown

**MCM #6 Comments:**

**POLLUTANT CONTROL MEASURES (PCMs)**

*Indicate the status of implementing PCMs in Appendices A, B and/or C by completing the table below. Skip this section if PCMs are not applicable.*

Task	Date Completed	Attached	Anticipated Completion Date
Storm Sewershed Map(s)		<input type="checkbox"/>	
Source Inventory		<input type="checkbox"/>	
Investigation of Suspected Sources		<input type="checkbox"/>	
Ordinance/SOP for Controlling Animal Wastes		<input type="checkbox"/>	

**PCM Comments:**

**POLLUTANT REDUCTION PLANS (PRPs) AND TMDL PLANS**

1. Complete this section if the development and submission of a PRP and/or TMDL Plan was required as an attachment to the latest NOI or application or was required by the permit, regardless of whether DEP has approved the plan(s).

Type of Plan	Submission Date	DEP Approval Date	Surface Waters Addressed by Plan
<input checked="" type="checkbox"/> Chesapeake Bay PRP (Appendix D)	09-15-2017 Revision 10-10-2017	Pending	Chesapeake Bay
<input type="checkbox"/> Impaired Waters PRP (Appendix E)			
<input type="checkbox"/> TMDL Plan (Appendix F)			
<input type="checkbox"/> Combined Chesapeake Bay / Impaired Waters PRP			Chesapeake Bay,
<input type="checkbox"/> Combined PRP / TMDL Plan			

☒ Joint Plan (if checked, list the name of the MS4 group or names of all entities participating in the joint plan below)



Joint Plan Participants: York County Stormwater Consortium

2. Identify the pollutants of concern and pollutant load reduction requirements under the permit (see instructions).

Type of Plan	TSS Load Reduction (lbs/yr)	TP Load Reduction (lbs/yr)	TN Load Reduction (lbs/yr)
<input checked="" type="checkbox"/> Chesapeake Bay PRP (Appendix D)	2,443,984		
<input type="checkbox"/> Impaired Waters PRP (Appendix E)			
<input type="checkbox"/> TMDL Plan (Appendix F)			
<input type="checkbox"/> Combined Chesapeake Bay / Impaired Waters PRP			
<input type="checkbox"/> Combined PRP / TMDL Plan			

3. Date Final Report Demonstrating Achievement of Pollutant Load Reductions Due:

4. Have any modifications to the plan(s) occurred since DEP approval? ☐ Yes ☐ No

If Yes to #4, was the updated plan(s) submitted to DEP? ☐ Yes ☐ No

If Yes to #4, did you comply with the public participation requirements of the applicable appendix? ☐ Yes ☐ No

If Yes to #4, describe the plan modifications.

5. Summary of progress achieved during reporting period.

For the Regional CBPRP, the reporting period is 09-01-2017 through 06-30-2018. One (1) BMP project was completed (ID #82 - Ensminger Drive Swale Retrofit) during the reporting period. It achieved a sediment reduction of 20,110 lbs/year. Additionally, construction is underway on five (5) projects ( 2 stream restorations, 1 basin retrofit, 1 bioretention, & 1 tree planting). Designs are completed on six (6) projects ( 4 stream restorations, 1 basin retrofit, & 1 bioretention). These projects are in the permitting stage and/or seeking construction funding. Seven (7) stream restoration projects are under design.

6. Anticipated activities for next reporting period.

The five (5) projects that are currently under construction will be completed. The 13 projects that are designed or in the design stage will be constructed or under construction, depending on the timing of permits and funding. Estimate that up to 10 planned projects will move into the design phase.

**PRP/TMDL Plan Comments:**



### NEW BMPs FOR PRP/TMDL PLAN IMPLEMENTATION

**Table 2.** List all new structural BMPs installed and ongoing non-structural BMPs implemented during the reporting period that are being used toward achieving load reductions in the permittee's PRP and/or TMDL Plan (see instructions).

BMP No.	BMP Name	DA (ac)	% Imp.	BMP Extent	Units	Latitude	Longitude	Date Installed or Implemented	Planning Area?	Ch. 102?	Annual Sediment Load Reduction (lbs/yr)
82	Ensminger Drive Swale Rehabilitation - Vegetated Swale	22.45	30	800	feet	39°87'56"	76°71'96"	11/06/2017	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	20,110
						° ' "	° ' "		<input type="checkbox"/>	<input type="checkbox"/>	
						° ' "	° ' "		<input type="checkbox"/>	<input type="checkbox"/>	
						° ' "	° ' "		<input type="checkbox"/>	<input type="checkbox"/>	
						° ' "	° ' "		<input type="checkbox"/>	<input type="checkbox"/>	

### BMP INVENTORY FOR PRP/TMDL PLAN IMPLEMENTATION

**Table 3.** List all existing structural BMPs that have been installed in prior reporting periods and are eligible to use toward achieving load reductions in the permittee's PRP and/or TMDL Plan (see instructions).

BMP No.	BMP Name	DA (ac)	% Imp.	BMP Extent	Units	Latitude	Longitude	Date Installed	Annual Sediment Load Reduction (lbs/yr)	Date of Latest Inspection	Satisfactory?
						° ' "	° ' "				<input type="checkbox"/>
						° ' "	° ' "				<input type="checkbox"/>
						° ' "	° ' "				<input type="checkbox"/>
						° ' "	° ' "				<input type="checkbox"/>
						° ' "	° ' "				<input type="checkbox"/>



						o ' "	o ' "				<input type="checkbox"/>
--	--	--	--	--	--	-------	-------	--	--	--	--------------------------



### CERTIFICATION

**For PAG-13 Permittees:** I have read the latest PAG-13 General Permit issued by DEP and agree and certify that (1) the permittee continues to be eligible for coverage under the PAG-13 General Permit and (2) the permittee will continue to comply with the conditions of that permit, including any modifications thereto. I understand that if I do not agree to the terms and conditions of the PAG-13 General Permit, I will apply for an individual permit within 90 days of publication of the General Permit. I also acknowledge that any facility construction needed to comply with the General Permit requirements shall be designed, built, operated, and maintained in accordance with operative laws and regulations.

**For All Permittees:** I certify under penalty of law that this report was prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated 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. See 18 Pa. C.S. § 4904 (relating to unsworn falsification).

Chaz Green

Name of Responsible Official

717-324-6599

Telephone No.

  
Signature

September 28, 2018

Date



# MCM #1 Appendix

- **MCM #1 Project Plan**
- **BMP 1.1 Attachments**
  - Street 2 Creek Storm Drain Art Meeting Minutes June 14 2018
  - Street 2 Creek Storm Drain Art Meeting Minutes June 8 2018
  - Career Day at Lincoln Charter 2.pdf
  - Go Green 2018.pdf
  - Career Day at Lincoln Charter School.pdf
  - Visit to McKinley Elementary School May 11 2018.pdf
  - York Excavating Company Inlet Protect Response Email.pdf
  - Go Green Event 2018.pdf
  - Go Green Event 2018 Write up.pdf
  - Post on FB about unclogging drains after heavy rains.pdf
  - Post on FB about Green Action Plan.pdf
  - Post on FB about grass in the streets and drains.pdf
  - Litter Pick Up3.pdf
  - Litter Pick Up2.pdf
  - Litter Pick Up1.pdf
  - Classroom 1.pdf
  - Audubon and MS4 Collab with Students from Ferguson Elem
  - May 2017 School Presentation Report.pdf
  - Report on City Council MS4 Presentation May 2017.pdf
- **BMP 1.3 Attachments**
  - 2018 Spring Summer Public Newsletter.pdf
  - 2017 Spring Summer Public Newsletter.pdf
  - Stormwater Information Available on Website
- **BMP 1.4 Attachments**
  - LOG USAGE OF HANDOUTS 4.1.2017 to 6.30.2018.pdf
  - Food Waste Flyer.pdf
  - York City Emergencies and Info Grease Youtube Post.pdf
  - Fixing York Grease Youtube Video.pdf
  - Facebook Post about Grease, Rags, and Wipes2.pdf
  - Facebook Post about Grease, Rags, and Wipes.pdf
  - The York City Stormwater Activity Book.pdf



- Grass and Leaf Flyer.pdf
- Dos and Don'ts pertaining to Grass.pdf
- Oil Slick Flyer.pdf
- Motor Oil Flyer Distribution List June 7 2017.pdf
- DEP.Stormwater.FactSheet.pdf
- stormwaterplacemat.pdf
- Hazardous waste flyer.pdf
- Trash Flyer.pdf
- York City Ordinance 942.pdf
- DEP.Poster.Carwash2.pdf
- DEP.RainDrainBrochure.pdf
- DEP.Poster.Petwaste2.pdf
- City Hall Flyers1.pdf
- City Hall Flyers2.pdf
- City Hall Flyers3.pdf
- YC Stormwater Slide1.pdf
- YC Stormwater Slide2.pdf
- YC Stormwater Slide3.pdf
- YC Stormwater Slide4.pdf
- YC Stormwater Slide5.pdf
- CBF.10ThingsToSaveTheBay.pdf
- DEP.Poster.Fertilizer2.pdf



# MCM #1 Project Plan

- BMP 1.1

Description:

Develop, Implement and maintain a written Public Education and Outreach Program

Measurable Goal:

For new permittees a Public Education and Outreach Program (PEOP) shall be developed and implemented during the first year of permit coverage and shall be re-evaluated each permit year thereafter and revised as needed. For renewal permittees, the existing PEOP shall be reviewed and revised as necessary. The permittee's PEOP shall be designed to achieve measurable improvements in the target audience's understanding of the causes and impacts of stormwater pollution and the steps they can take to prevent it.

Action Plan:

The York City MS4 taskforce will review and revise this plan on an annual basis, at a minimum. The plan shall include the minimum required activities, and note all additional activities performed within the City that exceed minimum requirements. On July 26, 2018, the following members of the MS4 Taskforce reviewed and revised the PEOP: MS4 Coordinator - Lettice Brown, C.S. Davidson Representative - Derek Rinaldo, E.I.T.  
The next review date will be (TBD)

- BMP 1.2

Description:

Develop and maintain lists of target audience groups present within the areas served by your MS4

Measurable Goal:

For new permittees, the lists shall be developed within the first year of coverage under the permit and reviewed and updated as necessary every year thereafter. For renewal permittees, the lists shall continue to be reviewed and updated annually.

Action Plan:

The City of York will review and revise this list on an annual basis, at a minimum. It shall be ensured that all activities included as part of this plan are intended to reach a minimum of one identified target audience groups. York City's current target audiences are: all City residents, all City Property Owners and Renters, City Businesses that are new and existing within York City, all Elected Officials, School Students, Contractors, Visitors, and City Employees. We will also target lawn companies, haulers, hotels, concrete companies, and anyone who is willing to gain this information. It is to be noted that while the education of City Employees will be covered more in-depth as part of MCM #6 requirements, the City has a residency policy which requires all City employees hired after February 1, 1994 to reside within the City. Therefore, education of our employees is also education of the City Residents.

- BMP 1.3

Description:

Annually publish at least one educational item on your Stormwater Management Program

Measurable Goal:

For new permittees, stormwater educational and informational items shall be produced and published in print and/or on the Internet within the first year of permit coverage. In subsequent years (and for renewal permittees), the list of items published and the content in these items shall



be reviewed, updated, and maintained annually. Your publications shall contain stormwater educational information that addresses one or more of the 6 MCMs.

Action Plan:

i) Printed material:

City Newsletter – The City publishes a quarterly newsletter which is distributed to all mailing addresses within the City. Each newsletter will include a minimum of one article relating to good stormwater practices or other stormwater quality educational topic. The Director of Public Works and the MS4 Coordinator is responsible for ensuring that information is provided semi-annually for inclusion with the newsletter. Based on the newsletter's distribution method, the target audience groups have been identified to be City residents, City property owners, and City businesses.

ii) Website:

Information and Links on Website – The City's website, [www.yorkcity.org](http://www.yorkcity.org), contains an entire page dedicated to stormwater management educational information and links to partnering organizations. This page is administered by the MS4 Coordinator and is targeted towards City Residents. Content is added to the website periodically throughout the year, including a copy of the latest Annual Report submission.

- BMP 1.4

Description:

Distribute stormwater educational materials to target audiences

Measurable Goal:

All permittees shall select and utilize at least two distribution methods in each permit year. These are in addition to the newsletter and website provisions of BMP #3.

Action Plan:

The following distribution methods will be utilized in addition to the activities identified in BMP 1.3:

i) City Hall

(1) Pamphlets at City Hall – An assortment of Stormwater related pamphlets will be printed and continuously stocked in a kiosk located on the first floor of City Hall. The number of pamphlets distributed will be tracked to measure the effectiveness of this activity. The MS4 Coordinator has been tasked with tracking the number of pamphlets distributed and ensuring that the kiosk remains supplied. The target audience groups of this activity are City Residents and Visitors.

(2) Building Permits – The Zoning Officer and the Director of Permits are responsible for ensuring that educational material relating to stormwater management and good construction practices is attached to all issued building permits. This activity is intended to target contractors working within the City and City property owners.

ii) Education:

Environmental Education Classes - The MS4 Coordinator volunteers with the Audubon Society on an annual basis educating children from the York City School District about Stormwater. The students are 5th and 6th graders. The target audience for this activity is school students with the success of the program being tracked by the total number of students in attendance and photos of the event. The effectiveness of the presentation is also tracked through evaluation forms completed by the students on the very last day.

iii) Local Cable TV

(1) Illicit Discharge Hotline – The City utilizes White Rose Community Television to publicize their illicit discharge hotline. The message is intended to reach the residents of the City to educate them



on the proper means of contacting the City in the event an illegal dumping or other form of stormwater pollution is discovered. The MS4 Coordinator is responsible for the content of the advertisement.

(2) Stormwater Informative Video – The City has included a link to a stormwater informative video, created by the Chesapeake Bay Program, on its website. The proposed target audience group is City residents.

(3) Grass Clippings Informational Video - The MS4 Coordinator produced an information video to our City residents about keeping grass out of the gutters and streets. The video is posted on Youtube, the York City Website, MS4 Facebook Page, and the City of York's Stormwater website. The proposed target audience group is City residents and businesses including lawn companies.

iv) Utility Bills:

City Sewer Bills – At least once per permit year, the City will include a message relating to good stormwater practices within the sewer bill. The Operations Manager will be responsible for supplying the information to the billing department. The target audience group for this outreach is City property owners.

v) Public Meetings:

MS4 Public Meeting – A public meeting, as required by BMP 2.3, will be held annually at a minimum. The Public Works Director, MS4 Coordinator, and City Engineer are responsible for the scheduling and content of this meeting. While the main objective of the meeting is to educate City residents and solicit their opinions and ideas for successful permit compliance, it also presents an opportunity to educate the City elected officials on the importance of the MS4 program.

vi) Internal Meetings and Training

(1) Public Works Meetings - The Public Works Department (Highway, Parks, MS4, Electrical, WWTP) meets weekly to discuss concerns and questions about topics in daily routines. The Public Works Department (Highway, Parks, MS4, Electrical, WWTP, Operations Manager, and Environmental) meets monthly to address concerns, duties, upcoming events, deadlines, and questions. MS4 items are discussed at both meetings in detail.

(2) Training - A combination of external and internal training programs for City employees have been identified as part of the requirements of BMP 6.3. The MS4 Coordinator is responsible for tracking the seminars and training events held by the City and also those attended by City employees outside the City.



## York Storm Drain Art Meeting Discussion Notes June 14, 2018 6 pm – 7:30 pm

### Action Items:

Responsible	Task	Priority
Jodi	Purchase Street2creek.org	High
Jodi/Richard	Create fund raising letter	High
Kelly	Creating Street2creek.org content	High
Kelly	Updating online brochure	High
Richard/Rhonda	Create contest brochure with details	High
Jodi	Reach out to Dean of Art School and Professors	Medium
Jodi	Send out doodle poll for next meeting	Medium
Rob	Contact York Arts Planning Committee discussing our content and possibility of presenting the winner with the prize during the festival/reception	Medium
Rhonda	Annalisa Gojmerac (gojmerac1@aol.com) regarding judging and approaching Redeux	Med/Low
Carla/Jackie/Ted/Sue	work together to purchase paint supplies by June 30	Med/Low
All	Publicity of event /Press Release	Med/Low
All	Develop storm water web content	Med/Low
All	Find digital pictures of adults doing storm drain street art.	Med/Low
All	Promote event door to door and through social media	Med/Low

### Contact Information

website      street2creek.org

email:          drainart.york@gmail.com

### Goals:

Need to get art brochure out next week

Fundraising

Deadline for art submissions will be July 22

Recruit judges for contest: combination of art teachers, York Leaders

Publicity for event

Complete art work at the arts festival on August 26, 2018 (Saturday)

### Budget/Money:

purchase Street2creek.org from square space for \$200 per 18 months

\$500 of CBF needs to be spent by June 30, 2018 (using \$ for supplies)

An additional \$500 will become available on July 1 from the CBF



Carla may have \$700 for printing  
Money will be needed for printing art brochure/posters, but hope most literature will be electronic

### **Details of the Festival:**

# **Yorkfest Fine Arts Festival**

[Yorkfest Fine Arts Festival - City of York, Pennsylvania](#)



**Yorkfest Fine Arts  
Festival - City of York,  
Pennsylvania**

Saturday, August 25, 2018: 10 a.m. to 5 p.m.

Sunday, August 26, 2018: 10 a.m. to 4 p.m.

Yorkfest also includes:

Opening Reception: Friday, August 24, 2018 (6 to 8 p.m.)

Silent Disco in Cherry Lane: Friday, August 24, 2018 (8 to 11 p.m.)

Evening Jazz Concert: Saturday, August 25, 2018 (6 to 8 p.m.)

### **Draft of Submission Form**

See example: <https://www.dmgov.org/Departments/PublicWorks/Pages/StormDrainManholeCoverContest.aspx>

We need your Help. Calling all Chesapeake Watershed Artists

Goal: Create street art out of storm drains to raise awareness of storm water pollution

### **Submission Guidelines:**

Please submit an original sketch of your idea by the submission deadline of July 20 to be considered.

Winners must be able to create the artwork located physically in York, PA

### **Rules and Use of Art**

Prizes: 1st place \$400, 2nd place \$300, 3rd place \$200



Judging: Best creative use of storm drain within the art work

Details:

Winners bio will be featured on the web page

Supplies and safety materials will be provided

Rules from the city must be followed

Entry Information:

Name

Address

Email

Phone

Would you like to show a web page showing your portfolio?

Would you like to show any pictures of previous street art or murals that you have completed?



## **York Storm Drain Art Meeting Discussion Notes July 1, 2018 5 pm – 8:30 pm**

Master Watershed Storm drain team and advisor met in downtown York (Philadelphia and Pershing) parking lot. In addition, the following people also joined us.

- Carla Johns (CBF)
- Lettice Brown (City of York- MS4 Coordinator)
- Mark Rooney (Downtown Inc.)
- Ted Evgeniadis (Riverkeeper)
- Stephanie Delp (SHARE – Sandy Hollow Arts & Recreation for the Environment)

Toured the area

- Walked around the key streets of York to search for 3 visible storm drains for the proposed painting – Pershing St, Beaver St. and George St.
- Toured the Royal Square Garden in the art district and listened to Annalisa Gojmerac (gojmerac1@aol.com) met with April Collier (community advocate and veteran) and Walter about good ideas to grow fresh food, protect our natural spaces, and our natural treasures, clean water flowing into our Codorus Creek, and community connection to the environment

Goal:

- Have a storm drain art contest with cash prizes to start the first phase of the street to creek project
- Leverage the York Art festival event in August 25-26 with an approximate budget for project: \$1,500

Discussion

1. Start small and build over time and eventually connect a path to the series of storm drains with signage on the benefits of reducing stormwater runoff and pollution. A suggestion was made to map out the storm drains using Google places.
2. A flyer has been developed, and a Canva account is needed. PDF would be easier to display to others
3. Use project partner logos on our communications – MWS, CBF, Lower Sus. Riverkeeper, City of York and possibly WAY (Watershed Alliance of York).
4. Agreement was made not to have the web site housed by the Chesapeake Bay Foundation or Penn State
5. Potential Storm Drains

1. bridge over Codorus Creek (near rail trail) needs repair of the concrete



2. drain in front of Redeux, 113 S. Duke Street (near Royal Square Garden)
3. heavy foot traffic areas away from road salt (Square or market area)

#### Supplies:

- cost of supplies
- paint vs. thermoplastic.

#### Funding

- *budget from the Chesapeake Bay foundation needs to be spent before the end of June 2018*
- cost of storm drain supplies
- fundraising - kick starter, donations

#### Contest

- The contest age group was discussed - adults with cash prizes and youth with local business prize

#### Maintenance

- maintaining the storm drain art was discussed
- need community involvement
- stencil "fish" or "rain drops" to connect the drains

#### Suggestions

1. pretreat the pavement with muriatic acid before painting
2. have a Facebook presence
3. have a web presence [street2creek.org](http://street2creek.org)
4. create email account
5. more detailed information that cannot be contained on Facebook such as
  - artists bios
  - promotes diversity (different languages)
  - educational outreach materials
  - sponsoring organizations

#### Action Items



1. Draft letter to York Water and area businesses such as Gladfelter Insurance
2. Reach out to local businesses such as rotary and Lions Clubs
3. Need to reach out to colleges and local artists to start spreading the word about the upcoming contest such as Rita Whitney [primeartsupply@gmail.com](mailto:primeartsupply@gmail.com) 443-280-1573 and another artist from the Hive name?
4. A doodle poll will be distributed to set up the next meeting around the week of June 11.
5. Determine the prizes
6. Distribute flyer









QUEST

YORK CITY  
STORM WATER

Protecting Water Quality  
in Urban Environments  
WITH CONSTRUCTION IDEAS  
THAT PROTECT OUR WATERSHEDS

TRASH







### Visit to McKinley Elementary School May 11 2018

On May 11<sup>th</sup> 2018 York City Stormwater Coordinator visited McKinley Elementary School for their Mother's Day/Women Empowering Day luncheon. There were approximately 50 students and parents in attendance. I was able to explain stormwater information to a parent and several children who sat at my table. I also talked to some other volunteers there.



**From:** Jake king  
**To:** [Lettice Brown](#)  
**Subject:** Storm Drain/Inlet Protection Letter  
**Date:** Thursday, April 26, 2018 10:18:33 AM

---

Good Morning Lettice,

I would like to personally thank you for the letter sent by you and your office outlining the ordinances for inlet protection in York City. We at York Excavating Co. found the letter and attached documents very helpful and informative. While we have taken care to protect the city storm drains/inlets in the past, we now have more information and options to help us do so in a more efficient manner. Measures are currently being taken to ensure the protection of these drains and inlets.

This email is to inform you that we have received your letter and are taking the necessary steps in order to comply with the city ordinances. Please feel free to contact me with any questions or concerns regarding the work we will be performing within the city limits this year.

Thanks, & Have a Great Day!

**Jake King**

**Project Manager**

**York Excavating Co., LLC**

**3180 East Prospect Road**

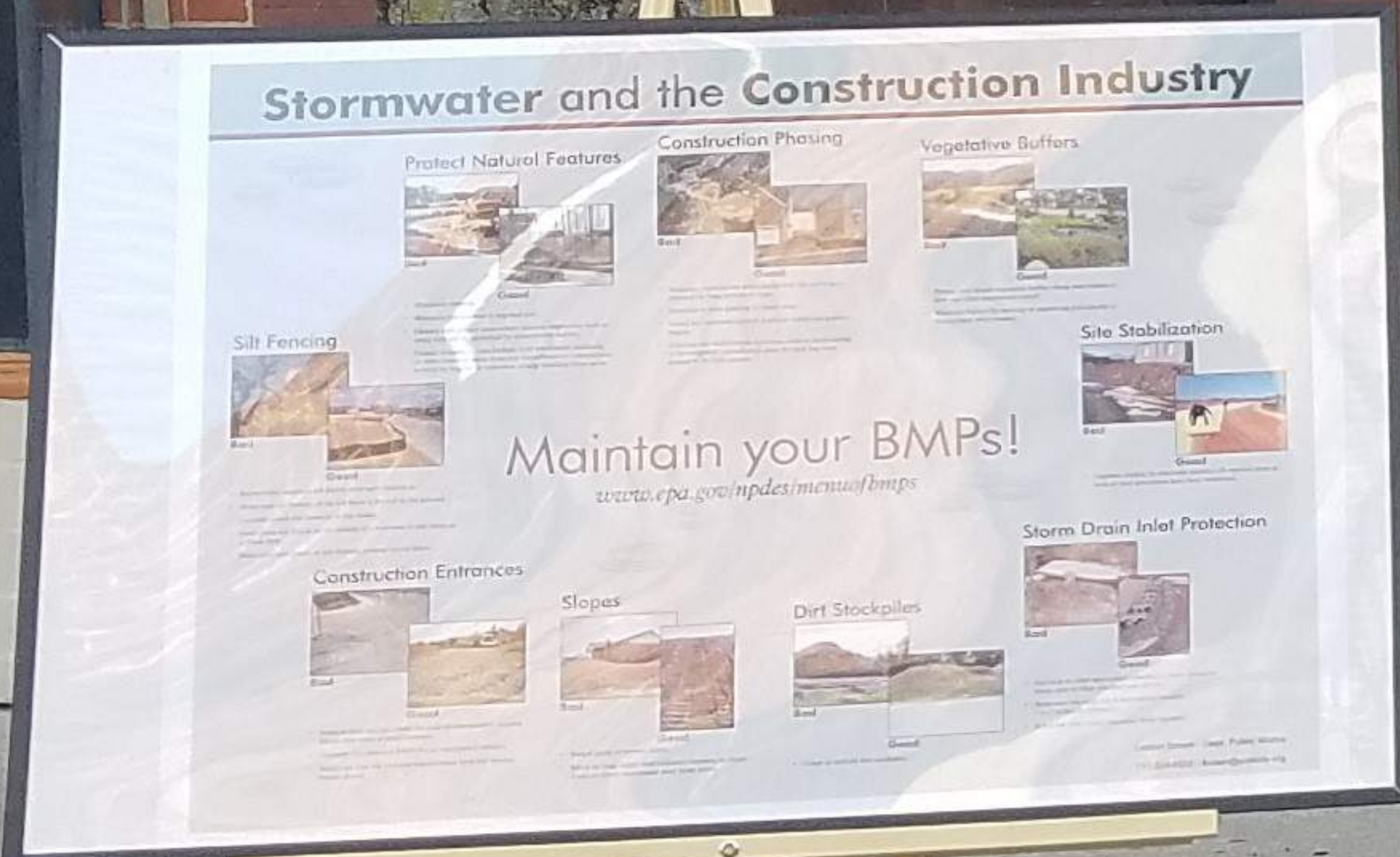
**York, PA 17402**

**Office (717) 755-0607**

**Cell (717) 881-1840**



The  
**YORKSHIRE**  
31





## **Go Green Event 2018**

Location: Downtown York on S. Beaver Street near Central Market

Date: April 21, 2018

Time: 10am-3pm

What: Go Green Event.

How many engaged?

- About 40 adults

- About 20 kids

Interactions:

- Most people liked the examples of Illicit Discharges that were displayed. They asked questions, knew where some of the locations are/were, and most asked me to explain what they were looking at. Most of the time there were follow up questions after the explanation.

- Many people stopped to look at the large poster on the easel – which showed the Stormwater BMPs for Construction Areas (Good and bad examples)

- The children liked the Enviroscape and asked how it worked, most loved the demonstration. I particularly was happy to hear the parents explain to the children after the demonstration that they should remember what they had talked about at home, about rainwater, recycling etc. The conversations are happening at home, this is encouraging.

- Many people walked by and wanted to touch some of the materials that are used in the field. Many were surprised at the items and how they felt. Some asked questions as to what they were and what they were used for. A common misconception is that the absorbent socks are to prevent water from going into the inlets, but on the contrary



they allow water to go into the inlets but not dirt, debris, oils, and greases. They were pleased to learn this.

-Some people stopped and took a few flyers. One was going to make copies and hand them out in their neighborhood I think.

-Some people stopped just to tell me of a stormwater issue that they had found. I made a list of these issues and followed up the next business day and addressed them appropriately.

Overall, the event was successful and I talked to a lot of great people and I do feel that it made a difference.





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York City - MS4 - Stormwater

Published by Lettice Brown [?] · September 7 at 8:22am ·

York City - MS4 - Stormwater would like to ask the residents of York City to please don't forget to check on your nearest storm drains while you are out and about today cleaning up from Tuesday evenings' storm. Yesterday, all city workers were dispatched to Penn Park as this park was the hardest hit and know it is a major thoroughfare for students attending York High, so that was our highest priority yesterday, along with some large trees that came down elsewhere in the city. Unfortunately, this did not allow us to clean off our priority storm drain areas, however, we will begin to get to them today. But with your help, we could alleviate any other flooding issues that may arise. We thank you for your help in advance!



39 people reached

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Nicole Fry and William Corcoran

Chronological

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@yorkcitystormwater

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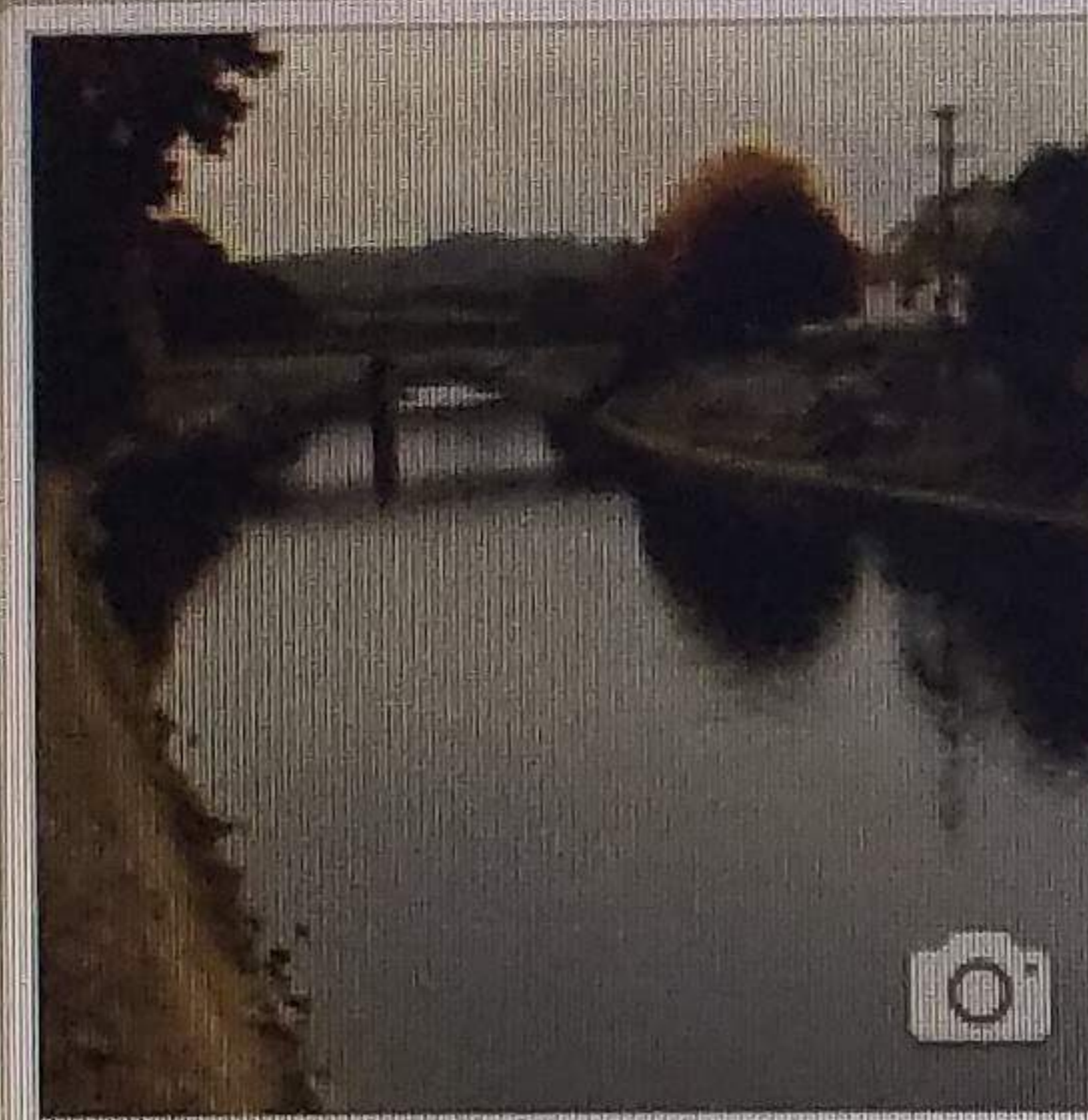
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### Posts



#### York City - MS4 - Stormwater

Published by Lettice Brown [?] · August 22 at 9:42am ·

The City of York has just released a completed Green Action Plan that centers its attention around the redevelopment of the Northwest Triangle area of the City. There are big improvements to be made, have a look! Click the link below and look for the RED link. I would love your feedback as well!

Thank you!



#### Stormwater Management - City of York, Pennsylvania

Stormwater Management Report Illicit Discharge of Dumping into a Stormwater Inlet - Call (717)-324-6532 York City Green Action Plan (click here) Innovative Stormwater Treatment in the...

YORKCITY.ORG

69 people reached

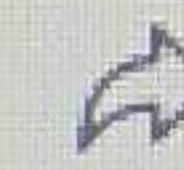
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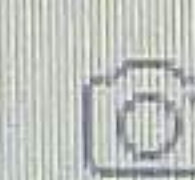


5

1 Share



Write a comment...



York City - MS4 - Stormwater shared City of York's post

Published by Lettice Brown [?] · 6 hrs ·

This Saturday morning!



72 people like this and 74 people follow this  
Nicole Fry and 15 other friends

### Community

See All



Invite your friends to like this Page



72 people like this



74 people follow this

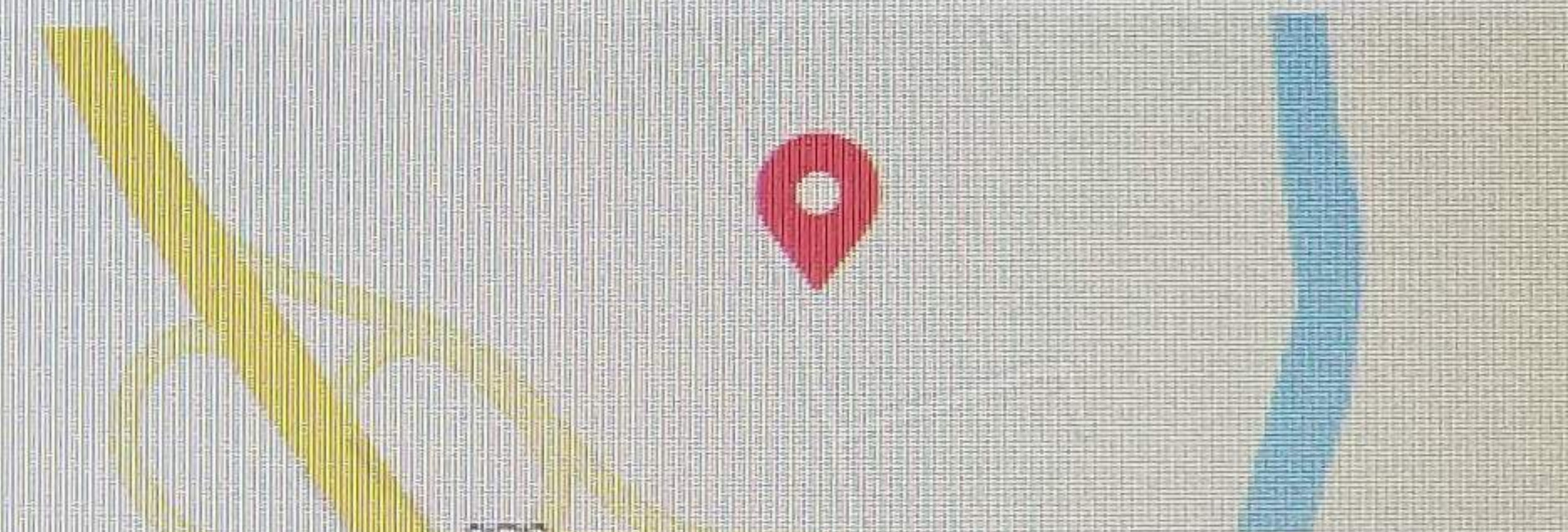


Colin Snyder and 15 other friends like this or have visited



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1625 Toronita Street  
York, Pennsylvania, PA 17402

(717) 324-6532

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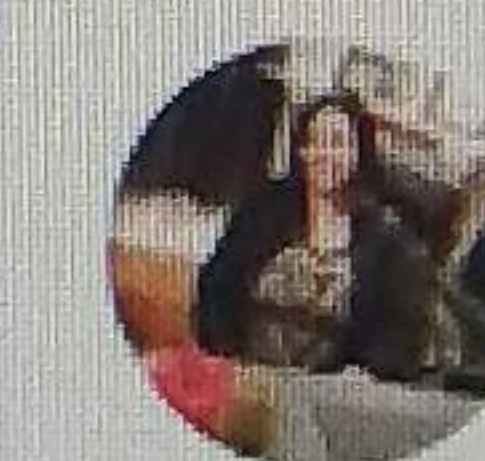
http://yorkcity.org/stor...

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Government Organization

Hours 8:00AM - 4:30PM  
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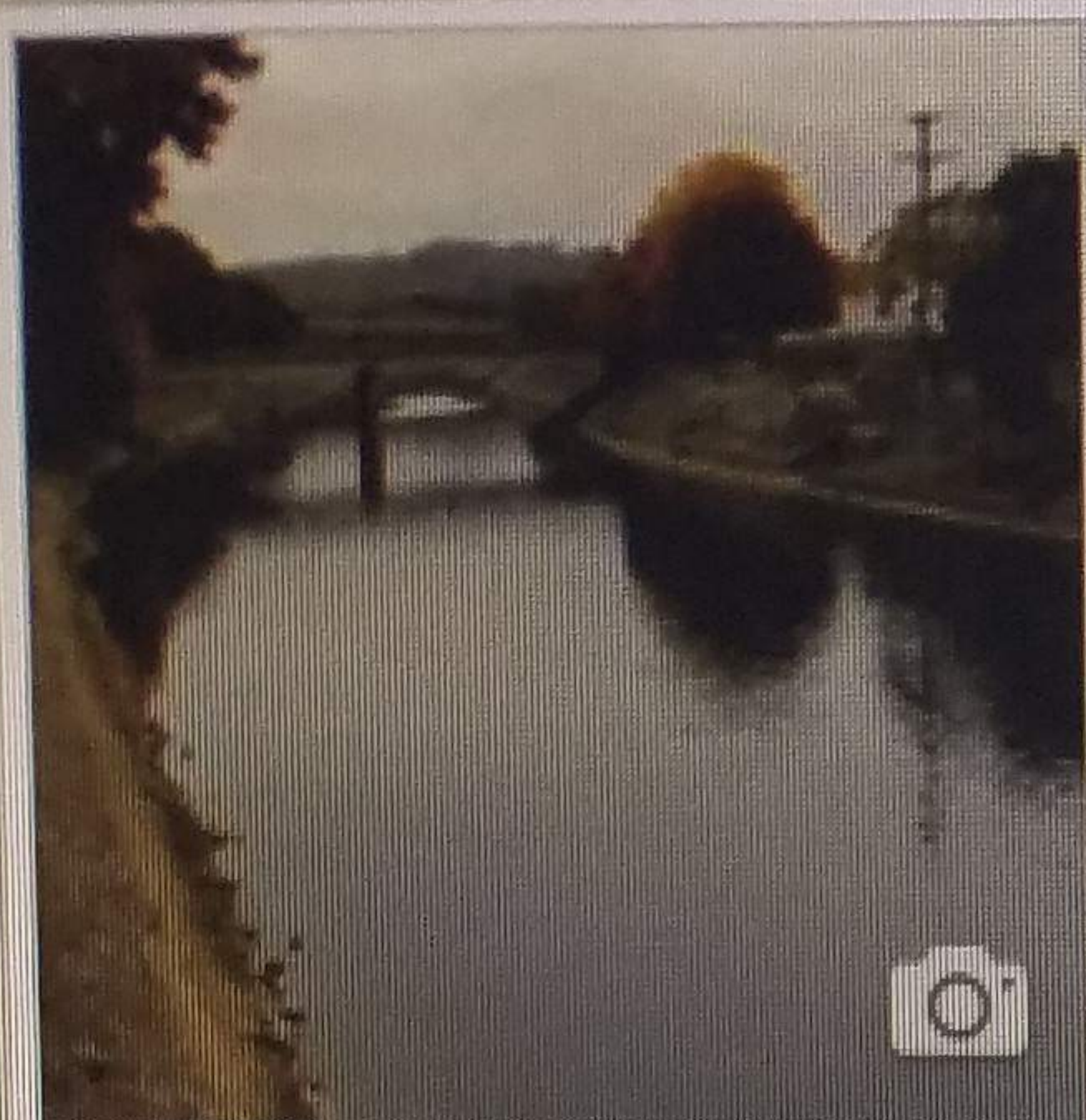


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### York City - MS4 - Stormwater

Published by Lettice Brown [?] · August 18 · 🌐

Hello everyone! Sorry it has been awhile since i have posted but the Stormwater world has been extremely busy. Below is a photo of HACC property out in the Industrial Park taken on Wednesday August 16th. HACC, along with about 5-6 other businesses in the park, were given warning letters about grass clippings being left in the street. When it rains, the clippings get pushed onto storm drains and clog it, thus creating the flooding that everyone gets so upset about. Please, keep your grass clippings out of the streets and gutters. Mow with your discharge pointing away from the road, use a bagger, or sweep the clippings back onto your lawn or into your regular trash can. GRASS CLIPPINGS ARE NOT CONSIDERED YARD WASTE AND DO NOT GO IN YOUR YELLOW CANS!

If you would like more information, please contact me.

Thanks and have a great weekend!



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DELL



















June 1 2017

MS4 Coordinator joined the Audubon Society and 6<sup>th</sup> graders from Ferguson Elementary School while they searched Willis Run for organisms that live in the creek. We were located near the YMCA parking lot, just upstream from the footbridge. The children caught crayfish, scud, and one leech. There were about 15 children there at the time. Other children were at other spots on the circuit of stations including fishing, bird watching, and tree or flower planting. MS4 Coordinator would like to collaborate with the Audubon Society for future trips to the creek and will keep in contact with them.







PUBLIC EDUCATION CLASSES								
CALENDAR FOR CLASSES SPRING 2017 (21ST YEAR)						(13 Classrooms; 11 Presentations)		
DAY	DATE	TIMES (From-To)	MINS	SCHOOL	SETUP	TEACHER	#	STUDENTS
Tues	5/9/17	11:30 AM - 12:30 PM	60	Devers Elem	In Library	Ms Smeltzer		19
Tues	5/9/17	12:30 PM - 1:30 PM	60	Devers Elem	In Library	Ms Shannon		18
Tues	5/9/17	1:30 PM - 2:30 PM	60	Devers Elem	In Library	Ms Hershey		23
Wed	5/10/17	9:00 AM - 10:30 AM	90	Goode Elem	Rm: 25	Ms Lehman		28
Thurs	5/11/17	9:00 AM - 10:30 AM	90	Goode Elem	Rm: 15	Ms Wood		33
Thurs	5/11/17	11:40 AM - 1:10 PM	90	Goode Elem	Rm: 11	Ms Sier		30
Mon	5/15/17	1:00 PM - 2:30 PM	90	Ferguson Elem	Rm: 218	Ms Mayfield		18
Tues	5/16/17	1:00 PM - 2:30 PM	90	Ferguson Elem	Rm: 221	3 combined classes (Ms Oxley; Ms Malon; repeat of Ms Mayfield)		45
Wed	5/17/17	1:00 PM - 2:30 PM	90	Ferguson Elem	Rm 219	Ms Keeney		15
Thurs	5/18/17	9:00 AM - 10:30 AM	90	Phineas Davis Elem	Rm: 204	Ms Buczek		21
Thurs	5/18/17	12:00 PM - 1:30 PM	90	Phineas Davis Elem	Rm: 205	Ms Mulrooney		19
			900					267
			MINS					STUDENTS





CITY OF YORK  
PUBLIC WORKS DEPARTMENT  
ENVIRONMENTAL BUREAU  
101 SOUTH GEORGE ST, 2ND FL  
PO BOX 509, YORK PA 17405

*Good  
MS Lehman  
5/10/17*

<b>TOPIC:</b> "The Good, The Bad & The Ugly" *Recycling *Litter and *Storm Water Run Off (MS4)	
<b>DATE:</b> / /17	
<b>SPEAKER:</b> Cassie Dennis	
<b>TEACHER:</b>	<b>RM#: SCHOOL:</b>

## PRESENTATION EVALUATION

Comments on presentation evaluations like this one help us make our presentations more informative and more effective. Please assist us by completing this form thoughtfully. Thank you!

<b><u>Number of students</u></b> in your class: 28										
Give your <b><u>overall reaction</u></b> to this presentation. (Circle One)										
LOW	1	2	3	4	5	6	7	8	9	10 HIGH
1. What was <b><u>most valuable</u></b> about this presentation?										
<i>Presenter / material</i>										
2. What was <b><u>least valuable</u></b> about this presentation?										
<i>—</i>										
3. Did you receive any <b><u>new or valuable ideas</u></b> ? If so, what?										
<i>news paper - flower</i>										
4. Was the <b><u>Storm Water information</u></b> valuable and easy to understand?										
<i>yes</i>										
5. Are the <b><u>handouts</u></b> useful?										
<i>yes</i>										
6. Was the <b><u>time allotted</u></b> to each subject too much, too little or about right?										
<i>just right</i>										
7. Any other <b><u>suggestions</u></b> for improvement, content of the program, presenter, arrangements, location, etc. are appreciated.										
<i>N/A</i>										





CITY OF YORK  
PUBLIC WORKS DEPARTMENT  
ENVIRONMENTAL BUREAU  
101 SOUTH GEORGE ST, 2ND FL  
PO BOX 509, YORK PA 17405

<b>TOPIC:</b>	"The Good, The Bad & The Ugly"		
	*Recycling *Litter and *Storm Water Run Off (MS4)		
<b>DATE:</b>	5/9/17		
<b>SPEAKER:</b>	Cassie Dennis		
<b>TEACHER:</b>	Smeltzer	<b>RM#:</b> 13	<b>SCHOOL:</b> JL Dever

## PRESENTATION EVALUATION

Comments on presentation evaluations like this one help us make our presentations more informative and more effective. Please assist us by completing this form thoughtfully. Thank you!

<b>Number of students</b> in your class: 19										
Give your <b>overall reaction</b> to this presentation. (Circle One)										
LOW	1	2	3	4	5	6	7	8	9	10 HIGH
1. What was <b>most valuable</b> about this presentation? visuals										
2. What was <b>least valuable</b> about this presentation? n/a										
3. Did you receive any <b>new or valuable ideas</b> ? If so, what? info to pass on										
4. Was the <b>Storm Water information</b> valuable and easy to understand?										
5. Are the <b>handouts</b> useful? yes										
6. Was the <b>time allotted</b> to each subject too much, too little or about right? just right										
7. Any other <b>suggestions</b> for improvement, content of the program, presenter, arrangements, location, etc. are appreciated.										





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101 SOUTH GEORGE ST, 2ND FL  
PO BOX 509, YORK PA 17405

TOPIC:	"The Good, The Bad & The Ugly"		
	*Recycling *Litter and *Storm Water Run Off (MS4)		
DATE:	5/9/17		
SPEAKER:	Cassie Dennis		
TEACHER:	Hershey	RM#:	5 SCHOOL: Devers

## PRESENTATION EVALUATION

Comments on presentation evaluations like this one help us make our presentations more informative and more effective. Please assist us by completing this form thoughtfully. Thank you!

<u>Number of students</u> in your class: 23										
Give your <u>overall reaction</u> to this presentation. (Circle One)										
LOW	1	2	3	4	5	6	7	8	9	10 HIGH
1. What was <u>most valuable</u> about this presentation? Recycling info -										
2. What was <u>least valuable</u> about this presentation?										
3. Did you receive any <u>new or valuable ideas</u> ? If so, what? crafts										
4. Was the <u>Storm Water information</u> valuable and easy to understand? yes										
5. Are the <u>handouts</u> useful? yes										
6. Was the <u>time allotted</u> to each subject too much, too little or about right? yes										
7. Any other <u>suggestions</u> for improvement, content of the program, presenter, arrangements, location, etc. are appreciated.										





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PO BOX 509, YORK PA 17405

TOPIC: "The Good, The Bad & The Ugly"  
\*Recycling \*Litter and \*Storm Water Run Off (MS4)  
DATE: 5/11/17  
SPEAKER: Cassie Dennis  
TEACHER: Mrs Wood RM#: 15 SCHOOL: Goode

## PRESENTATION EVALUATION

Comments on presentation evaluations like this one help us make our presentations more informative and more effective. Please assist us by completing this form thoughtfully. Thank you!

Number of students in your class: 33

Give your overall reaction to this presentation. (Circle One)

LOW 1 2 3 4 5 6 7 8 9 (10) HIGH

1. What was most valuable about this presentation?

Recycling gave ideas for reusing products  
Litter helped

2. What was least valuable about this presentation?

N/A

3. Did you receive any new or valuable ideas? If so, what?

no

4. Was the Storm Water information valuable and easy to understand?

N/A Did not do??

5. Are the handouts useful?

yes the kids enjoyed working on the activities  
and learning about recycling and litter.

6. Was the time allotted to each subject too much, too little or about right?

just right

7. Any other suggestions for improvement, content of the program, presenter, arrangements, location, etc. are appreciated.





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ENVIRONMENTAL BUREAU  
101 SOUTH GEORGE ST, 2ND FL  
PO BOX 509, YORK PA 17405

TOPIC: "The Good, The Bad & The Ugly"  
\*Recycling \*Litter and \*Storm Water Run Off (MS4)  
DATE: 5/15/17  
SPEAKER: Cassie Dennis  
TEACHER: Mayfield RM#: 218 SCHOOL: Ferguson

## PRESENTATION EVALUATION

Comments on presentation evaluations like this one help us make our presentations more informative and more effective. Please assist us by completing this form thoughtfully. Thank you!

<u>Number of students</u> in your class: 16										
Give your <u>overall reaction</u> to this presentation. (Circle One)										
LOW	1	2	3	4	5	6	7	8	9	10 HIGH
1. What was <u>most valuable</u> about this presentation? She was very knowledgable about the program.										
2. What was <u>least valuable</u> about this presentation? _____										
3. Did you receive any <u>new or valuable ideas</u> ? If so, what? Yes; reusable items to make into crafts/games.										
4. Was the <u>Storm Water information</u> valuable and easy to understand? Yes!										
5. Are the <u>handouts</u> useful? Yes (4)										
6. Was the <u>time allotted</u> to each subject too much, too little or about right? Just right.										
7. Any other <u>suggestions</u> for improvement, content of the program, presenter, arrangements, location, etc. are appreciated. Excellent presentation.										





CITY OF YORK  
PUBLIC WORKS DEPARTMENT  
ENVIRONMENTAL BUREAU  
101 SOUTH GEORGE ST, 2ND FL  
PO BOX 509, YORK PA 17405

TOPIC: "The Good, The Bad & The Ugly"  
\*Recycling \*Litter and \*Storm Water Run Off (MS4)

DATE: 5/16/17

SPEAKER: Cassie Dennis

TEACHER: MS. Oxley RM#: 22 SCHOOL: Ferguson K-8

## PRESENTATION EVALUATION

Comments on presentation evaluations like this one help us make our presentations more informative and more effective. Please assist us by completing this form thoughtfully. Thank you!

Number of students in your class: 10

Give your overall reaction to this presentation. (Circle One)

LOW 1 2 3 4 5 6 7 8 9 10 HIGH

1. What was most valuable about this presentation?

Going outside/hands-on activities

2. What was least valuable about this presentation?

n/a

3. Did you receive any new or valuable ideas? If so, what?

adding game w/ egg carton

4. Was the Storm Water information valuable and easy to understand?

5. Are the handouts useful?

yes

6. Was the time allotted to each subject too much, too little or about right?

Lost focus towards end

7. Any other suggestions for improvement, content of the program, presenter, arrangements, location, etc. are appreciated.

n/a



May 24, 2017

MS4 Coordinator presented a MS4 Stormwater Powerpoint Presentation to City Council on this date to about 5 Council members and about 20 residents of York City. There were also 4 flyers that were available for residents and Council members: “When it Rains it Drains”, “10 Things You Can Do To Save The Bay”, “DEP Fact Sheet Stormwater”, and the Powerpoint presentation in paper form. The presentation lasted about 20 minutes.



# Public Works Programs

*The Honorable Michael R. Helfrich, Mayor*

# Spring/Summer 2018

Environmental and Recreation & Parks  
[www.yorkcity.org](http://www.yorkcity.org)



## ENVIRONMENTAL BUREAU

All persons in York City are required to recycle according to State law, Act 101 and local ordinance 952. (resident, commercial, institutional). Designated items include paper (office paper, tablet paper, envelopes, junk mail, magazines, phone books), cardboard, and chipboard (cereal, tissue and other product boxes; paper towel and toilet paper rolls), glass & metal food and beverage containers and plastic bottles/jars with #1-7 (as a bottle/jar, neck must be smaller than bottom) All butter tubs, dessert cups, and plastic bags are trash. **If you are not recycling, begin immediately.** Non-compliance may result in fines of up to \$600.

## CITYWIDE LITTER CLEANUP, Saturday, April 14<sup>th</sup>

Volunteers to register at City Hall parking lot, 101 S George St between 7:30-8:00 a.m. Cleanup 8:00-11:00 a.m.  
(Additional litter cleanups will be conducted by Adopt-A-Block volunteers on 4/28; 6/23; 8/11; and 9/22).

## ELECTRONICS Drop-off Program Open to Residents

Effective January 24, 2013 certain items may not be discarded in the normal trash: 1)TVs; 2) Computers; 3) Items that connect to computers (such as printers, modems, keyboards, etc). These items must be taken by the customer to an Electronics program for proper handling. The York County Solid Waste Authority accepts electronics from all York County residents, **Mon-Fri 8 am-4 pm & Sat 8 am-noon**. For more details and a complete list of other Electronics sites in York County, go to the website at [www.ycswa.com](http://www.ycswa.com) or call 717-845-1066 for more information.

## YARD WASTE FACILITY (Memorial Stadium)

This site is open the first Saturday of each month 10 am-2 pm, weather permitting. (Bring proof of residency) **NO GRASS!**  
**Open: 4/7; 5/5; 6/2; 7/7; 8/4; 9/1; 10/6; 11/3; 12/1**  
Closed: January, February & March

**CURBSIDE YARD WASTE COLLECTIONS** begin on the first recycling day in March (weather permitting) and continue through mid December.

## UPCOMING HOLIDAY CURBSIDE COLLECTIONS

**Memorial Day** – No collections on Monday, 5/28  
All collections (Mon – Fri) this week will be delayed 1 day.  
**Independence Day** – No collections on Wednesday, 7/4  
All collections (Wed – Fri) this week will be delayed 1 day  
**Labor Day** – No collections on Monday, 9/3  
All collections (Mon – Fri) this week will be delayed 1 day.

## LARGE- ITEM COLLECTION

York City Curbside Customers may call **717-843-1240** Mon-Thurs, 9:00 a.m. to 3:30 p.m. to schedule up to 5 normal household furniture/appliances. Some excluded items must be handled privately.

**REFUSE COLLECTIONS** Our current hauler is Republic Services (thru 4/30/21). Place trash in securely tied trash bags. Tied bags may be placed alone or inside a plastic or metal trash can with a lid and handles (Max: 32 gals; 40lbs). (Contractor bags, leaf bags, grocery bags, large "tote" cans and any cans over 32 gals, plastic/metal drums, cardboard boxes, milk crates, and baskets may NOT be used for regular trash.) Illegal containers may be disposed of. No refunds/replacements will be given.

### CONTAINERS, BAGS OR BUNDLES PLACED CURBSIDE:

All normal curbside items placed for collection (trash, recycling, and yard waste) should not exceed:

**32 gallons** (contents should never extend beyond the top edge of any container)

**40 pounds**

**3 feet long**



**CONTAINERS & BAGS FOR SALE** to individual residents for their specific York City dwelling. Quantities will not be sold to landlords or management companies.

Green Recycling Bin OR Can	\$3.00/limit 1
Yard Waste Cans	\$3.00/limit 1
Yard Waste Kraft Paper Bags	\$5.00/pack of 10



Reduced pricing is made possible, in part, due to a grant from the Department of Environmental Protection, in conjunction with York County Solid Waste and Refuse Authority. Yard Waste bags remain \$5.00 for each pack of 10 bags. The items above are available at the Public Works Department, 101 S George Street, 2<sup>nd</sup> floor, M-F, 8 a.m. – 5 p.m. Customers must show proof of residency (i.e. driver's license or bill). Yard waste cans/bags not available December-February.  
Recycling containers must remain with the property.

## STORMWATER UPDATE

Warmer weather is coming!! Don't forget: Keep grass clippings off the sidewalks and streets. Ensure leaves and other yard debris are kept out of the gutters so storm water can flow freely. Check on your nearest storm drain occasionally and keep them free of leaves and other debris. "Only rain, down the drain". If you see anyone dumping illegal substances into a storm drain or onto the street/gutter, call the Public Works Department at 717-849-2245 OR call Lettice, the MS4 Coordinator, at 717-324-6532.

## FOG WILL CLOG YOUR PIPES

Fats, Oils, and Greases (FOG) should never be rinsed down drains. FOG may start as a liquid but as it hits the cool pipes, it can harden and stick to the inside of pipes. This may slow drains and cause clogs. Fats and grease from meats/sausage/bacon, cooking oil, salad dressings, cheeses should NEVER go down drains. Baby wipes are NOT biodegradable and should NEVER be put in toilets.



THE CITY OF YORK  
THE DEPARTMENT OF PUBLIC WORKS  
101 SOUTH GEORGE STREET, PO BOX 509  
YORK PA 17405

PRSR STD  
US POSTAGE  
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YORK PA  
PERMIT NO 96

\*\*\*\*\*ECRWSS\*\*\*\*\*  
POSTAL CUSTOMER

PUBLIC WORKS  
PROGRAMS

Update

SPRING/SUMMER 2017

Honorable C. Kim Bracey, Mayor

Environmental and Recreation & Parks

[www.yorkcity.org](http://www.yorkcity.org)

ENVIRONMENTAL BUREAU

All persons in York City are required to recycle according to State law, Act 101 and local ordinance 952, (resident, commercial, institutional). Designated items include paper (office paper, tablet paper, envelopes, junk mail, magazines, phone books), cardboard, and chipboard (cereal, tissue and other product boxes; paper towel and toilet paper rolls), glass & metal food and beverage containers and plastic bottles/jars with #1-7 (as a bottle/jar, neck must be smaller than bottom) All butter tubs, dessert cups, and plastic bags are trash. If you are not recycling, begin immediately. Non-compliance may result in fines of up to \$600.

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Volunteers to register at City Hall parking lot, 101 S George St between 7:30-8:00 a.m. Cleanup 8:00-11:00 a.m. (Rain date: 4/8)

LITTER CLEANUPS by Adopt-A-Block volunteers will be on 4/8; 6/10; 8/12; and 10/7

ELECTRONICS EVENTS

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Printed on Recycled Paper

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Illicit Discharges

An illicit discharge is anything other than stormwater flowing into a storm drain (grass clippings, paint, leaking vehicle fluids, excess fertilizers, grease, toxins, excess sediment (dirt), and pet wastes). Never throw any of these into streets, curbs, or storm drains. Remember stormwater does NOT get treated before flowing into creeks and streams. If you see anyone dumping illegal substances into a storm drain or onto the street/gutter, call the Public Works Department at 717-849-2245 OR the MS4 Coordinator at 717-324-6532.



**YORK CITY RECREATION & PARKS BUREAU**  
**101 South George Street, PO Box 509, York PA 17405**  
**Office Hours: Monday – Friday, 8:00 am to 5:00 pm**  
**Phone: 717.854-1587 \* Fax: 717.845.7457**  
**www.yorkcity.org**

**Important #'s**

City Hall Main Desk 849.2301 \* Mayor's Office 849.2221  
FYI Line 845.3949 \* City Council 849.2246  
Economic & Community Development 849.2264  
Health Bureau 849.2299 \* Human Resources 849.2244  
Housing Services 849.2264  
Fire Non-Emergency Calls/Code Enforcement 854.3921  
Parking Bureau 849.2259  
Police Non-Emergency Calls 854.5571 \* Police Main Desk 846.1234  
Sewer Refuse 849.2268 or 852.8173 \* Traffic Fines 849.2236  
Treasurer's Office/Tax Collection 849.2281  
Yard Sale Permits 849.2256 \* York City Events 849.2217  
**Sewer Emergency 894.1187**

**CITY OFFICE CLOSED FOR HOLIDAYS**

Friday, April 14<sup>th</sup> Good Friday (Trash Hauler IS collecting)  
Monday, May 29<sup>th</sup> Memorial Day  
Tuesday, July 4<sup>th</sup> Independence Day  
Monday, September 4<sup>th</sup> Labor Day

**MISSION STATEMENT/POLICIES**

The **mission** of the York City Recreation & Parks Bureau is to meet the recreation needs of York City residents by providing direction, planning and coordination of services to enhance their quality of life through year-round leisure programs and facilities that will develop and enhance the individual's physical, emotional, mental and social well-being. **Policies** - York City Recreation and Parks reserves the right to: Cancel a program for any reasonable cause. To deny registration or entry into a program when it deems necessary to assure public safety. To suspend a child from a program, with no refund, after notifying a parent of disciplinary problems. To adjust any of the program details printed in this publication or any other City publication regarding fees, locations, instructors, times, days and starting dates. **Park Rules** - No person or vehicle shall remain in any park between the hours of 10:00 pm and 6:00 am unless by permit or authorized by the Director. No person shall drive through or park a motor vehicle partially or totally on lawn areas of any park unless otherwise permitted. No alcoholic beverages are permitted in any park. No littering. All trash must be disposed of in the proper containers. (Codified Ordinance Article 741.02) Feeding of water fowl is prohibited. All dogs must wear a collar displaying current license and current rabies vaccination verification tags and shall be under control of a leash when on City sidewalks or streets or upon any public property such as parks and buildings of the City. (Ord. 7-1996 §1. Passed 5-21-96.) No owner or keeper of any dog shall allow or permit any such dog to excrement upon any public or private property of the City unless such owner or keeper removes the excrement and disposes of same in a sanitary manner. (Ord. 5-2012. Passed 2-21-12.) Whoever violates any provision of this article shall be subject to penalty.

**For more program information or to register, call 717-854-1587**

**YOUTH ACTIVITIES**

**42<sup>nd</sup> Annual Easter Egg Hunt** at Kiwanis Lake  
**Saturday, April 8<sup>th</sup> at 1 pm (Ages 1 to 8)**

Rain date, Sunday, April 9<sup>th</sup> at 1 pm  
Bring your basket or a container to collect the eggs.

**18<sup>th</sup> Annual William Shaffer**  
**"Kids Hooked On Fishing" Trout Fishing Derby**  
**Kiwanis Lake** (rain or shine event)  
**Saturday, April 1<sup>st</sup>, 8 am to 12 pm**  
Ages 15 and under accompanied by parents.

**2017 Summer Playground Program**  
**June 19<sup>th</sup> through July 27<sup>th</sup>**

Monday through Thursday, 8 am to 4 pm  
**Registration: June 12<sup>th</sup> through 15<sup>th</sup>, 4:30 to 6:30 pm**  
Registration location to be determined.  
Park Sites: Allen Park, Bantz Park, Lincoln Park,  
Memorial Park Complex and Yorktown Park.  
There will not be an evening program at Penn this year.  
Registration Fee (Cost for six (6) week program):  
City Residents - \$25.00 for 1<sup>st</sup> child / \$20.00 each additional child  
Non-City - \$55.00 for 1<sup>st</sup> child / \$50.00 each additional child  
Additional fees will apply for field trips.

**24<sup>th</sup> Annual Free Art in the Park Program**  
Monday through Friday, 6:30 to 7:30 pm  
Allen Park – June 19<sup>th</sup> through June 23<sup>rd</sup>  
Yorktown Park – June 26<sup>th</sup> through June 30<sup>th</sup>  
Albemarle Park – July 3<sup>rd</sup> through July 7<sup>th</sup>  
*No program on July 4<sup>th</sup>.*  
Lincoln Park – July 10<sup>th</sup> through July 14<sup>th</sup>  
Penn Park – July 17<sup>th</sup> through July 21<sup>st</sup>

**ATHLETICS**

**Memorial Park Batting Cages** (Rockdale & Vander Aves)  
**Open April 3 through end of September (weather permitting)**  
Monday through Thursday 5-9 pm & Saturday and Sunday 12-4 pm  
Cost: \$1.00 (14 pitches). Available for rentals 15, 30 or 60 minutes.

**Summer Leagues: Basketball** begins May 30<sup>th</sup> at Voni B. Grimes Gym. **Beach Volleyball** begins May 30<sup>th</sup> at the Memorial Park Complex. For more information call the Recreation & Parks office at 717-854-1587.

**SPECIAL EVENTS/ACTIVITIES**

**Box Lunch Revue:** Tues & Thurs, May 2 - Aug 31, 11:30 am-1:00 pm (Cherry Lane Park)

**42<sup>nd</sup> Annual Olde York Street Fair:** Sun, May 14, 12:30-6:00 pm  
(In and around Continental Square in Downtown York)

**Yorkfest Arts Festival:** Aug 26 & 27, beginning at 10 am  
Downtown York, surrounding the Colonial Court House Complex, portions of the York Co Heritage Rail Trail (Philadelphia-Princess Sts), Market St (Codorus Creek & Beaver St to first block of N Pershing Ave).

**23<sup>rd</sup> Annual York Bike Night:** Fri, Sept 29, 6:00-10:00 pm (In and around Continental Square in Downtown York)

**Save the Dates:**

Labor Day Festival: 9/4  
Light Up York: Saturday, 12/2 (NOTE NEW DAY FOR 2017)  
New Year's Eve Celebration – 12/31

**FREE SUMMER MOVIE SERIES – KIWANIS LAKE**  
**June 7<sup>th</sup> – July 26<sup>th</sup> (Wednesday Evenings)**

PG/family oriented movies (weather permitting) begin at dusk (around 8:15 pm). Bring favorite snack, lawn chair or blanket. For a complete movie list, visit [www.yorkcity.org](http://www.yorkcity.org) or check the local newspaper.

**LINCOLN PARK FREE CONCERT SERIES**

Featuring Jazz, R&B, Top 40 and Classic Rock- **STAY TUNED!**  
**Visit our website in May for the complete schedule.** Concerts begin at 7:00 pm (weather permitting). Bring your favorite snack, lawn chair or blanket and enjoy the show.

**PARK/SPECIAL EVENT PERMIT**

To reserve a park for your next family picnic or special event, submit your application online 30 days prior to the date of your scheduled event ([www.yorkcity.org/york-city-event-permit](http://www.yorkcity.org/york-city-event-permit)). Fees will apply.

**FREQUENTLY ASKED QUESTIONS**

**TREE TRIMMING? (Codified Ordinance Article 913)**

913.03 (a) Any tree or shrub which overhangs any sidewalk, street or public place in such a way as to impeded or interfere with traffic or travel on such public place including City street sweepers and other vehicles requiring a high clearance on roadways, shall be trimmed by the owner of the abutting premises on which such trees or shrub grows, to a height of a minimum of fourteen feet above the roadway and eight feet above the sidewalk so that the obstruction shall cease (Ord. 5-1995. Passed 4-18-95) (b) Any tree or limb of a tree which has become likely to fall on or across any public way or place, shall be removed by the owner of the premises on which such tree grows or stands.

**WHEN WILL STREET SWEEPING RESUME?**

City wide street sweeping will begin March 15<sup>th</sup> ending in mid-November. The fine for parking in an area during designated street sweeping days is \$50.00. For questions about when a street is posted for no parking please call the Highway Bureau at 849.2320.

**HOW DO I REPORT A STREET LIGHT PROBLEM?**

**Identify** the exact location (street name, closest address of a building), include the pole number (ten-digit number located on a yellow metal tag on the pole, *example* 22550-28665). If the number is missing from the pole this should be reported along with the exact location. **Identify** the problem (light out, goes on and off, on during daylight hours). **Report** the problem by calling the Bureau of Electrical and Building Maintenance 845.9351 or email [cgodfrey@yorkcity.org](mailto:cgodfrey@yorkcity.org). Allow two to three weeks to make a repair.

**HOW DO I REPORT A POT HOLE?**

Call the hot line, 717.849.2228, for any street problems-pot holes, inlets clogged, signs, snow removal or sweeping. Please give exact location (street name, block). Leave a message on the 24-hour service. If you wish to speak with someone, call 849.2320 between 7:00 am & 3:30 pm, Monday-Friday.

**CURBS & SIDEWALKS, REPAIRS & REPLACEMENTS?**  
**(Codified Ordinance 909.19)**

Owners of property abutting on any public street or highway within the City, shall at their expense, construct, pave, curb, repave and recurb the sidewalks and keep them in good repair along such property, in conformity with existing City ordinances. (Ord. 9-1945 §1.)




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# Stormwater Management

**Report Illicit Discharge of Dumping into a Stormwater Inlet - Call (717)-324-6532**

## Innovative Stormwater Treatment in the Spotlight: RSC

A recent addition to the City's Stormwater System includes an innovative treatment method called Regenerative Step Conveyance (RSC). The RSC is a system/method of treating stormwater runoff to improve the quality of the runoff and reduce the destructive forces of fast flowing runoff. Two RSCs were installed along the East side of Tyler Run in the vicinity of Rose Alley and Hancock Alley. The design of the RSC allows stormwater flow entering the system to slow down and percolate into the ground. The RSC is a series of "steps" and "pools" that permit the water quality improvement process to take place. This project was funded as part of the Pennsylvania Growing Greener grants initiative. Stop on out and take a look as what the City is doing to improve water quality in our community. (4/21/14)

## Stormwater & The Chesapeake Bay





## Learn More About Local Water Conservation Organizations

- [York County Coalition for Clean Waters YCC4CW](#)
- [Watershed Alliance of York](#)
- [York County Conservation District](#)
- [Lower Susquehanna Riverkeeper](#)
- [Codorus Creek Watershed Association](#)

## Documents/Education Materials

- [City Council MS4 Stormwater Presentation](#)
- [CBF.10ThingsToSaveTheBay](#)
- [DEP.Stormwater.FactSheet](#)
- [EPA.AfterTheStorm.english](#)
- [EPA.AfterTheStorm.spanish](#)
- [EPA.UrbanRunoff](#)
- [City of York MS4 Annual Report 2015-16](#)
- [City of York MS4 Annual Report 2014-15](#)

## Social Media and other sites

### FACEBOOK

[Center for Watershed Protection](#)

[Chesapeake Bay Program](#)

[Pennsylvania Department of Environmental Protection](#)

[Stormwater PA MS4 Program](#)

[US Environmental Protection Agency](#)

[York County Conservation District](#)

[York County Planning Commission](#)



**MS 4 RELATED**

(4.1.2017 - 6.30.2018)

**EDUCATIONAL HANDOUTS AT CITY HALL BROCHURE DISPLAY**

<u>DATE</u>	<u>WHO</u>	<u>DOCUMENT (A)</u>	<u>COUNT</u>	<u>BAL</u>	<u>USED</u>	<u>ADDED</u>	<u>NEW BAL</u>
4/3/2017	L. Brown	10 THINGS YOU CAN DO THE SAVE THE BAY	12	3	9	9	12
5/1/2017	L. Brown	10 THINGS YOU CAN DO THE SAVE THE BAY	12	0	12	12	12
6/1/2017	L. Brown	10 THINGS YOU CAN DO THE SAVE THE BAY	12	0	12	12	12
7/3/2017	L. Brown	10 THINGS YOU CAN DO THE SAVE THE BAY	12	0	12	12	12
8/2/2017	L. Brown	10 THINGS YOU CAN DO THE SAVE THE BAY	12	10	2	2	12
9/1/2017	L. Brown	10 THINGS YOU CAN DO THE SAVE THE BAY	12	6	6	6	12
10/2/2017	L. Brown	10 THINGS YOU CAN DO THE SAVE THE BAY	12	9	3	3	12
11/3/2017	L. Brown	10 THINGS YOU CAN DO THE SAVE THE BAY	12	6	6	6	12
12/4/2017	L. Brown	10 THINGS YOU CAN DO THE SAVE THE BAY	12	7	5	5	12
1/2/2018	L. Brown	10 THINGS YOU CAN DO THE SAVE THE BAY	12	8	4	4	12
2/1/2018	L. Brown	10 THINGS YOU CAN DO THE SAVE THE BAY	12	11	1	1	12
3/1/2018	L. Brown	10 THINGS YOU CAN DO THE SAVE THE BAY	12	12	0	0	12
4/2/2018	L. Brown	10 THINGS YOU CAN DO THE SAVE THE BAY	12	9	3	3	12
5/2/2018	L. Brown	10 THINGS YOU CAN DO THE SAVE THE BAY	12	3	9	9	12
6/1/2018	L. Brown	10 THINGS YOU CAN DO THE SAVE THE BAY	12	5	7	7	12
					<b>91</b>		

<u>DATE</u>	<u>WHO</u>	<u>DOCUMENT (B)</u>	<u>COUNT</u>	<u>BAL</u>	<u>USED</u>	<u>ADDED</u>	<u>NEW BAL</u>
4/3/2017	L. Brown	STORMWATER RUNOFF CHALLENGE (PUZZLE)	12	5	7	7	12
5/1/2017	L. Brown	STORMWATER RUNOFF CHALLENGE (PUZZLE)	12	0	12	12	12
6/1/2017	L. Brown	STORMWATER RUNOFF CHALLENGE (PUZZLE)	12	1	11	11	12
7/3/2017	L. Brown	STORMWATER RUNOFF CHALLENGE (PUZZLE)	12	0	12	12	12
8/2/2017	L. Brown	STORMWATER RUNOFF CHALLENGE (PUZZLE)	12	11	1	1	12
9/1/2017	L. Brown	STORMWATER RUNOFF CHALLENGE (PUZZLE)	12	8	4	4	12
10/2/2017	L. Brown	STORMWATER RUNOFF CHALLENGE (PUZZLE)	12	12	0	0	12
11/3/2017	L. Brown	STORMWATER RUNOFF CHALLENGE (PUZZLE)	12	9	3	3	12
12/4/2017	L. Brown	STORMWATER RUNOFF CHALLENGE (PUZZLE)	12	4	8	8	12
1/2/2018	L. Brown	STORMWATER RUNOFF CHALLENGE (PUZZLE)	12	6	6	6	12
2/1/2018	L. Brown	STORMWATER RUNOFF CHALLENGE (PUZZLE)	12	10	2	2	12
3/1/2018	L. Brown	STORMWATER RUNOFF CHALLENGE (PUZZLE)	12	12	0	0	12
4/2/2018	L. Brown	STORMWATER RUNOFF CHALLENGE (PUZZLE)	12	10	2	2	12
5/2/2018	L. Brown	STORMWATER RUNOFF CHALLENGE (PUZZLE)	12	8	4	4	12
6/1/2018	L. Brown	STORMWATER RUNOFF CHALLENGE (PUZZLE)	12	11	1	1	12
					<b>73</b>		

**MS 4 RELATED****EDUCATIONAL HANDOUTS AT CITY HALL BROCHURE DISPLAY**

<u>DATE</u>	<u>WHO</u>	<u>DOCUMENT (C)</u>	<u>COUNT</u>	<u>BAL</u>	<u>USED</u>	<u>ADDED</u>	<u>NEW BAL</u>
4/3/2017	L. Brown	DEP FACT SHEET	12	1	11	11	12
5/1/2017	L. Brown	DEP FACT SHEET	12	6	6	6	12
6/1/2017	L. Brown	DEP FACT SHEET	12	5	7	7	12
7/3/2017	L. Brown	DEP FACT SHEET	12	4	8	8	12
8/2/2017	L. Brown	DEP FACT SHEET	12	7	5	5	12
9/1/2017	L. Brown	DEP FACT SHEET	12	4	8	8	12
10/2/2017	L. Brown	DEP FACT SHEET	12	7	5	5	12
11/3/2017	L. Brown	DEP FACT SHEET	12	6	6	6	12
12/4/2017	L. Brown	DEP FACT SHEET	12	12	0	0	12
1/2/2018	L. Brown	DEP FACT SHEET	12	9	3	3	12



2/1/2018	L. Brown	DEP FACT SHEET	12	11	1	1	12
3/1/2018	L. Brown	DEP FACT SHEET	12	12	0	0	12
4/2/2018	L. Brown	DEP FACT SHEET	12	9	3	3	12
5/2/2018	L. Brown	DEP FACT SHEET	12	8	4	4	12
6/1/2018	L. Brown	DEP FACT SHEET	12	9	3	3	12
					<b>70</b>		

<u>DATE</u>	<u>WHO</u>	<u>DOCUMENT (D)</u>	<u>COUNT</u>	<u>BAL</u>	<u>USED</u>	<u>ADDED</u>	<u>NEW BAL</u>
4/3/2017	L. Brown	WHEN IT RAINS, IT DRAINS	12	1	11	11	12
5/1/2017	L. Brown	WHEN IT RAINS, IT DRAINS	12	1	11	11	12
6/1/2017	L. Brown	WHEN IT RAINS, IT DRAINS	12	3	9	9	12
7/3/2017	L. Brown	WHEN IT RAINS, IT DRAINS	12	1	11	11	12
8/2/2017	L. Brown	WHEN IT RAINS, IT DRAINS	12	6	6	6	12
9/1/2017	L. Brown	WHEN IT RAINS, IT DRAINS	12	4	8	8	12
10/2/2017	L. Brown	WHEN IT RAINS, IT DRAINS	12	10	2	2	12
11/3/2017	L. Brown	WHEN IT RAINS, IT DRAINS	12	3	9	9	12
12/4/2017	L. Brown	WHEN IT RAINS, IT DRAINS	12	10	2	2	12
1/2/2018	L. Brown	WHEN IT RAINS, IT DRAINS	12	10	2	2	12
2/1/2018	L. Brown	WHEN IT RAINS, IT DRAINS	12	12	0	0	12
3/1/2018	L. Brown	WHEN IT RAINS, IT DRAINS	12	11	1	1	12
4/2/2018	L. Brown	WHEN IT RAINS, IT DRAINS	12	7	5	5	12
5/2/2018	L. Brown	WHEN IT RAINS, IT DRAINS	12	4	8	8	12
6/1/2018	L. Brown	WHEN IT RAINS, IT DRAINS	12	4	8	8	12
					<b>93</b>		

<u>DATE</u>	<u>WHO</u>	<u>DOCUMENT (E)</u>	<u>COUNT</u>	<u>BAL</u>	<u>USED</u>	<u>ADDED</u>	<u>NEW BAL</u>
5/1/2017	L. Brown	CONSTRUCTION SITES AND POLLUTION PREVENTION	12	12	0	0	12
6/1/2017	L. Brown	CONSTRUCTION SITES AND POLLUTION PREVENTION	12	3	9	9	12
7/3/2017	L. Brown	CONSTRUCTION SITES AND POLLUTION PREVENTION	12	10	2	2	12
8/2/2017	L. Brown	CONSTRUCTION SITES AND POLLUTION PREVENTION	12	0	12	12	12
9/1/2017	L. Brown	CONSTRUCTION SITES AND POLLUTION PREVENTION	12	0	12	10	10
10/2/2017	L. Brown	CONSTRUCTION SITES AND POLLUTION PREVENTION	10	0	10	12	12
11/3/2017	L. Brown	CONSTRUCTION SITES AND POLLUTION PREVENTION	12	10	2	2	12
12/4/2017	L. Brown	CONSTRUCTION SITES AND POLLUTION PREVENTION	12	10	2	2	12
1/2/2018	L. Brown	CONSTRUCTION SITES AND POLLUTION PREVENTION	12	8	4	4	12
2/1/2018	L. Brown	CONSTRUCTION SITES AND POLLUTION PREVENTION	12	8	4	4	12
3/1/2018	L. Brown	CONSTRUCTION SITES AND POLLUTION PREVENTION	12	12	0	0	12
4/2/2018	L. Brown	CONSTRUCTION SITES AND POLLUTION PREVENTION	12	10	2	2	12
5/2/2018	L. Brown	CONSTRUCTION SITES AND POLLUTION PREVENTION	12	6	6	6	12
6/1/2018	L. Brown	CONSTRUCTION SITES AND POLLUTION PREVENTION	12	7	5	5	12
					<b>70</b>		

<u>DATE</u>	<u>WHO</u>	<u>DOCUMENT (F)</u>	<u>COUNT</u>	<u>BAL</u>	<u>USED</u>	<u>ADDED</u>	<u>NEW BAL</u>
9/1/2017	L. Brown	YORK CITY STORMWATER ACTIVITY BOOK	12	12	0	0	12
10/2/2017	L. Brown	YORK CITY STORMWATER ACTIVITY BOOK	12	0	12	12	12
11/3/2017	L. Brown	YORK CITY STORMWATER ACTIVITY BOOK	12	0	12	12	12
12/4/2017	L. Brown	YORK CITY STORMWATER ACTIVITY BOOK	12	5	7	7	12
1/2/2018	L. Brown	YORK CITY STORMWATER ACTIVITY BOOK	12	6	6	6	12
2/1/2018	L. Brown	YORK CITY STORMWATER ACTIVITY BOOK	12	0	12	12	12
3/1/2018	L. Brown	YORK CITY STORMWATER ACTIVITY BOOK	12	0	12	12	12
4/2/2018	L. Brown	YORK CITY STORMWATER ACTIVITY BOOK	12	0	12	12	12
5/2/2018	L. Brown	YORK CITY STORMWATER ACTIVITY BOOK	12	0	12	12	12
6/1/2018	L. Brown	YORK CITY STORMWATER ACTIVITY BOOK	12	0	12	12	FALSE
					<b>97</b>		



## **Stormwater Discharges in York City**

### **Definitions:**

MS4 – Municipal Separate Storm Sewer System – Means our Storm System and Sewer Systems are SEPARATE. Sewer water gets cleaned, Storm water DOES NOT and flows directly into the Codorus Creek or surrounding creeks.

Illicit Discharge – any discharge to a MS4 that is **not** composed entirely of storm water, except for allowable discharges pursuant to National Pollutant Discharge Elimination System (NPDES). (i.e. water from fire fighting activities)

### **ALLOWABLE DISCHARGES UNDER NPDES:**

- uncontaminated stormwater and non-stormwater discharges that are approved by NPDES
  - Discharges from firefighting activities
  - Irrigation water
  - Diverted stream flows
  - Air conditioning condensation
  - Springs
  - Water from watering your lawn
  - Individual residential car washing

### **UNAUTHORIZED DISCHARGES UNDER NPDES:**

- Discharges that are mixed with sources of non-stormwater unless that discharge is in compliance with the NPDES permit
- Stormwater discharges from industrial activity that leads to contamination



- Stormwater discharges from construction activity that leads to contamination
  - **Stormwater discharges from food services activity that leads to contamination**
  - **Discharges that contain hazardous pollutants or toxins**
  - Discharges that are not, or shall not be, in compliance with the terms and conditions of the general permit
- ✓ FOOD WASTES SHOULD BE DISCHARGED TO THE SANITARY SEWER SYSTEM OR TAKEN TO AN AUTHORIZED FACILITY FOR ELIMINATION.
- ❖ Springettsbury Wastewater Treatment Facility will accept your food waste water. Please contact them at (717) 757-3521





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York City - MS4 - Sto... 4

Bingo Bash

Kitchen Star

Happy Land 1

Celebration of Commun... 2

STOMP 2

Dueling Pianos! Friday, ... 2

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Write Post



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Live Video



More



Write something...



Photo/Video



Poll



Feeling/Activ...



### RECENT ACTIVITY



Lettice Brown shared a link.

Admin · 9 mins

From York City - MS4 - Stormwater As promised, this is a video about grease in the drains and what can happen. Yes, it is very cheesy but i thought i sends the right message. Thank you to the North Central Texas Council of Governments. \*\*Side note\* York City does not currently have a grease recycling center as stated in the video, that i know of. If we do, please let me know. I will be looking into seeing if we could get one here in the City. Any comments are appreciated. Thanks for watching!



### Grease down the drain?

A woman's sink becomes clogged while cooking and is surprised when Earl the Plumber shows up to 'fix' the problem. <http://www...>

YOUTUBE.COM



Like



Comment



Share

### ADD MEMBERS

+ Enter name or email address...

### MEMBERS

608 Members



You have 2 new members this week. Write a post to welcome them.

Write Post

### DESCRIPTION

Edit

A place to stay up to date on emergencies, accidents, violence, ... [See More](#)

### TAGS

Edit

Violence · Crime Watch · York, Pennsylvania

### LOCATIONS

Edit



York, Pennsylvania

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Kitchen Star

Happy Land 1

Celebration of Commun... 2

STOMP 2

Dueling Pianos! Friday, ... 2

percent of this group's membership. And about half of the gro... See More



Joined

Ted Evgeniadis - Riverkeeper, Judy Bowser and 18 others 5 Comments 1 Share

Like Comment Share

## RECENT ACTIVITY



Lettice Brown shared a link.

7 mins

From York City - MS4 - Stormwater As promised, this is a video about grease in the drains and what can happen. Yes, it is very cheesy but i thought i sends the right message. Thank you to the North Central Texas Council of Governments. \*\*Side note\* York City does not currently have a grease recycling center as stated in the video, that i know of. If we do, please let me know. I will be looking into seeing if we could get one here in the City. Any comments are appreciated. Thanks for watching!



## Grease down the drain?

A woman's sink becomes clogged while cooking and is surprised when Earl the Plumber shows up to 'fix' the problem. http://ww...

YOUTUBE.COM

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## LINKED GROUP BY



York Daily Record/Sunday ...

90,715 like this

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## ADD MEMBERS

+ Enter name or email address...

## MEMBERS

9,543 Members



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Bane Marshall-Chilton

Add Member



Ted Brown

Add Member



Bnai T Madden

Add Member

See More

## DESCRIPTION

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## LOCATIONS



York, Pennsylvania



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Bingo Bash

Kitchen Star

Happy Land

Celebration of Commun... 2

STOMP 2

Dueling Pianos! Friday, ... 2



Lettice Brown

Admin · December 31, 2017 at 10:37am

York City - MS4 - Stormwater apologizes for another post but it is VERY important. For the past two days, Sewer Maintenance, Highway, and the MS4 Coordinator have been working sewer backup emergencies in the area of the 300blk of S. Penn St, Stone Avenue, and Brooklyn Avenue. The sewer mains are EXTREMELY clogged with GREASE, BABY WIPES, AND RAGS! These items are NOT to be thrown into your toilets, sinks, or any other pipe leading to the sanitary sewers. If you live in this area, please expect to see more literature to be distributed to your homes in the coming days/week. We must put an end to these backups. If the pipes become damaged and have to be replaced, many inconveniences may occur, including road closures, service interruption and what no one wants to hear...higher taxes. Please keep our infrastructure in working order. Any questions or concerns please feel free to contact the York City MS4 Coordinator at (717) 324-6532 or lbrown@yorkcity.org. Thank you and Happy New Years



Like Comment Share

Angela Jordan, Tonya L Larry and 10 others



You have 2 new members this week. Write a post to welcome them.

Write Post

### DESCRIPTION

Edit

A place to stay up to date on emergencies, accidents, violence, ... See More

### TAGS

Edit

Violence · Crime Watch · York, Pennsylvania

### LOCATIONS

Edit



York, Pennsylvania

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Green Nation

9 friends · 41,146 members

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- York City - MS4 - Sto... 2
- Bingo Bash
- Kitchen Star
- Happy Land
- Celebration of Commun... 2
- STOMP 2
- Dueling Pianos! Friday, ... 2



Lettice Brown

December 31, 2017 at 10:32am

York City - MS4 - Stormwater apologizes for another post but it is VERY important. For the past two days, Sewer Maintenance, Highway, and the MS4 Coordinator have been working sewer backup emergencies in the area of the 300blk of S. Penn St, Stone Avenue, and Brooklyn Avenue. The sewer mains are EXTREMELY clogged with GREASE, BABY WIPES, AND RAGS! These items are NOT to be thrown into your toilets, sinks, or any other pipe leading to the sanitary sewers. If you live in this area, please expect to see more literature to be distributed to your homes in the coming days/week. We must put an end to these backups. If the pipes become damaged and have to be replaced, many inconveniences may occur, including road closures, service interruption and what no one wants to hear...higher taxes. Please keep our infrastructure in working order. Any questions or concerns please feel free to contact the York City MS4 Coordinator at (717) 324-6532 or lbrown@yorkcity.org. Thank you and Happy New Years



Like Comment Share

Rachelle Semper, Charles R. Sweitzer and 42 others

Fly Eagles Fly

7 friends · 17,430 members

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+

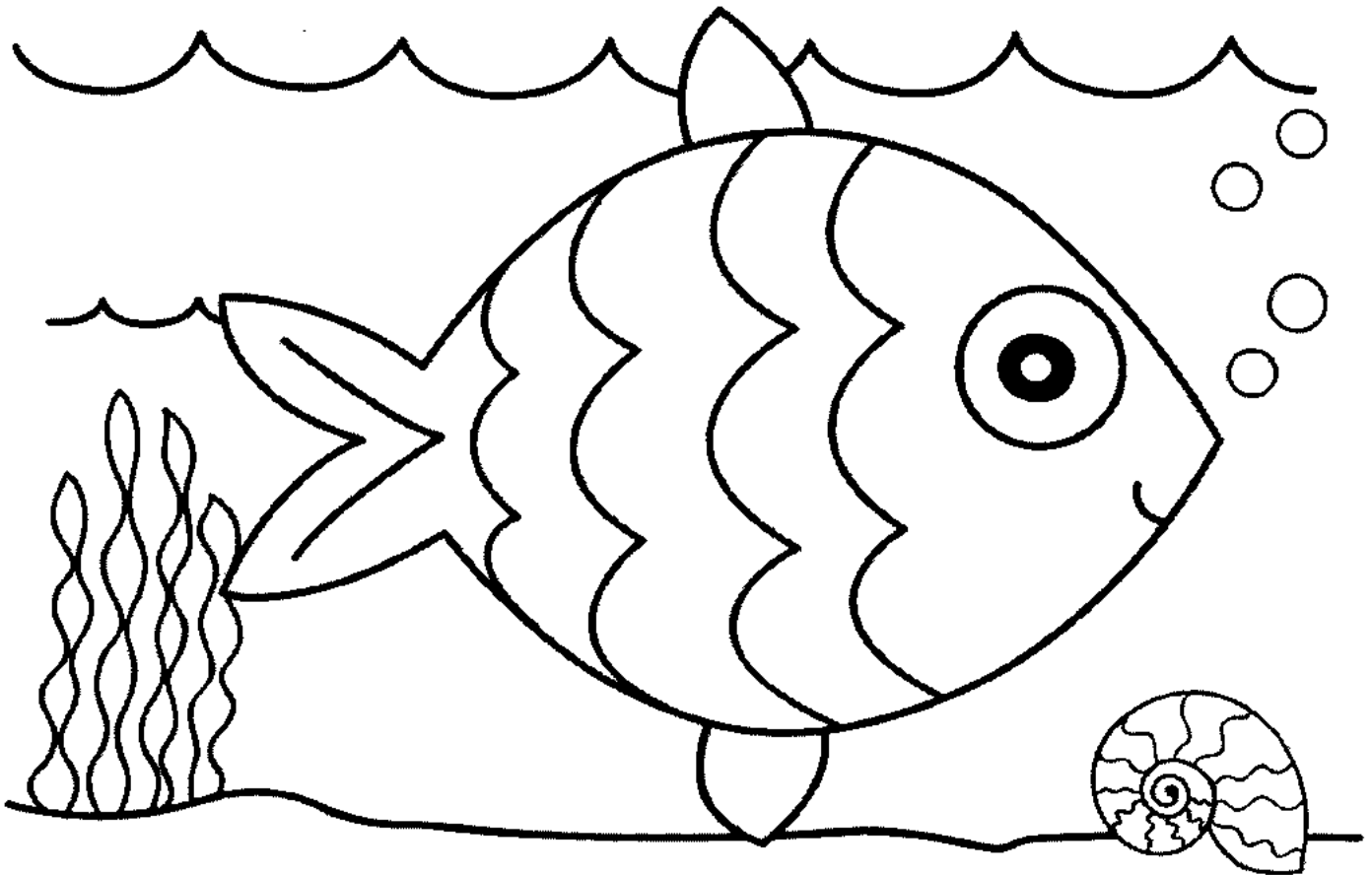
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# The York City Stormwater Activity Book

Your Name:





# York City Stormwater Find A Word

S Y U V R N U T I D B F C T K L E J U O  
U E K R X E R S C L F S K Q I E Z S A P  
J W D T A A T B H I U T A D R M E C M I  
T Q L I S I S A F L O O D I N G E R S L  
Q R S H M L N H W N I S A B Z G R T C A  
Q D E F V E I Q J M S T I U R F F C O K  
X M E V M H N R Q F R P C A R H I U K E  
O A F X L K A T R H E O H H C O T V A U  
N O I T C U R T S N O C T T C F N J E U  
G W E T F F C Y N J S O I S A B A V L Z  
R I F M P Y A S M I Q D B L N O H V H G  
A K V O J B Y S D A F O L D M W P K E N  
S G N F J L K L U G I R W A T E R S M R  
S D H I V H O L Y I F U F D Q X A N G H  
C X Q A N J D I P D L S I D M E M R F D  
W O N M V L R P W I S X V C R P Y B K T  
G I W O N S E S O G T K I G S E W A G E  
A N W F K T V T N Z O S R Y I N R T X X  
H Q G Z V C Z U Q J O I L O V L L G G C  
C T I C I L L I T Q B I J L Y F X W K F

ANTIFREEZE  
CODORUS  
CULVERT  
FLOODING  
ILLICIT  
LEAK  
PENNSYLVANIA  
SEDIMENT  
SPILLS  
WATER

BASIN  
CONSTRUCTION  
DISCHARGE  
GRASS  
INLET  
OIL  
POND  
SEWAGE  
STORMWATER  
WET

BOOTS  
CREEK  
DITCH  
GREASE  
LAKE  
OUTFALL  
RAIN  
SNOW  
TRASH  
YORK



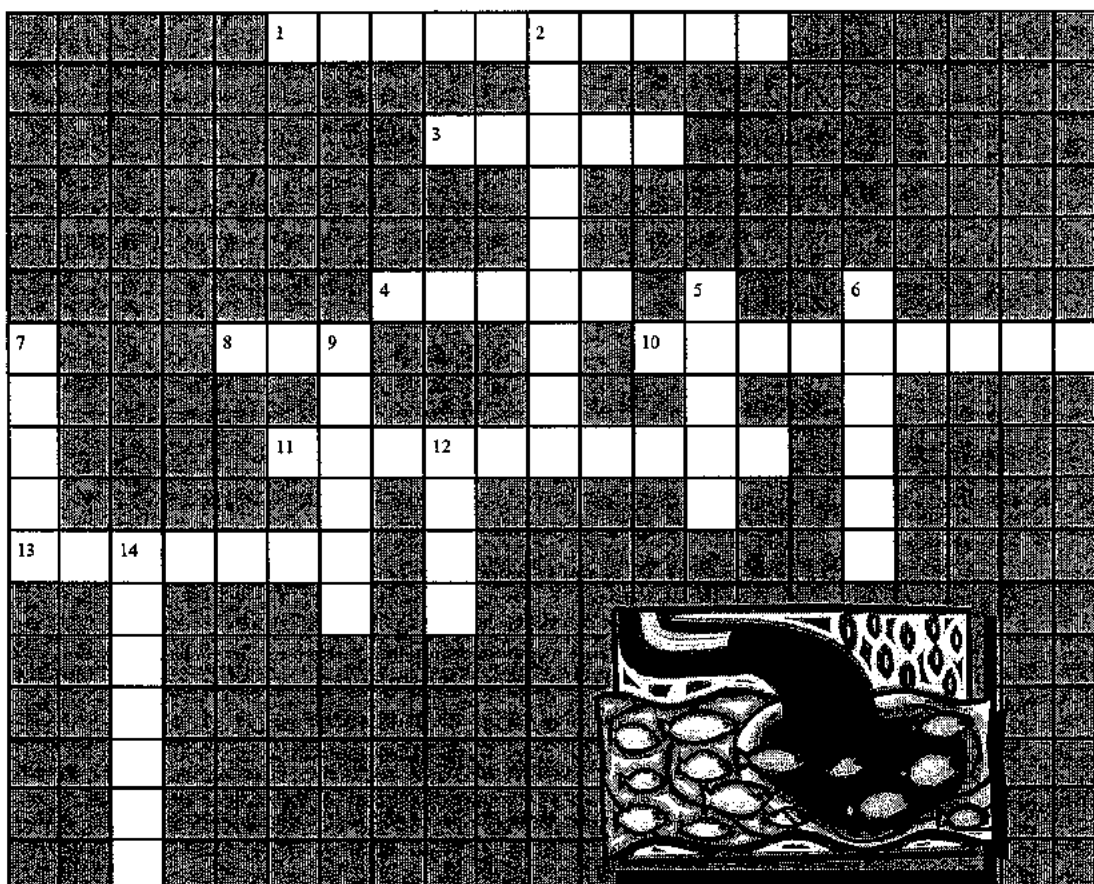




# Stormwater Crossword

INSTRUCTIONS: Complete the stormwater crossword puzzle by using the words below:

rain	litter	recycle	stormdrain	runoff	oil	watershed
trash	pollution	sewer	cleanup	toxic	water	stormwater



## ACROSS

1. \_\_\_\_\_ runoff is the rain or water from sprinklers and hoses that flow into the storm drain.
3. Picking up pet waste from the street is one way to prevent \_\_\_\_\_ pollution in our storm drains.
4. Many items found in your \_\_\_\_\_ can be recycled into valuable new products.
8. One quart of \_\_\_\_ can pollute 250,000 gallons of water.
10. Leaking motor oil fluids and litter from the streets is a cause of water \_\_\_\_\_.
11. Openings in curbs or gutters with labels marked "No Dumping. Flows to Bay."
13. It is important to \_\_\_\_\_ things like used motor oil, batteries and paint instead of throwing them away.

## DOWN

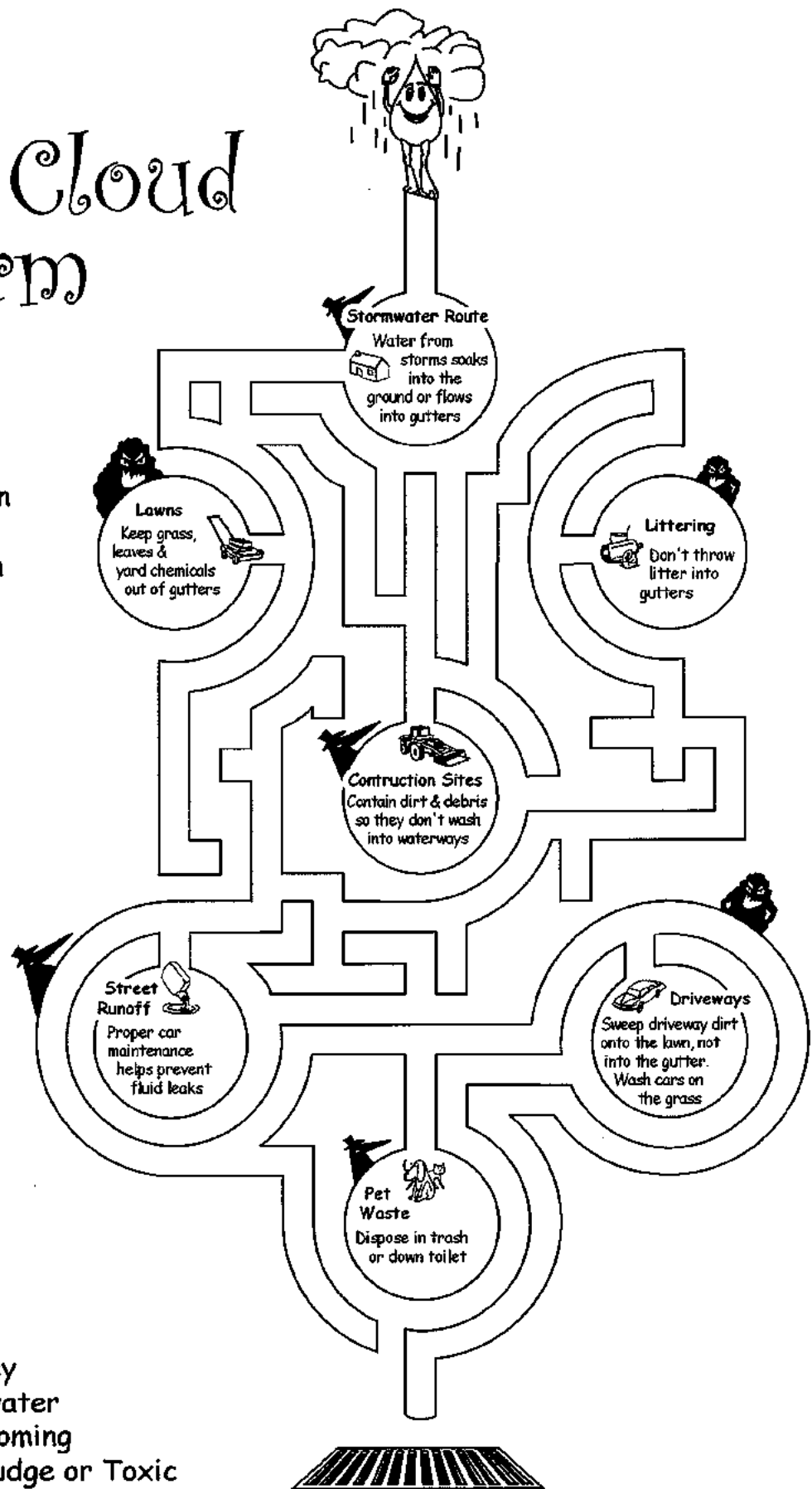
2. Area of land that drains directly to a creek, stream, bay or ocean.
5. Some items like batteries, fluorescent light bulbs and used motor oil are "Too \_\_\_\_\_ to Trash."
6. Another word for the water that flows from rain storms and sprinklers into storm drains.
7. The water that goes down the drain in our homes goes to the \_\_\_\_\_.
9. Snack wrappers, plastic bags and cigarette butts are commonly found \_\_\_\_\_ items from cleanups.
12. "Only \_\_\_\_\_ down the storm drain!"
14. One way to battle litter is to pick up trash at a local beach or creek \_\_\_\_\_.





# From Storm Cloud to Storm Drain

The Stormwater system channels rain and snowmelt into gutters, which drain into streams and rivers. When people pollute stormwater, they also pollute our natural waterways.



Help Droplet journey through the stormwater system without becoming contaminated by Sludge or Toxic



# Hazardous Waste Sudoku

Fill out the grid so that each symbol and/or its correlating number appears one time in each row, column & 3x3 box. Use its correlating number to fill in the blank boxes.



1



2



3



4



5



6



7



8



9



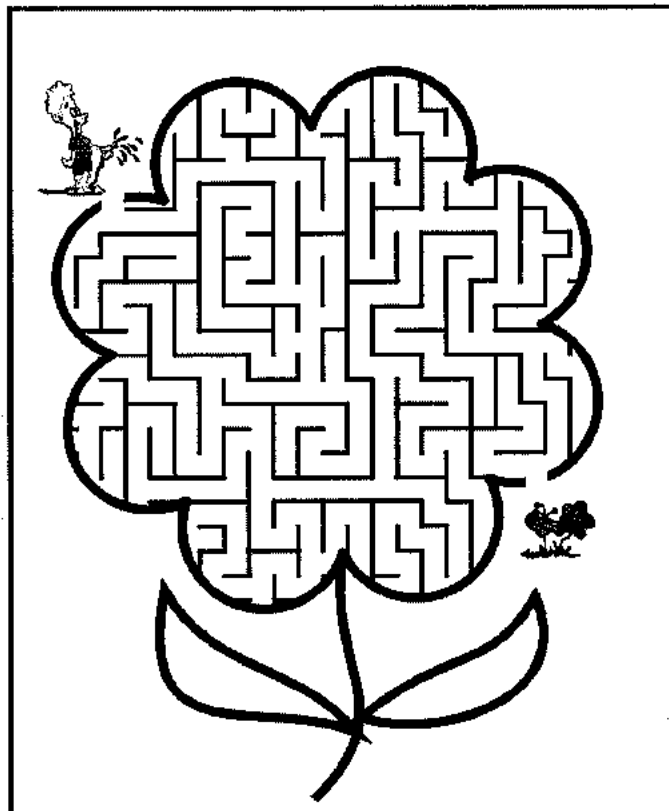

# Storm Water

Did you know that when rain and other water flows across grass or pavement it is called storm water? This water runs through pipes and drains and will eventually end up in a stream, lake, or other body of water. When you leave trash on the ground instead of throwing it in a garbage can, it is picked up by the water and carried into our streams and lakes. The next time you're outside, make sure you put your trash where it belongs or you may see it again!

DRIVEWAY  
LAKE  
OCEAN  
RAIN

STREAM  
SNOW  
TRASH  
WATER

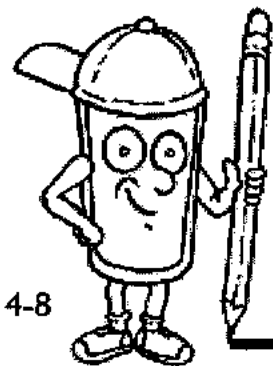
W	T	G	U	F	W	S	I	O	N	S	T
L	A	G	H	T	C	N	R	C	C	E	F
M	P	O	R	Z	A	M	A	E	R	T	S
P	E	Z	A	T	C	E	O	A	T	R	N
S	N	A	T	Y	I	L	C	N	E	A	O
D	I	A	E	F	N	J	T	I	A	S	W
X	F	P	H	G	E	A	O	E	E	H	R
F	H	U	N	S	H	E	K	R	I	I	C
W	R	Q	G	A	I	A	E	T	Z	S	N
I	P	D	S	Q	L	N	G	T	S	I	U
F	I	A	E	S	S	M	O	P	A	A	Q
L	I	Y	A	W	E	V	I	R	D	R	O



Here is something you can do to help protect the environment in our area:  
Don't use more water than you need!  
Turn off the water while you brush your teeth or wash your hands!







4-8

# Word Scramble

Put the letters in the right order to complete the sentence!

All living things need \_\_\_\_\_ to live.

t a w e r

When water evaporates, it travels into the air and becomes part of a \_\_\_\_\_.

d l o c u

Less than 1% of all the water on the earth is \_\_\_\_\_ water.

s e f r h

We \_\_\_\_\_ water in the liquid form.

i k r d n

Check for leaks and save hundreds of \_\_\_\_\_ of water a day.

a l l o g n s

You'll save water by taking a quick \_\_\_\_\_.

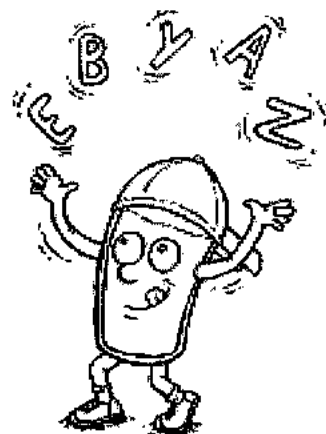
h o w s e r

Wash bikes and cars with a \_\_\_\_\_ and sponge instead of a running hose.

k e c b u t

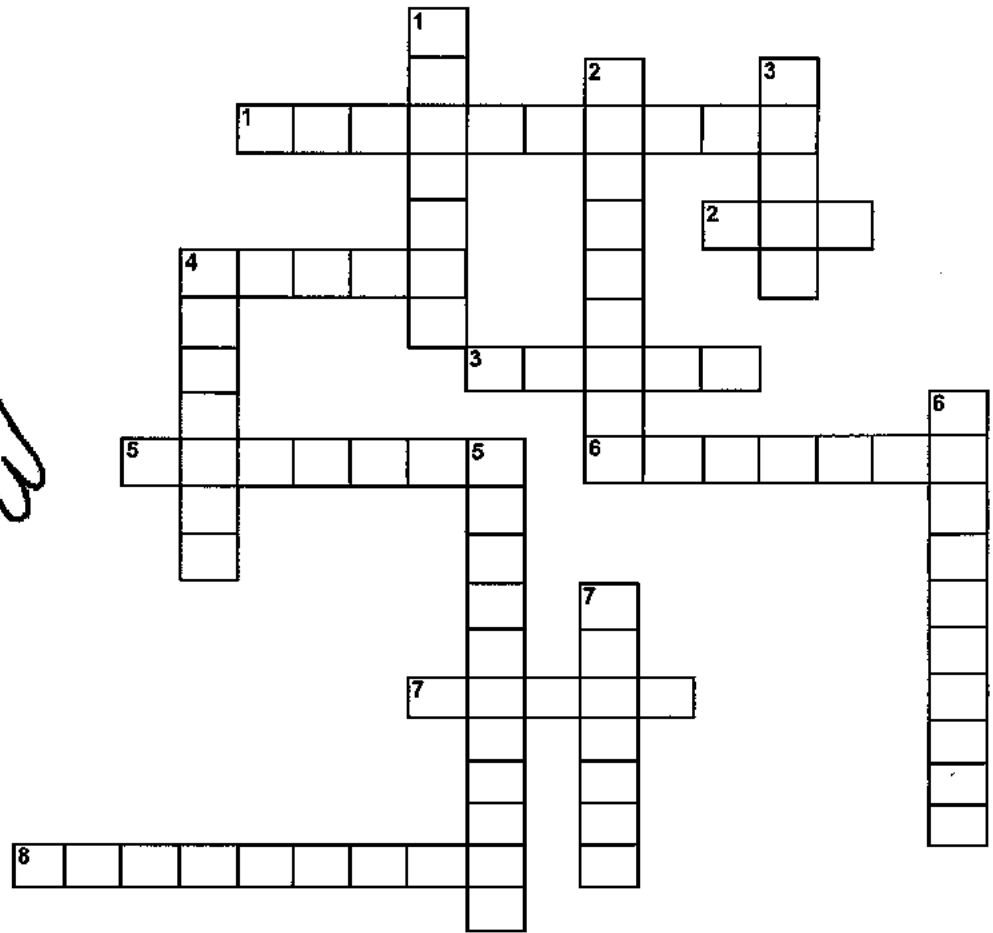
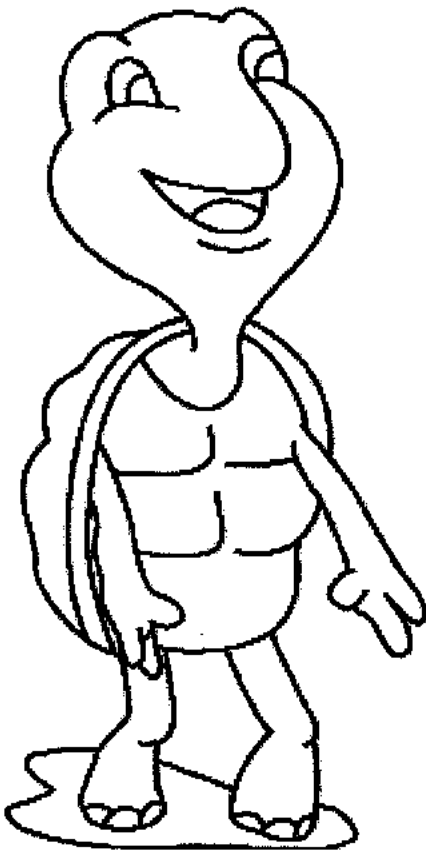
Ask your \_\_\_\_\_ to look for ways to save water.

m f a i y l





# Crossword Puzzle



## Across:

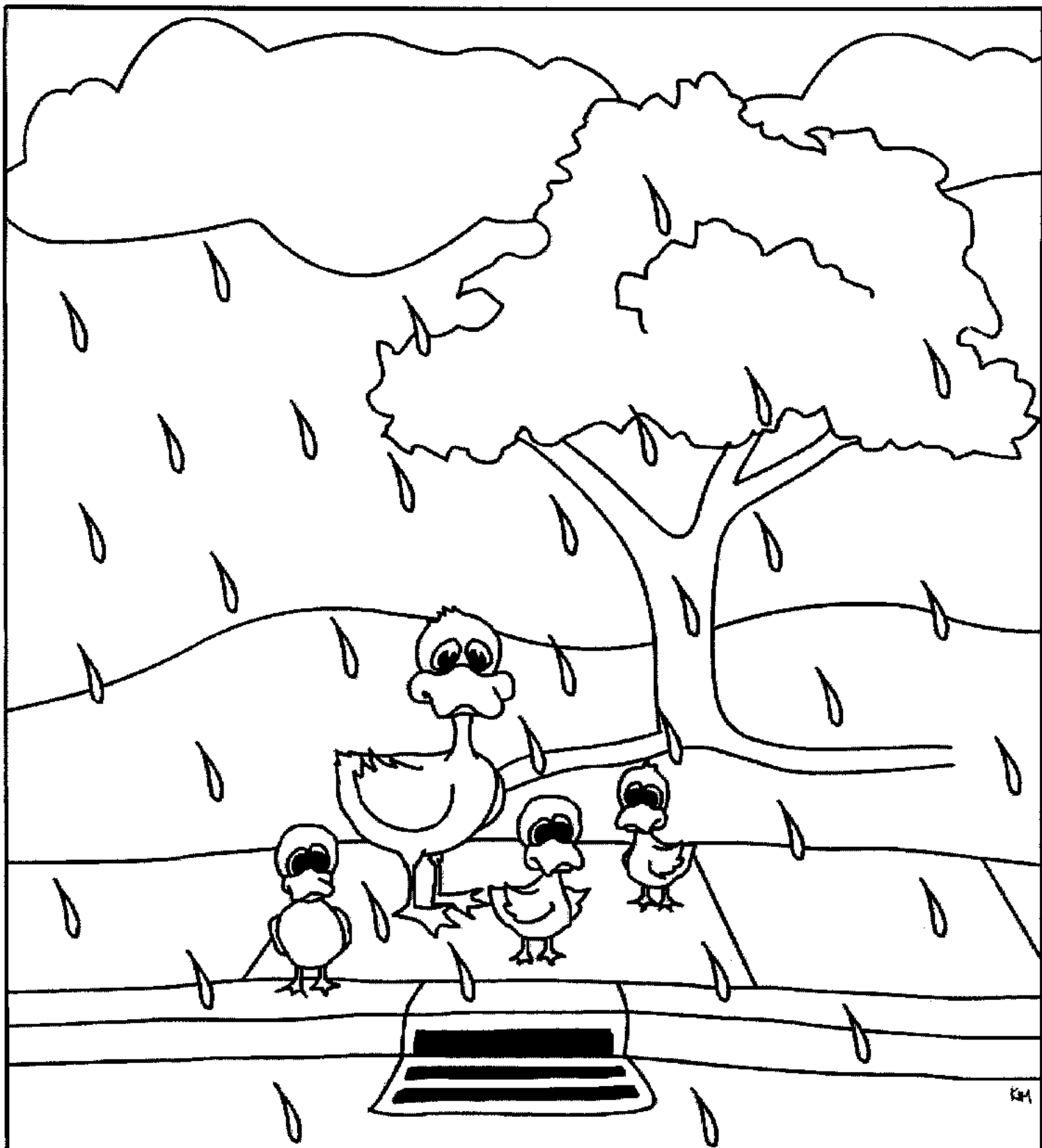
1. This is the name of what you've been learning about
2. You change this out of your car
3. This must be disposed at a hazardous waste collection facility
4. Large bodies of water
5. If you don't want to throw an item away, you can do this instead
6. The things you throw away are also known as this
7. This is the name of our mascot
8. There are many different types of this including air, water, noise, and trash

## Down:

1. If your vehicle is dirty, take it here
2. If you work with flowers, you're doing this
3. Keep trash and grass out of this
4. In Autumn, these fall off trees
5. Trash and dirty water can hurt this
6. Use this sparingly when working on your lawn or garden
7. Make this out of grass clippings and leaves

Answers:  
 Across: 1. stormwater 2. oil 3. paint 4. lakes 5. recycle  
 6. garbage 7. Tommy 8. pollution  
 Down: 1. carwash 2. gardening 3. drain 4. leaves 5. environment  
 6. fertilizer 7. compost





KM

**Only rain in the storm drain!**



# BAG IT **DON'T** BLOW IT

## GRASS CLIPPINGS & LEAF LITTER ARE STORMWATER POLLUTANTS



Yard debris, including leaves and other organic plant material like shrubbery trimmings and grass clippings, are a significant source of stormwater pollution.

When leaves, grass clippings, and other debris from your lawn end up in City streets, sidewalks, and storm drains, it eventually will make its way to our drainage ways, creeks, and lakes.

### WHAT YOU CAN DO WITH GRASS CLIPPINGS:

- Leave them on the lawn
- Compost them
- Bag & dispose properly

### WHAT YOU CAN'T DO WITH GRASS CLIPPINGS:

Intentionally blowing or placing lawn waste in the street is a VIOLATION of the City's Ordinance 942 which deals with illicit discharges into the municipal stormwater drainage system.

### DO YOU USE A YARD CARE SERVICE?

It is still up to the homeowner to make sure that your landscaper does not violate city ordinance by contributing to storm water pollution. Make sure they sweep up stray clippings and dispose of them properly instead of leaving them in the street.

For more information or to report a violation call (717) 324-6532







# Don't

Don't mow with the discharge facing the street



Don't leave clippings in the street or on side-walks



Don't blow leaves or grass into the street







**DO**

**Use a mower with a bagger, then throw the clippings into the trash**



**When using a riding or push mower, point the discharge away from the street**



**Sweep up any clippings that accumulated on the sidewalk or in the street**



**Blow any clippings back onto the grass**







# Motor Oil

Attention Neighbors:

There has been a motor oil spill in your neighborhood. On June 7 2017, at about 11am, the MS4 Stormwater Coordinator noticed a motor oil spill on the roadway. Photos were taken and an investigation has commenced. This notice is intended to:

- 1) Notify the public that there was a spill in your area
- 2) Ask for your assistance with the investigation by calling the MS4 Coordinator at the number below, or email with any information regarding the spill that you may have.

Please feel free to ask any questions as well.

We want to remind all of our residents that anything other than clean stormwater, flowing into our storm drains, is an illegal discharge and is in direct violation of our City Ordinance.

IF YOU SEE SOMETHING, SAY SOMETHING.....this can be true for illicit discharges as well. Please help our city by keeping it clean.

Please contact:

Lettice Brown—Certified Stormwater Inspector

Phone: (717) 324-6532

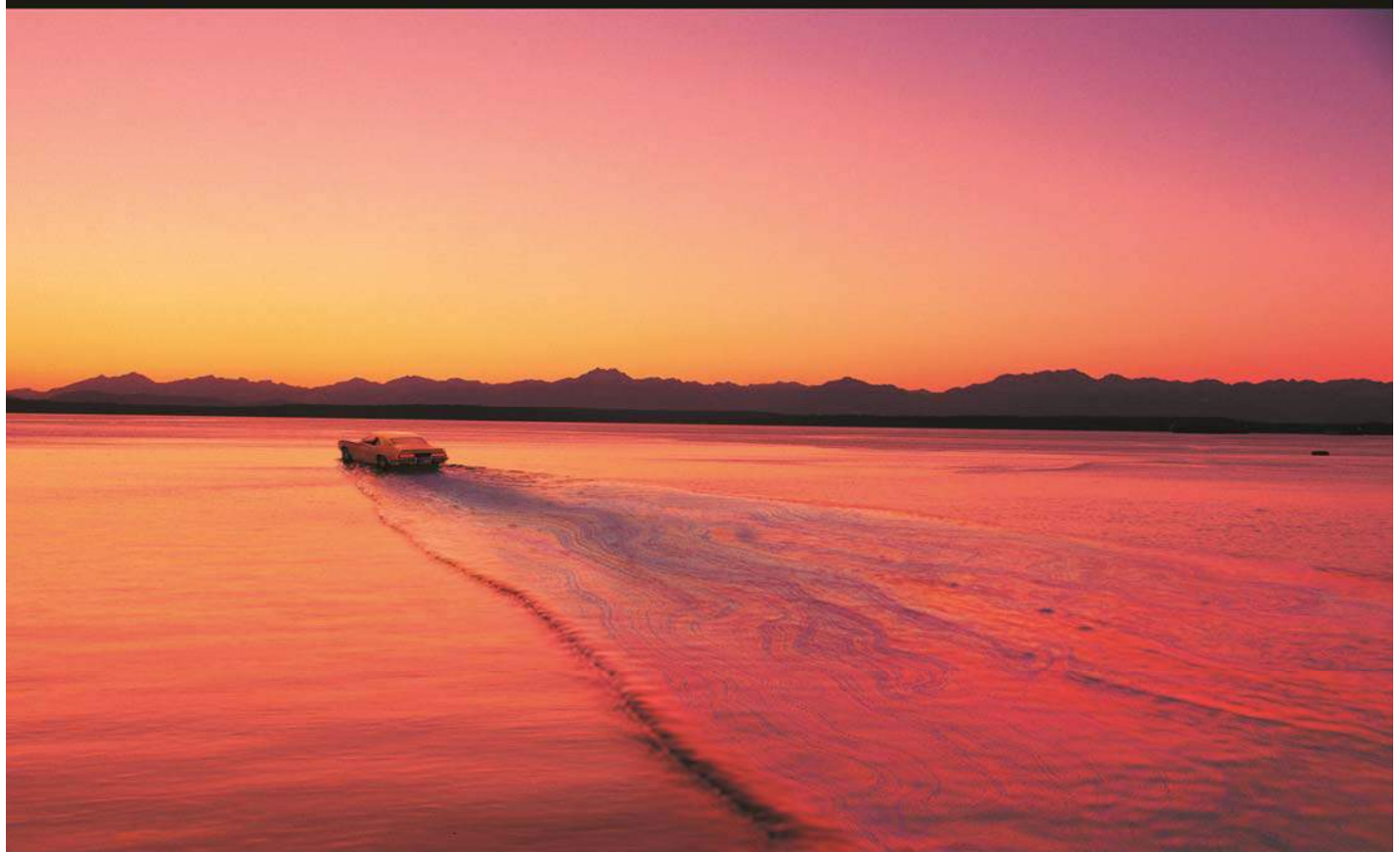
Email: [lbrown@yorkcity.org](mailto:lbrown@yorkcity.org)



**\*\*You may remain anonymous**



**WHEN YOUR CAR'S LEAKING OIL ON  
THE STREET, REMEMBER IT'S NOT JUST  
LEAKING OIL ON THE STREET.**



Leaking oil goes from car to street. And is washed from the street into the storm drain and into our lakes, streams and into coastal waters including the Chesapeake Bay. Now imagine the number of cars in the area and you can imagine the amount of oil that finds its way from leaky gaskets into our water. So please, fix oil leaks.

If you have questions regarding storm water, please contact your municipality or Pennsylvania Department of Environmental Protection's Regional Office. For general questions, you may also contact DEP's Bureau of Water Management at (717) 772-5661 or visit [www.dep.state.pa.us](http://www.dep.state.pa.us). Thanks to the Washington State Water Quality Consortium for permission to adapt and use this poster.



On June 7 2017 I distributed Motor Oil flyers to 13 houses on E. Princess Street and Pattison Street due to an Illicit Discharge of motor oil on the road in their area. I also gave one to a crossing guard who was interested and had a complaint about trash in a storm inlet. This way she had my contact information.





# Fact Sheet

Commonwealth of Pennsylvania • Department of Environmental Protection

## STORMWATER MANAGEMENT IN PENNSYLVANIA

### WHAT IS STORMWATER MANAGEMENT?

Stormwater management involves the control of water that runs off the surface of the land from rain or melting ice or snow. The volume, or amount of runoff and its rate of runoff, substantially increase as land development occurs. Construction of impervious surfaces, such as roofs and parking lots, and the installation of storm sewer pipes which efficiently collect and discharge runoff, prevent the infiltration of rainfall into the soil. Management of stormwater is necessary to compensate for the possible impacts of development such as frequent flooding, erosion and sedimentation problems, concentration of flow on adjacent properties, damages to roads, bridges and other infrastructure as well as non-point source pollution washed off from impervious surfaces.

### HISTORY OF DRAINAGE CONTROLS IN PENNSYLVANIA

Court decisions over the years have placed various common law duties and responsibilities on landowners involved with obstructing water courses and collecting and discharging of runoff onto adjacent lands.

Pennsylvania cities, boroughs, townships and counties have been authorized by state statute (Pennsylvania Municipalities Planning Code, Act 247 as amended) to prepare comprehensive plans for community development, zoning ordinances and subdivision and land development ordinances and regulations that may include provisions for drainage and stormwater management. However, governments are not required to adopt these plans containing development controls. Further, there is no obligation for local governments having stormwater management regulations to consider the effects of runoff beyond their boundaries. Often, municipalities within a watershed may require different levels of control that result in increased flooding problems.

### PENNSYLVANIA'S STORMWATER MANAGEMENT PROGRAM

The Pennsylvania legislature enacted the Storm Water Management Act (No.167) in 1978 to authorize a program of comprehensive watershed stormwater management which retains local implementation and enforcement of stormwater ordinances similar to local responsibility of administration of subdivision and land development regulations. Under the Act, the Department of Environmental Protection (DEP) provides grant money to counties to develop stormwater

management plans for designated watersheds. This planning effort results in the incorporation of sound engineering standards and criteria into local codes and ordinances to manage runoff from new development in a coordinated, watershed-wide approach.

### HOW THE STORMWATER PROGRAM WORKS

Counties develop stormwater plans for each of their watersheds within their boundaries. DEP develops grant agreements with counties to pay for 75 percent of the cost to prepare the plans. Upon completion of a plan by a county and approval by DEP, municipalities located in the watershed adopt ordinances consistent with the plan. Developers are then required to follow the local drainage regulations that incorporate the standards of the watershed plan when preparing their land development plan. Although not all watersheds have been studied, developers in non-studied areas are still required to follow any local drainage regulations adopted under the Municipalities Planning Code.

### GUIDE TO THOSE AFFECTED BY RUNOFF

Individuals and property owners affected by runoff due to development need to know who is responsible for management of stormwater runoff in their particular situation. The following guide can assist in making that determination.

**Municipalities:** Historically, municipalities have been responsible for enacting ordinances to regulate stormwater as they review subdivision and land development plans (Pennsylvania Municipalities Planning Code).

**Developers:** Developers are required to follow local drainage regulations. In watersheds having a completed Act 167 plan, developers, by following local ordinances, would be following the standards and criteria of the approved watershed plan.

**Department of Environmental Protection:** DEP is responsible for management of the stormwater planning program but has no regulatory authority for individual activities. Section 10 and 12 of the act provide DEP with authority to compel county planning and municipal implementation in studied watersheds. DEP also provides technical guidance and training to counties, municipalities and individuals.

**County Conservation Districts:** The Districts investigate runoff complaints resulting from earthmoving activities. Stormwater may be controlled during construction activities through temporary erosion and



sedimentation control devices such as sedimentation basins. Upon stabilization of work sites, temporary erosion and sedimentation structures are often converted to permanent stormwater facilities under the jurisdiction of municipalities.

### **SUGGESTIONS IN RESOLVING STORMWATER PROBLEMS**

- Document problems by taking photographs and videos and making sketches of site conditions.
- Try to determine the source of stormwater runoff. Is there new development upstream/uphill from your location? Are there nearby road improvements, such as widening or drainage pipes installed?
- Is the runoff originating from an active construction site where earthmoving activities are occurring or is there sediment or mud leaving the site? If so, the County Conservation District may assist with any erosion and sedimentation control problems.
- In the case of runoff originating from recent development, contact the municipality where the development is located.
- Seek legal counsel if the problem has not been resolved after seeking assistance from all involved parties or agencies.

### **LOANS AVAILABLE FOR UNDERTAKING STORMWATER PROJECTS**

Governmental agencies are eligible to obtain low interest loans from the Pennsylvania Infrastructure Investment Authority (PENNVEST) to resolve drainage problems.

Loans are available for the construction, improvement or rehabilitation of stormwater systems and installation of best management practices to address point or nonpoint source pollution associated with stormwater. Examples of stormwater projects eligible for funding include:

- New or updated storm sewer systems to eliminate stormwater flooding or to separate stormwater from sanitary sewer systems;
- Detention basins to control stormwater runoff; and/or

- Stormwater facilities to implement best management practices to reduce nonpoint source pollution.

The loan program is administered by PENNVEST staff with technical services from DEP. DEP engineers provide technical guidance to loan applicants. The scope of their guidance includes:

- Conducting planning consultation meetings with loan applicants and their engineers;
- Reviewing project plans and specifications;
- Rating the projects under established criteria;
- Recommending projects for funding;
- Participating in and representing PENNVEST at preconstruction conferences;
- Conducting interim and final construction inspections; and
- Assisting PENNVEST in conducting educational programs.

### **AVAILABLE INFORMATION FROM DEP**

- The Storm Water Management Act (No. 167) of 1978.
- Storm Water Management Guidelines and Model Ordinances.
- Chapter 111. Storm Water Management - Grants and Reimbursement.
- PENNVEST regulations and application form

To obtain publications, contact the  
Pa. Department of Environmental Protection  
Bureau of Watershed Management  
Division of Water Use Planning  
Rachel Carson State Office Building  
P.O. Box 8555, Harrisburg, PA 17105-8555  
717-772-4048  
FAX 717-787-9549

This fact sheet and related environmental information are available electronically via Internet. For more information, visit us through the PA PowerPort at <http://www.state.pa.us> or visit DEP directly at <http://www.dep.state.pa.us> (directLINK "Stormwater").



[www.GreenWorks.tv](http://www.GreenWorks.tv) - A web space dedicated to helping you learn how to protect and improve the environment. The site features the largest collection of environmental videos available on the Internet and is produced by the nonprofit Environmental Fund for Pennsylvania, with financial support from the Pennsylvania Department of Environmental Protection, 877-PA-GREEN.



# Take the Stormwater Runoff Challenge

## Across:

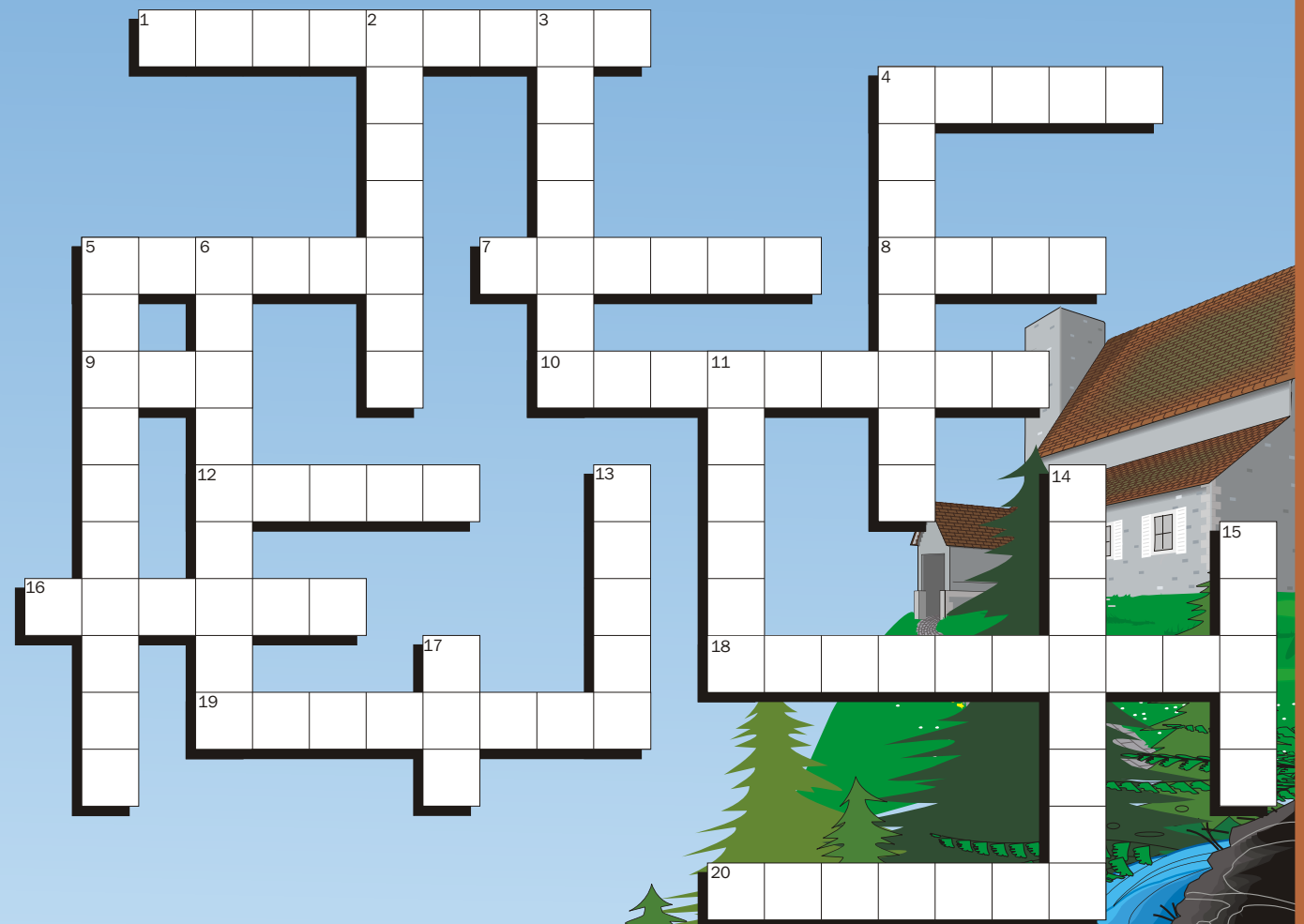
- 1) The area of land that drains into an estuary, lake, stream, or groundwater is known as a \_\_\_\_\_.
- 4) The \_\_\_\_\_ of speeding boats can erode shorelines.
- 5) Maintaining your \_\_\_\_\_ tank will help to prevent bacteria and nutrients from leaking into groundwater and surface waters.
- 7) Wetland plants act like a natural water \_\_\_\_\_, removing harmful pollutants from stormwater runoff.
- 8) Leave your grass clippings on your \_\_\_\_\_ to reduce the need for commercial fertilizers.
- 9) A single quart of motor \_\_\_\_\_, if disposed of improperly, can pollute 2 million gallons of water.
- 10) Fertilizers and animal wastes contain \_\_\_\_\_ that "feed" algae and other aquatic plants harmful to water quality.
- 12) Polluted runoff from both rural and \_\_\_\_\_ sources has a significant impact on water quality.
- 16) Storm \_\_\_\_\_ don't always connect to sewage treatment plants, so runoff can flow directly to rivers, lakes, and coastal waters.
- 18) Follow directions carefully when applying \_\_\_\_\_ on your lawn—more isn't always better.
- 19) Polluted runoff (also called \_\_\_\_\_ source pollution) comes from so many places that it's hard to "pinpoint" a source.
- 20) Yard and vegetable food waste are suitable additions to a \_\_\_\_\_ pile.

## Down:

- 2) Don't dump used motor oil into storm drains. \_\_\_\_\_ it!
- 3) \_\_\_\_\_ of soil from barren land can cloud nearby streams.
- 4) \_\_\_\_\_ prevent flooding, improve water quality, and provide habitat for waterfowl, fish, and wildlife.
- 5) Marking "Do Not Dump, Drains to Bay" on a \_\_\_\_\_ is one way to educate people about polluted runoff.
- 6) Excess sediment, nutrients, toxics, and pathogens are all types of runoff \_\_\_\_\_.
- 11) Polluted \_\_\_\_\_ is the nation's #1 water quality problem.
- 13) The cattail is one wetland \_\_\_\_\_ that helps purify polluted runoff.
- 14) Too much \_\_\_\_\_ in water can harm aquatic life.
- 15) Proper crop and animal management on \_\_\_\_\_ helps to control water pollution.
- 17) \_\_\_\_\_ impact development helps control stormwater pollution through conservation approaches and techniques.

## Choices:

compost	nonpoint	sediment
drains	nutrients	septic
erosion	oil	storm drain
farms	plant	urban
fertilizer	pollution	wakes
filter	recycle	watershed
lawn	runoff	wetlands
Low		





## Household Hazardous Waste

What is Household Hazardous Waste (HHW)?

According to the Pennsylvania Department of Environmental Protection, Household Hazardous Wastes (HHW) are those wastes produced in our households that are hazardous in nature, but are not regulated as hazardous waste, under federal and state laws. Each person in Pennsylvania produces an average of four pounds of HHW each year or about 25,000 tons/yr. statewide. HHW, if carelessly managed, can and frequently does, create environmental and public health hazards.

How to Identify HHW:

**Generally, HHW materials belong to one of the following hazardous waste categories:**

**Corrosives** have an extremely low or high pH and can burn skin and mucous membranes. Examples include drain cleaners, rust removers and oven cleaners.

**Flammables** are easily set on fire or readily combustible. Examples are gasoline, kerosene, fuel oil, butane, oil-based paints and paint thinners.

**Oxidizers** are chemicals that react strongly with other compounds and may cause fires or explosions. Examples include chlorinated pool chemicals, household bleach and hydrogen peroxide.

**Toxic** materials are poisonous and/or carcinogenic to humans and/or wildlife. Examples are pesticides, solvents, and cleaning agents.

**Air Quality Hazardous** materials can cause excessive emissions or toxic ash problems at resource recovery facilities. Examples include thermostats, smoke detectors and nickel, cadmium, lithium or lead batteries.

**Unknowns** are unidentified materials, such as those that contain no label or ingredient information. Unknown materials should be treated as though they belong to one of the above categories until proven otherwise.

Why is Household Hazardous Waste a Potential Problem?

- Improper storage or use of hazardous products in the home can increase the risk of accidental poisoning or injury.
- Disposal of household hazardous wastes in regular garbage could injure sanitation workers. Some products are chemically incompatible, and may lead to fires in dumpsters or garbage trucks.
- Pouring waste down the drain puts it directly into septic tanks or sewage treatment plants that may not be able to filter out or properly treat hazardous materials. This can lead to the contamination of groundwater or surface waters where treatment plants discharge.

What Can You Do About Household Hazardous Waste?

- The best way to manage HHW is to **avoid creating it**. Select the least toxic product to do the job and buy only as much as you need. Learn more about alternatives for household hazardous products here: [www.epa.gov/saferchoice](http://www.epa.gov/saferchoice)



- Store hazardous products in their original containers.
- If the product is still usable, donate it to a community group.
- As a York County resident, you can bring your HHW to the **York County Solid Waste Authority's annual Household Hazardous Waste Collection Program** or use the **"At Your Door Special Collection" Program**.

York County Solid Waste Authority's FREE Annual Household Hazardous Waste Collection Program:

The Authority's annual HHW Waste Collection Program is conducted **every May on the first Saturday of the month from 9:00 AM to 1:00 PM**. There is **no fee for York County residents** to participate. **Businesses and government entities are not eligible to participate. This event in 2017 will be conducted at 915 Woodland View Drive, York, PA 17406, NOT** at the Authority's Yard Waste Transfer Site off of Flour Mill Road, as in prior years. Residents can safely manage HHW by bringing it to this free household hazardous waste collection program.

**Accepted items include:** thermometers containing mercury; liquid mercury; smoke detectors; auto fluids such as transmission fluid, brake fluids and antifreeze; car batteries; rechargeable batteries such as Nickel Cadmium (Ni-Cd), Nickel Metal Hydride (Ni-MH), Lithium Ion (Li-ion), and Small Sealed Lead (Pb); driveway sealant; compact fluorescent light bulbs and fluorescent lamps; gasoline, kerosene, diesel fuel and butane; herbicides and pesticides; household cleaners; chemistry kits; photographic chemicals and pool chemicals.

**Unacceptable items:** **explosives; propane tanks; ammunition; radioactive waste; alkaline batteries** (may be disposed of in your regular garbage) and **latex or oil-based paint** (may be disposed of in your regular garbage, click [here](#) for preparation instructions)

## Paint

How to Manage Paint:

Paint and paint-related products can be safely processed at the York County Resource Recovery Center. Liquid paint and paint products pose potential impacts to the environment and to the safety of your waste hauler's employees. To minimize potential impacts, many haulers prefer that paint and paint products be dried, hardened using paint hardeners purchased at hardware/home improvement stores or mixed with an absorbent material such as shredded paper or kitty litter. Also be sure to secure lids tightly and place in a closed garbage bag. **For your waste hauler's specific guidelines regarding disposal of these products, please contact them directly.**

**Paint from manufacturing operations may be residual or hazardous waste as defined by the state and may require special approvals to process.** Contact the Authority at 717-845-1066 for more information about how to manage residual waste.





# TRASH

There has been an increase in trash around your neighborhood and The City of York is asking that everyone help in keeping your block clean and free of trash and debris. Trash not only looks bad but it gets picked up by stormwater and carried into storm drains when it rains then flows into our creeks and streams. Here's what you can do:

1. **Sweep** up trash, litter, and debris and properly store them in trash or recycle bins
2. **Pick up** and discard of any litter you find in your travels
3. **Ensure** your trash and recyclables are secure within the receptacles. If it is windy out, please properly secure the items in the bins so they do not blow around.
4. **Take pride** in your community and encourage others to do the same. If you want to live in a nice, clean area, it starts with you!

Everyone wants their community to be clean and inviting and with a few simple steps, it can!



Lettice Brown  
MS4 Coordinator

Stormwater Management Program  
York City Department of Public Works

1625 Toronita Street

York PA 17402

Cell: [\(717\) 324-6532](tel:7173246532)

Email: [lbrown@yorkcity.org](mailto:lbrown@yorkcity.org)

Facebook: "York City Stormwater"



## **York City Ordinance 942 – IDDE to the MS4**

### **942.02 – PROHIBITION OF ILLICIT DISCHARGES**

(a) No person shall discharge illicit materials/pollutants into the storm drain system or waters of the Commonwealth. Any discharges will be in direct violation of this Article

(c) If the Municipality or DEP determines that any of the discharges that are identified as ALLOWABLE discharges significantly contribute to the pollution of the Commonwealth, the Municipality or DEP will notify responsible person(s) to cease the discharge.

### **942.07 – REQUIREMENTS TO PREVENT, CONTROL, AND REDUCE STORMWATER POLLUTANTS BY THE USE OF BMPs**

The Municipality will adopt requirements identifying BMPs for any activity, operation, or facility that causes or contributes to the pollution or contamination of storm water, the storm drain system, or Waters of the Commonwealth of Pennsylvania or the US. The owner or operator will be held fully responsible and at their own expense, should provide reasonable protection from accidental discharge of prohibited materials or other wastes into the storm drain system. Furthermore, the persons responsible may be required to implement, at their own expense, additional structural and non-structural BMPs to prevent further discharge of pollutants to the MS4.

### **942.09 – NOTIFICATION OF SPILLS**

As soon as any person responsible for a facility or operation has information of any known or suspected release of materials which are resulting or may result in the Illicit Discharge or pollutants discharging into storm water or storm drain system of the Commonwealth of PA or US, that person should take all necessary steps to ensure the discovery, containment, and cleanup of such release. In the event of such a release of hazardous materials, said person shall notify the authorized



enforcement agency in person or by phone or email no later than the next business day. If the discharge comes from an industrial or commercial site, the owner or operator should also retain an on-site written record of the discharge and the actions taken to prevent its recurrence. These records should be retained for at least 3 years.

#### 942.10 – ENFORCEMENT

(a) When the Municipality has found a person has violated a prohibition or failed to meet a requirement of this Article, the Municipality may order compliance by written notice of violation to the responsible person. The notice may require the following:

1. The performance of monitoring, analyses, and reporting
2. The elimination of Illicit Connections or Discharges
3. Violating discharges, practices, or operations shall cease and desist
4. The abatement of storm water pollution or contamination and restoration of any affected property
5. Payment of a fine to cover costs
6. Implementation of source control or treatment BMPs

(b) If abatement of a violation and/or restoration of affected property is required, the notice shall set forth a deadline within which such remediation must be completed. It should also further advise that should the violator fail to remediate before the deadline, the work will be done by a designated governmental agency and the expenses will be passed on to the violator or will be assessed as a Municipal lien on the property.

#### 942.13 – COST OF ABATEMENT OF VIOLATION

(a) Within 30 days after the abatement of the violation, the owner of the property will be notified of the cost of abatement, including admin



costs. A written protest of the objection of the cost may be sent within 30 days. If the amount due is not paid within a timely manner as determined by the decision of the Municipality or by the expiration of the time in which to file an appeal, the charges shall become a special assessment against the property and shall constitute a Municipal lien on the property for the amount of the assessment.

(b) Any person violating any of the provisions of this Article shall become liable to the Municipality by reason of such violation. The liability should be paid in not more than 12 equal payments. Interest rate of 12% per year will be assessed on the balance beginning on the 1<sup>st</sup> day following the discovery of the violation.

#### 942.14 – INJUNCTIVE RELIEF

It is unlawful for any person to violate any provision or fail to comply with any part of the requirements of this Article. If a violation occurs or continues to occur, the Municipality may petition for a preliminary or permanent injunction restraining the person from activities which would create further violations for compelling that person to perform abatement or remediation of the violation.

#### 942.16 – VIOLATIONS DEEMED AS PUBLIC NUISANCE

In addition to the enforcement processes and penalties, any condition caused or permitted to exist in violation of any of the provisions in this Article is a threat to public health, safety, and welfare, and is deemed or declared a public nuisance, may be summarily abated or restored at the violators expense. Civil action to abate, enjoin, or otherwise compel the cessation of such nuisance may be taken.

#### 942.17 – CRIMINAL PROSECUTION

Any person who violates or continues to violate any section of Article 942 shall be liable to criminal prosecution to the fullest extent of



the law and will be subject to a criminal penalty of \$1,000 per violation per day and/or imprisonment for a period of time not to exceed 90 days.

#### 942.18 – ATTORNEY FEES AND COSTS

The Municipality may recover all attorney's fees, court costs, and other expenses associated with enforcement of this Article, either criminal or civil, including sampling and monitoring expenses or other costs of investigation.

#### 942.19 – REMEDIES NOT EXCLUSIVE

The remedies listed in this Article are not exclusive of any other remedies available under any applicable federal, state, or local law and it is within the discretion of the Municipality to seek cumulative remedies.

#### 943.06 – PENALTIES

(a) Any person, partnership or corporation who or which has violated the provisions of this Ordinance shall, upon being found liable therefore in a civil enforcement proceeding commenced by the Municipality, pay a judgement of not more than one thousand dollars (\$1,000.00). No judgement shall commence or be imposed, levied or payable until the date of the determination of a violation by the district justice. If the defendant neither pays nor timely appeals the judgement, the Municipality may enforce the judgement pursuant to the applicable rules of civil procedure. Each day that a violation continues shall constitute a separate violation, unless the district justice determining that there has been a violation further determines that there has been a good faith basis for the person, partnership or corporation violating the Ordinance to have believed that there was no such violation, in which event there shall be deemed to have been only one such violation. The Court of Common Pleas, upon petition, may grant an order of stay, upon cause shown, tolling the per diem judgement pending a final adjudication of the violation and judgement.



# CAR WASHING

**Don't feed soap to the storm drain.  
Wash your car right. Keep your waters clean.**

Clean water is important to all of us. It's up to all of us to make it happen. In recent years sources of water pollution like industrial wastes from factories have been greatly reduced. Now, most water pollution comes from things like cars leaking oil, fertilizers from farms and gardens, and failing septic tanks. All these sources add up to a big pollution problem. But each of us can do small things to help clean up our water too. And that adds up to a **POLLUTION SOLUTION!**

## **Why do we need clean water?**

Having clean water is of primary importance for our health and economy. Clean water provides recreation, commercial opportunities, fish habitat, drinking water, and adds beauty to our landscape. All of us benefit from clean water and all of us have a role in getting and keeping our lakes, rivers, and ground waters clean.

## **What's the problem with car washing?**

There's no problem with washing your car. It's just how and where you do it. Most soap contains phosphates and other chemicals that harm fish and water quality.

If you live in the city and you wash your car in the driveway, the soap, together with the dirt and oil washed from your car, flows into nearby storm drains which run directly into lakes and rivers. The phosphates from the soap can cause excess algae to grow. Algae look bad, smell bad, and harm water quality. As algae decay, the process uses up oxygen in the water that fish need.

## **How will we change our ways?**

The state recommends that cities and counties help educate people in urban areas about sensible ways to wash their cars and still keep soapy water from washing into storm drains. You can, indeed, wash your car and you can also keep our waters clean!

## **What will you do to help?**

- Use a commercial car wash, either self-serve or machine wash.
- Wash on lawns or other surfaces where water can seep into the ground.
- Divert water away from storm drain.



## **Charity Car Washes~**

- Sell commercial car wash coupons instead.
- Borrow a pump kit to send the soapy runoff to a sanitary sewer.
- Locate the car wash to divert wash water away from storm drains.
- Rent a "Bay for a Day" at a self-serve car wash that is hooked up to sanitary sewer.

**When you're washing your car in the driveway, remember  
you're not just washing your car in the driveway.**




## What is Storm Water?

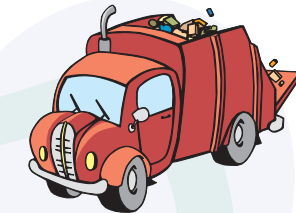
Storm water is water from precipitation that flows across the ground and pavement when it rains or when snow and ice melt. The water seeps into the ground or drains into what we call storm sewers. These are the drains you see at street corners or at low points on the sides of streets. Collectively, the draining water is called storm water runoff.

## Why is Storm Water “Good Rain Gone Wrong?”

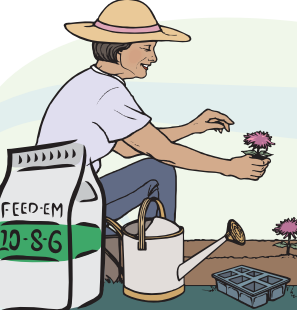
Storm water becomes a problem when it picks up debris, chemicals, dirt, and other pollutants as it flows or when it causes flooding and erosion of stream banks. Storm water travels through a system of pipes and roadside ditches that make up storm sewer systems. It eventually flows directly to a lake, river, stream, wetland, or coastal water. All of the pollutants storm water carries along the way empty into our waters, too, because storm water does not get treated!




**Pet wastes left on the ground get carried away by storm water, contributing harmful bacteria, parasites and viruses to our water.**



**Vehicles drip fluids (oil, grease, gasoline, antifreeze, brake fluids, etc.) onto paved areas where storm water runoff carries them through our storm drains and into our water.**



**Chemicals used to grow and maintain beautiful lawns and gardens, if not used properly, can run off into the storm drains when it rains or when we water our lawns and gardens.**



**Waste from chemicals and materials used in construction can wash into the storm sewer system when it rains. Soil that erodes from construction sites causes environmental degradation, including harming fish and shellfish populations that are important for recreation and our economy.**

## Where To Go To Continue the Information Flow

Your community is preventing storm water pollution through a storm water management program. This program addresses storm water pollution from construction, new development, illegal dumping to the storm sewer system, and pollution prevention and good housekeeping practices in municipal operations. It will also continue to educate the community and get everyone involved in making sure the only thing that storm water contributes to our water is . . . water! Contact your community’s storm water management program coordinator or the Pennsylvania Department of Environmental Protection for more information about storm water management.



Pennsylvania Department of Environmental Protection  
[www.dep.state.pa.us](http://www.dep.state.pa.us)

- 1. Ditch** – Part of the storm sewer system. Most people think that the system is just a series of underground pipes. It can also include ditches used to convey storm water from the land to a receiving lake, river, or stream.
- 2. Fire Hydrant** – Not part of the storm sewer system. Water sprayed from fire hydrants is not storm water, but is allowed by law to enter the storm sewer system.
- 3. Curb with Storm Drain Inlet** – Part of the storm sewer system. Many people do not realize that this is an opening leading to the storm sewer system. Anything going into this inlet (e.g., trash, leaves, improperly disposed of hazardous materials) travel directly to a receiving lake, river, or stream without being treated first. Many communities stencil storm drains with "Do Not Dump" messages to let people know.
- 4. Storm Sewer Outfall** – Part of the storm sewer system. An outfall is where storm water drains from the storm sewer system into a receiving lake, stream, or river. If there is a flow from an outfall when it isn't raining, there could be a problem with the system or someone has used a storm drain for illegally disposing of materials.
- 5. Toilet** – Not part of the storm sewer system. Wastewater from sinks and toilets in houses and businesses travel through a sewer system constructed to carry sanitary wastes. In some instances, older communities may have a combined sewer system designed to carry both storm water and sanitary waste.
- 6. Septic System** – Not part of the storm sewer system. Homeowners use septic tanks to manage sanitary wastes on-site. Improperly maintained septic systems can leak and contribute pollutants to the storm sewer system, as well as directly to lakes, rivers, and streams.
- 7. Roads and Other Paved Areas** – Not part of the storm sewer system. Roads and other hardened surfaces such as parking lots and sidewalks can accumulate pollutants (e.g., oil, grease, dirt, leaves, pet wastes) that storm water eventually washes into the storm sewer system.
- 8. Storm Drain Inlet** – Part of the storm sewer system. This is another example of what a storm drain may look like. Like the storm drain inlet shown in picture #3, anything that enters this drain will go directly to streams, rivers, and lakes without being treated first. It is important to recognize this as a storm drain to prevent it from being used as a trash can.

# When It Rains, It Drains

Understanding Storm Water and How It Can Affect Your Money, Safety, Health, and the Environment





## What Happens When It Rains?

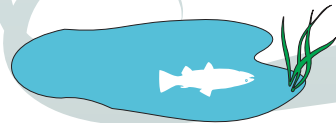


Rain is an important part of nature's water cycle, but there are times it can do more damage than good. Problems related to storm water runoff can include:



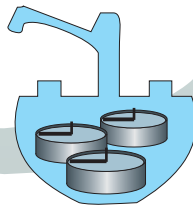
**Flooding caused by too much storm water flowing over hardened surfaces such as roads and parking lots, instead of soaking into the ground.**

**Increases in spending on maintaining storm drains and the storm sewer system that become clogged with excessive amounts of dirt and debris.**



**Decreases in sportfish populations because storm water carries sediment and pollutants that degrade important fish habitat.**

**More expensive treatment technologies to remove harmful pollutants carried by storm water into our drinking water supplies.**



**Closed beaches due to high levels of bacteria carried by storm water that make swimming unsafe.**

We can help rain restore its good reputation while protecting our health and environment while saving money for ourselves and our community. Keep reading to find out how. . .

## Test Your Storm Sewer System Savvy!



What does the storm sewer system look like in your community? See if you can identify which pictures are part of the storm sewer system. (Answers are on the back.)



## Restoring Rain's Reputation: What Everyone Can Do To Help

Rain by nature is important for replenishing drinking water supplies, recreation, and healthy wildlife habitats. It only becomes a problem when pollutants from our activities like car maintenance, lawn care, and dog walking are left on the ground for rain to wash away. Here are some of the most important ways to prevent storm water pollution:

- Properly dispose of hazardous substances such as used oil, cleaning supplies and paint—never pour them down any part of the storm sewer system and report anyone who does.
- Use pesticides, fertilizers, and herbicides properly and efficiently to prevent excess runoff.
- Look for signs of soil and other pollutants, such as debris and chemicals, leaving construction sites in storm water runoff or tracked into roads by construction vehicles. Report poorly managed construction sites that could impact storm water runoff to your community. (See the back of this brochure for contact information.)
- Install innovative storm water practices on residential property, such as rain barrels or rain gardens, that capture storm water and keep it on site instead of letting it drain away into the storm sewer system.
- Report any discharges from storm water outfalls during times of dry weather—a sign that there could be a problem with the storm sewer system.
- Pick up after pets and dispose of their waste properly. No matter where pets make a mess—in a backyard or at the park—storm water runoff can carry pet waste from the land to the storm sewer system to a stream.
- Store materials that could pollute storm water indoors and use containers for outdoor storage that do not rust or leak to eliminate exposure of materials to storm water.



# PET WASTE

**Scoop the Poop. Bag it, trash it.**

Clean water is important to all of us. It's up to all of us to make it happen. In recent years sources of water pollution like industrial wastes from factories have been greatly reduced. Now, most water pollution comes from things like cars leaking oil, fertilizers from farms and gardens, and failing septic tanks. All these sources add up to a big pollution problem. But each of us can do small things to help clean up our water too. And that adds up to a **POLLUTION SOLUTION!**

## Why do we need clean water?

Dog poop is more than just an icky nuisance. It's a health risk to dogs and people, especially children. It's full of bacteria that can make people sick. And it's a source of water pollution. When it rains, dog poop melts away and runoff carries it to storm drains, ditches and streams that feed our rivers, lakes and the Chesapeake Bay.

Bacteria from dog poop can end up in fish and shellfish. People who eat those species can get very sick. The bacteria can also make water unsafe to drink or to swim in. Nutrients from dog poop can also feed the growth of aquatic plants and algae. As these decay, they use up oxygen in the water that fish and other aquatic life need.

Dog poop doesn't have to be a problem.

## What will you do to help?

- Carry plastic bags when taking your pet for a walk or a romp in the park.
- Pick up your dog's waste. Use a plastic bag, scoop or disposable gloves. Remember to wash your hands afterward.
- Seal the waste inside a plastic bag (or two) and throw it in the garbage.
- Keep dog poop out of septic systems and sewer systems. These systems are designed for human waste only.
- Pick up after your dog in your yard every few days— more often if you have small children who play there.

Property disposing of dog poop also helps you:

- Keep pets healthy
- Make yards and parks safer and more pleasant places to play
- Keep your and your family's shoes clean
- Keep our community with local ordinances
- Support a healthy watershed



When your dog goes on the lawn, remember  
it doesn't *just* go on the lawn.





# Fact Sheet

Commonwealth of Pennsylvania • Department of Environmental Protection

## STORMWATER MANAGEMENT IN PENNSYLVANIA

### WHAT IS STORMWATER MANAGEMENT?

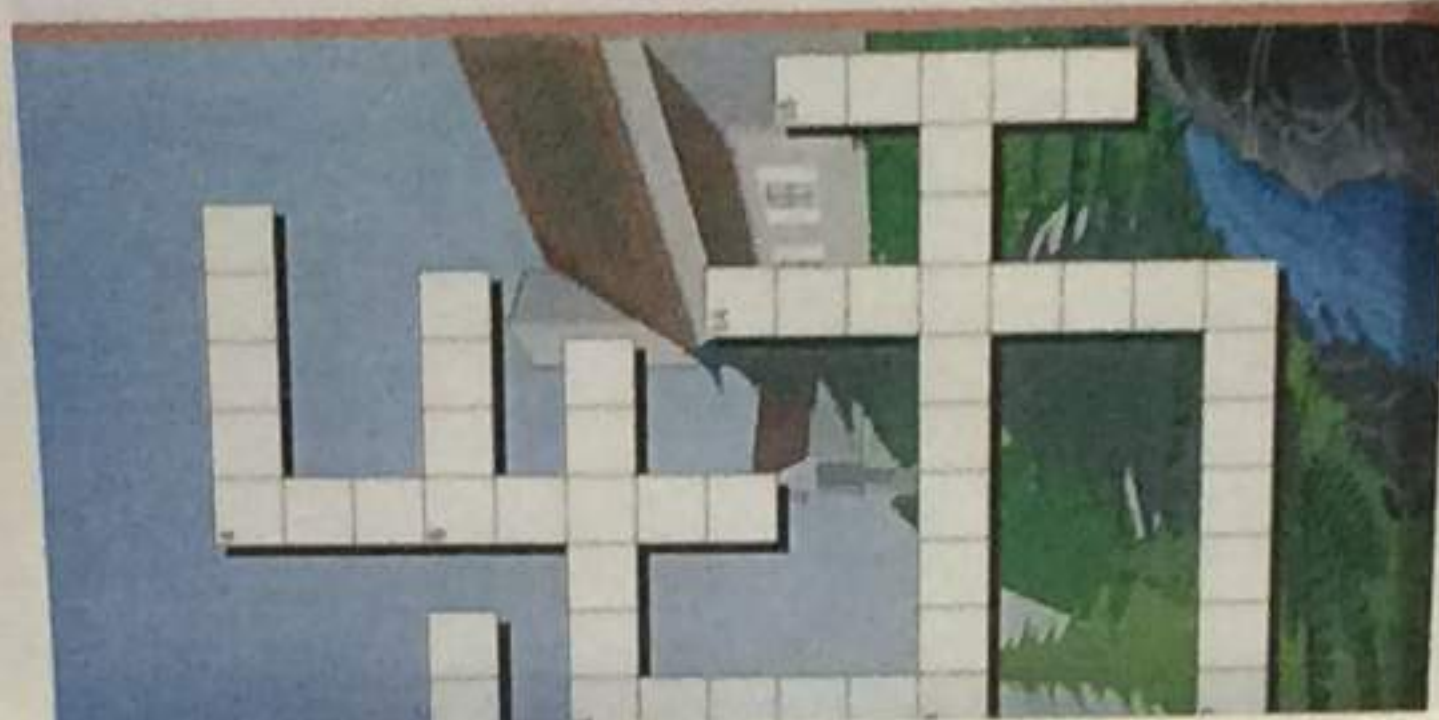
Stormwater management involves the control of water that runs off the surface of the land from rain or melting ice or snow. The volume, or amount, of runoff and its rate of runoff substantially development occurs. Surfaces, such as roofs, installation of storm sewers and discharge runoff, into the soil. Management compensate for the problems, concentration, damages to roads, bridges, as well as non-point source impervious surfaces.

### HISTORY OF PENNSYLVANIA

Court decisions over common law duties are involved with obstructing and discharging of runoff.

Pennsylvania cities, boroughs, and townships have been authorized Municipalities Planning Commission, comprehensive

management plans for designated watersheds. This planning effort results in the incorporation of sound engineering standards and criteria into local codes and ordinances to manage runoff from new development in a



## Do To



### IN YOUR COMMUNITY

Introduce a friend to the Bay watershed. Many people don't realize that they are part of a watershed and that what they do can have an impact on water quality. Share your knowledge with others. For each friend and neighbor you introduce, you'll be more likely to take care of it in the future.

Become an informed voter. One of the most important responsibilities you can take on is to vote. Be an informed voter and make your voice heard. Use the Chesapeake Bay Foundation's voter guide to help you make the most of your vote.

**WANT TO KNOW MORE?**  
Visit the Chesapeake Bay Foundation Web site:  
[cbf.org](http://cbf.org)



**ENVIRONMENTAL BUREAU**  
All persons in York City are required to recycle according to State Act 101 and local ordinance 952. (resident, commercial, institutional, junk mail, magazines, phone books, cardboard, and other non-hazardous waste.) Designated items include paper (office paper, label paper, junk mail, magazines, phone books, paper towel and toilet paper rolls), glass & metal food and beverage containers and plastic bottles, with #1-7 (as a bottle/jar, neck must be smaller than bottom). All lids, dessert cups, and plastic bags are trash. If you are not recycling, please use the trash bin.

**PUBLIC WORKS PROGRAMS**  
Honorable C. Kim Bracey, Mayor

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**PUBLIC WORKS PROGRAMS**  
Honorable C. Kim Bracey, Mayor

**Update**  
Environmental and Recreation & Parks  
[www.yorkcity.org](http://www.yorkcity.org)

**E-ITEM COLLECTION**  
Curbside Customers may call 843-1240 Mon-Thurs, 9:00 a.m. to 3:30 p.m. to schedule up to 5 normal household appliances. Some excluded items must be handled privately.

**RECYCLING COLLECTIONS**  
The City's hauler is Republic Services. On 3/30, 2021, Place trash in plastic or metal can with a lid and/or in securely tied trash bags (Max: 32 gals; 40lbs).

## When It Rains, It Drains

Understanding Storm Water and How it can Affect Your Money, Safety, Health and the Environment



**iTrabajando para Usted!**



## WHEN IS A BUILDING PERMIT REQUIRED?

An owner or authorized agent who intends to construct, enlarge, alter, repair, move, demolish or change the occupancy of a commercial or residential building, structure and facility or to erect, install, enlarge, alter, repair, remove, convert or replace any electrical, gas, mechanical, or plumbing system regulated by the Uniform Construction Code shall first apply to the building official and obtain the required permit. (The Uniform Construction Code currently has adopted the 2009 family of the International Code Council building codes.)

**Emergency repairs** or replacement of equipment may be made without first applying for a permit if a permit application is submitted to the building code official within 3 business days of the repair or replacement.

In addition to the required permits under the Uniform Construction Code, **the City of York also requires permits to be obtained for the following:**

- Concrete sidewalks, curbs, driveways, ramps and handicap ramps. (City of York Codified Ordinance Article 909)
- Temporary placement of a dumpster in a public way (City of York Codified Ordinance Article 541)
- Demolition work (ICC 2009 - Chapter 33) (Requires City of York Demolition Agreement & building permit)
- Signs - installation or placement of permanent signs. (Requires Zoning approval & building permit, City of York Codified Ordinance Section 1309.04)
- Decks, covered or uncovered, regardless of height above grade
- Fencing - permanently installed (Requires Zoning approval)
- Swimming pools, whether prefabricated or not, which are greater than 18 inches deep, including spas, or whirlpools. (City of York Codified Ordinance Article 1302.111)
- Amusement Machines
- Juke Boxes
- Peddler/Solicitation
- Waste Handling
- Street excavations - Obtained from the Public Works Department (City of York Codified Ordinance Article 905.2)

If you live in the HARB District and are proposing to do any exterior work other than painting or work that is not visible from a public street or alley, you will also have to have HARB approval **EVEN IF A PERMIT IS NOT REQUIRED.**

**UNLESS LISTED BELOW, A PERMIT IS REQUIRED FOR YOUR PROJECT.**

**A PERMIT IS NOT REQUIRED FOR THE FOLLOWING:**

An ordinary repair does not require a permit.

The following are **not** ordinary repairs:

- (1) Cutting away a wall, partition or portion of a wall
- (2) The removal or cutting of any structural beam or load-bearing support
- (3) The removal or change of any required means of egress, or rearrangement of parts of a structure affecting the egress requirements

- |   |                       |
|---|-----------------------|
| SMALL GAMES OF CHANCE - YORK COUNTY TREA    | 717-771-9603          |
| BETTER BUSINESS BUREAU                      | 717-364-3250          |
| DOG LICENSE                                 | 717-771-9603          |
| PENN DOT                                    | 717-848-6230          |
| DEATH CERTIFICATE                           | 717-787-2121          |
| YORK ADAMS TAX BUREAU                       | 717-854-8084          |
| HEALTH LICENSE-OUT OF CITY                  | 1-877-724-3258        |
| APPLICATION TO SELL PRECIOUS METALS (DEPT.) | 717-771-9601(SHERIFF) |
| RECORDER OF DEEDS                           | 717-771-9295          |
| E.P.A.                                      | 1-800-438-2474        |
| MARRIAGE LICENSE                            | 717-771-9615          |
| HANDICAP PARKING                            | 717-849-2301          |
| STATE POLICE                                | 717-428-1011          |
| BUREAU OF CONSUMER PROTECTION               | 717-787-7109          |

## 10 Steps to Stormwater Pollution Prevention on Small Residential Construction Sites

Stormwater management on small residential construction sites need not be complicated.



# ATTENTION

IN ORDER TO SCHEDULE AN INSPECTION YOU MUST HAVE REQUIRED UTILITIES CONNECTED AND OPERATING AT TIME OF INSPECTION. IF UTILITIES ARE NOT CONNECTED OPERATING THE INSPECTION WILL BE HALTED AND YOU WILL BE REQUIRED TO PAY THE APPROPRIATE RE-INSPECTION TO RE-SCHEDULE YOUR INSPECTION. ALSO FOR CERTIFICATION OF OCCUPANCY INSPECTIONS ALL REQUIRED INSPECTIONS MUST HAVE BEEN COMPLETED.

REQUIRED UTILITIES ARE: ELECTRIC, GAS AND HOT AND RUNNING WATER.

DO NOT REPLY  
 COUNTER COPY

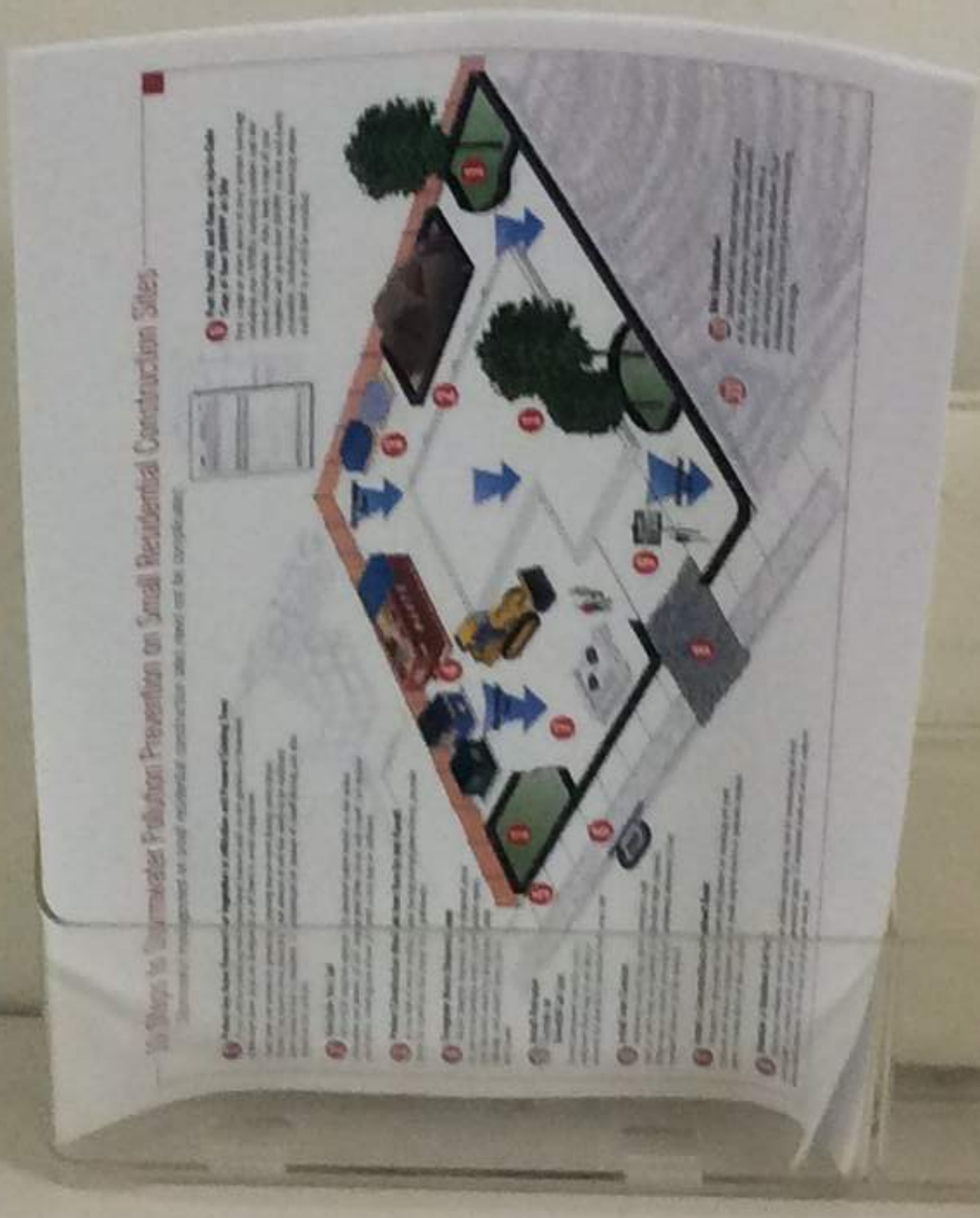
City of York

## Stormwater Management Small Projects Guide



COPIES AVAILABLE ON REQUEST





If you would  
events in the





**White Rose Community TV** 11:34 AM  
4/25/17

**York City MS4 Stormwater**

Any stormwater questions or concerns  
please call Lettice Brown (717) 324-6532  
or lbrown@yorkcity.org  
Join our FACEBOOK page - search York  
City Stormwater

**CITY OF YORK**  
PENNSYLVANIA  
Currently in  
York PA

54°  
Tomorrow  
71°

**Tech News** China Moves To Increase Number Of Electric Vehicles  
On Its Roads

[Refresh](#)

### Active Program



Control the media  
currently displayed  
by the device.



### Slide Dog Waste



Edit the last  
modified Slide.



### Tip Manage Programs



Use the Programs menu to  
edit existing Programs or  
create new ones. Programs  
control the content displayed  
on the screen.



### Get Latest News

Get the latest news and tips from  
SpinetiX.







**White Rose Community TV** 11:36 AM  
4/25/17

**Stormwater DONT's:**

DONT litter  
DONT throw liquids such as oil, grease,  
paint, or gas onto the sidewalks, gutters or  
streets  
DONT sweep or blow grass clippings into  
the street or storm drains  
DONT overuse fertilizers, pesticides, or  
other chemicals on your lawn

**Tech News** By early next year, Beijing will require automakers in China to ensure that at least 8 percent of all vehicles they manufacture are electric.

Currently in York PA  
54°  
Tomorrow 71°

[Refresh](#)

### Active Program



Control the media currently displayed by the device.



### Slide Dog Waste



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### Tip Manage Programs



Use the Programs menu to edit existing Programs or create new ones. Programs control the content displayed on the screen.



### Get Latest News

Get the latest news and tips from SpinetiX.







# White Rose Community TV

11:37 AM  
4/25/17

**Stormwater Do's:**

DO pick up trash and other debris  
DO pick up after your dog  
DO sweep your grass clippings back onto your lawn

**Currently in Hanover PA**

55°

Tomorrow

72°

**Tech News**  
**On Its Roads**  
By early next year, Beijing will require automakers in China to ensure that at least 2 percent of all vehicles they manufacture are



[Refresh](#)

### Active Program



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### Slide Dog Waste



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### Tip More Programs



Use the Programs menu to create additional Programs. Each Program can be activated to be displayed on the screen.



### Get Latest News

Get the latest news and tips from SpinetiX.







**White Rose Community TV** 11:39 AM  
4/25/17

**Pick up your trash**

Don't Pass It Up, Pick It Up!!  
Sweep up trash  
Pick up litter and throw it away  
Ensure your trash is secured in the proper bins, especially during windy days  
Take pride in your community, it starts with YOU!

Currently in Hanover PA

55°  
Tomorrow  
72°

**Tech News**  
On Its Roads  
By early next year, Beijing will require automakers in China to

[Refresh](#)

### Active Program



Control the media currently displayed by the device.



### Slide Dog Waste



Edit the last modified Slide.



### Tip More Programs



Use the Programs menu to create additional Programs. Each Program can be activated to be displayed on the screen.



### Get Latest News

Get the latest news and tips from SpinetiX.







# White Rose Community TV

## Scoop the POOP. Bag It. Trash It.

Please make sure you are cleaning up after your pet. Dog poop is NOT fertilizer and can actually damage your grass. The poop gets melted down and runs into the creeks and streams when it rains. Bacteria from dog poop can end up in fish and shellfish. People who eat those species can get very sick, not to mention the water fish and other wildlife are swimming in.

**Tech News**  
China moves to increase number of electric vehicles on its roads  
By early next year, Beijing will require automakers in China to

11:40 AM  
4/25/17

**CITY OF YORK**  
PA

Currently in Hanover PA

55°  
Tomorrow

72°

[Refresh](#)

### Active Program



Control the media currently displayed by the device.



### Slide Dog Waste



Edit the last modified Slide.



### Tip More Programs



Use the Programs menu to create additional Programs. Each Program can be activated to be displayed on the screen.



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Get the latest news and tips from SpinetiX.





# 10 Things You Can Do To Save the Bay

16 million people live on the land that drains into the Chesapeake Bay, and the actions that we take in our daily lives have a big impact on our environment. You can make a difference in the health of this national treasure. Think about the choices you make in your home, in your yard, and at your table. Consider making changes to help lessen pollution in our waterways. Here are some ideas.

## Join the Chesapeake Bay Foundation.

Add your voice to those of the 140,000 members who are the Bay's strongest advocates. Your contribution works throughout the watershed to save the Bay, its rivers, and streams. And be sure to sign up for the CBF Action Network to stay informed about issues affecting the protection and restoration of the Bay. Through free e-mail alerts from CBF, you'll be well-versed on vital Bay issues that need your action, and you can contact key decision-makers when it counts.



## IN YOUR YARD

**Make your lawn Bay-friendly.** In your landscaping, use native grasses or other plants that don't require watering or fertilizing. Reduce or eliminate use of chemical herbicides and pesticides. Learn to live with a dandelion or two. Lawn fertilizers and chemicals are a big source of nitrogen and phosphorus pollution and toxic runoff.

**Avoid pouring toxic substances down storm drains.** Don't dump hazardous materials like solvents, paints, and preservatives. They go directly into streams and waterways to pollute the Bay. Use your county's hazardous waste collection program instead.

**Plant a tree.** Besides providing oxygen to the atmosphere, trees hold soil in place with their roots, preventing erosion that runs into the Bay. They soak up fertilizers and other chemicals before they seep into waterways. And by shading your home in summer, they even reduce energy costs.

## AT HOME

**Drive less.** Air pollution contributes more than one-third of all the nitrogen entering the Bay, and a large part of that is from vehicle exhaust. Make it a personal goal to combine errands and limit trips to reduce your contribution to auto emissions. And when the time comes to buy a new car or truck, choose the most fuel-efficient and low-emission gasoline, gasoline-electric hybrid, or alternative-fuel model in its class.

**Buy local foods.** Did you know that most foods you eat travel 1,300 miles before they get to your plate? Buying food that's grown on local farms minimizes transportation-related emissions. It also keeps local farmers in business—which is good for Bay lands and, ultimately, Bay water quality. Try shopping for your produce at farmers' markets, or join a Community Supported Agriculture farm.

**Minimize your use of household chemicals.** Instead of all-purpose cleaners, use baking soda or borax and hot water for almost any sort of household cleaning, from toilet bowls to greasy pots and pans and laundry. Natural products reduce toxic chemicals in the wastewater.

**Conserve water.** Take shorter showers. Turn off the water while you're brushing your teeth, washing your hands, or doing dishes in the sink. By reducing your use of water, you help wastewater treatment plants function more effectively by reducing the volume they process.

## IN YOUR COMMUNITY

**Introduce a friend to the Bay watershed.** Many people don't realize that they are part of a watershed and that their actions have an impact on water quality. Share your concerns about the Bay with friends and neighbors, or visit a stream, creek, or park with a child. If people love their environment, they'll be more likely to take care of it in the future.

**Become an informed voter.** One of the most important individual actions that you can take is to vote for thoughtful and responsible land use and conservation policies in your community and state. An informed electorate can flex its political muscle on behalf of the environment.

## WANT TO KNOW MORE?

Visit the Chesapeake Bay Foundation Web site:  
**cbf.org**



CHESAPEAKE BAY FOUNDATION  
Saving a National Treasure



Printed on recycled, recyclable paper, 4/06.



# YARD CARE

**Treat with care; Right dose at the right time.**

Clean water is important to all of us. It's up to all of us to make it happen. In recent years, sources of water pollution, like industrial wastes from factories, have been greatly reduced. Now, most water pollution comes from things like cars leaking oil; fertilizers from farms, lawns and gardens; and failing septic tanks. All these sources add up to a big pollution problem. But each of us can do small things to help clean up our water too. And that adds up to a **POLLUTION SOLUTION!**

## Why do we need clean water?

Having clean water is of primary importance for our health and economy. Clean water provides recreation and commercial opportunities, fish habitat and drinking water. It also adds beauty to our landscape. All of us benefit from clean water and all of us have a role in getting and keeping our lakes, rivers, and ground waters clean.

## What's the problem with fertilizing your lawn?

Many people use fertilizers, weed killers and pesticides to enhance their yards and gardens. But if you use too much of these products or apply them at the wrong time, stormwater runoff can easily carry them from your lawn or garden into storm drains and ditches. From there, they can end up in lakes and streams.

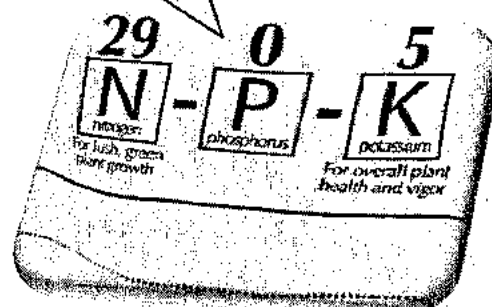
Weed killers and pesticides are designed to kill plants and animals that are considered pests. However, when they get into our waters, they can kill plants and animals that are not a problem. Fish and amphibians are vulnerable to these chemicals.

Like in the garden, fertilizer in lakes and streams makes plants grow. But too much algae and other aquatic plant growth can make boating, fishing and swimming unpleasant. What's more, as the algae and other plants decay, they use up the oxygen in the water that fish and other aquatic life need. Lawn and garden care doesn't have to be a problem.

## What will you do to help?

- Read the label. Follow the instructions.
- Use fertilizer sparingly. Many plants don't need as much as you might think. Too much can even harm them. Also, roots, leaves and fruits need different nutrients. Test your soil to find the right dose and type to match your plants' needs.
- Use Phosphorus free fertilizer.
- Don't treat your lawn or garden right before a rainstorm.
- Use slow-release fertilizers and other more environmentally friendly products.
- Try non-chemical alternatives. Use compost. Plant companion plants that deter pests. Pull weeds by hand. Use mulch. Trade lawn for native groundcover or shrubs.
- Get expert advice about lawn and garden products from Master Gardeners at <http://extension.psu.edu/plants/master-gardener/counties/york>

The middle number is the Phosphorus content. Look for "0"!



**When you treat the lawn, remember  
you're not just treating the lawn.**



# MCM #2 Appendix

- **MCM #2 Project Plan**
- **BMP 2.1 Attachments**
  - Audubon Society Kiwanis Lake Field Trip 2018 Narrative.pdf
  - Keep Pennsylvania Beautiful 2017 Great American Cleanup of PA - Events by County.pdf
  - Fall KYB Litter Clean Up.pdf
  - Public Input screenshot May 2017.pdf
  - Photos of Bantz Park Rain Gardens June 14 2017
  - Go Green Photo2.pdf
  - Go Green Photo1.pdf
  - Photo of Street Fair2.pdf
  - Photo of Street Fair.pdf
  - Willis Run Clean up Photo May 2017.pdf
  - Have an Idea screenshot.pdf
- **BMP 2.3 Attachments**
  - Report on City Council MS4 Presentation May 2017.pdf



# MCM #2 Project Plan

- BMP 2.1

Description:

Develop, implement and maintain a written Public Involvement and Participation Program (PIPP)

Measurable Goal:

A new permittee's PIPP shall be developed and implemented during the first year of coverage under this General Permit. All permittees shall re-evaluate the PIPP each permit year and revise as needed. Your PIPP shall include, but not be limited to:

- a. Opportunities for the public to participate in the decision-making processes associated with the development, implementation, and update of programs and activities related to this General Permit.
- b. Methods of routine communication to groups such as watershed associations, environmental advisory committees, and other environmental organizations that operate within proximity to the permittee's regulated small MS4s or their receiving waters.
- c. Making your periodic reports available to the public on your website, at your municipal offices, or by US Mail upon request.

Action Plan:

The York City MS4 taskforce will review and revise this plan on an annual basis, at a minimum. The plan shall include the minimum required activities, summarized above, and note all additional activities performed within the City that exceed minimum requirements. On July 28, 2018, the following members of the MS4 Taskforce reviewed and revised the PIPP: MS4 Coordinator - Lettice Brown, C.S. Davidson Rep - Derek Rinaldo, E.I.T. The plan includes the following activities:

i) Public Input Opportunities:

MS4 Facebook Page - The page is a gateway for residents to connect to the MS4 Coordinator to ask questions and gain knowledge on Stormwater. The page has private message capabilities to contact the MS4 Coordinator directly for questions and reporting stormwater issues. The page also requests input from the public about stormwater issues, activities, and education materials. Articles, notices, and emergency information are posted to the page as well.

ii) Watershed/Environmental Group Commination:

Watershed Alliance of York (WAY) – WAY is a coalition of stakeholders committed to being innovative leaders educating the public and encouraging watershed-based planning, restoration and protection in York County, Pennsylvania, and beyond. WAY provides watershed educational assistance and sponsors stream and illegal dump site cleanups throughout the year. The City has executed a Memorandum of Understanding with WAY making the services of WAY available to the City to aid in meeting the education and participation requirements of the MS4 permit. The City currently provides a link to WAY's website in the Stormwater Management section of the City's Website.

iii) Annual Report Publication:

A copy of the current MS4 Annual Report will be posted under the Stormwater Management section of the City's website. The MS4 Coordinator is responsible for ensuring the report is posted.

iv) Keep York Beautiful:

This group of City Employees, Residents, Penn State Extension, and other stakeholders focuses on maintaining a clean and beautiful County by hosting City-wide cleanups twice a year (Spring and Fall), planting flowers and hanging baskets downtown, maintaining the community gardens located throughout the City, and participating in different environmental events throughout York



County.

v) Street 2 Creek

This group is comprised of the Penn State Master Watershed Stewards, the MS4 Coordinator for the City of York, the Lower Susquehanna RiverKeeper and the Chesapeake Bay Foundation. This group is planning some educational events including creating storm drain art in downtown York City. The idea is to recruit local artists to conceptualize a drawing utilizing the storm drains picked out and painting it during our York Arts Fest in August. Several Businesses have expressed interest.

vi) Additional Opportunities for Public Involvement and Participation

(1) Facebook Page

(2) York City Go Green Event

(3) Targeted Educational Meetings

(4) Olde York Street Fair

(5) Codorus Creek Bank Trimming

(6) York City Website - Section at bottom of Stormwater page has a "How are we doing?" section for public input

(7) City-Wide Litter Pickups

(8) Audubon Society Educational Field Trips for York City School Students

(9) Lincoln Charter Career Day

(10) Annual Mayfly Festival

- BMP 2.2

Description:

Prior to adoption of any ordinance (municipal permittees) or SOP (non-municipal permittees) required by the permit, provide adequate public notice and opportunities for public review, input and feedback

Measurable Goal:

Advertise any proposed MS4 Stormwater Management Ordinance or SOP, provide opportunities for public comment, evaluate any public input and feedback, and document the comments received and the municipality's response

Action Plan:

York City shall follow the standard procedure for ordinance adoption as defined in the City Code. All ordinances are required to be advertised and are then discussed and adopted during City Council Meetings, which are open to the public. No MS4 related ordinances have been adopted within the previous year.

- BMP 2.3

Description:

Regularly solicit public involvement and participation from the target audience groups. This should include an effort to solicit public reporting of suspected illicit discharges. Assist the public in their efforts to help implement your SWMP. Conduct public meetings to discuss the on-going implement of your SWMP.

Measurable Goal:

Conduct at least one public meeting per year to solicit public involvement and participation from target audience groups. The public should be given reasonable notice through the usual outlets a reasonable period in advance of each meeting. During the meetings, you should present a summary of your progress, activities, and accomplishments with implementation of your SWMP, and you should provide opportunities for the public to provide feedback and input. Your presentation can



be made at specific MS4 meetings or during any other public meeting. Under this MCM, you should document and report instances of cooperation and participation in your activities; presentations you made to local watershed organizations and conservation organizations; and similar instances of participation or coordination with organizations in your community. You also should document and report activities in which members of the public assisted or participated in your meetings and in the implementation of your SWMP, including education activities or organized implementation efforts such as cleanups, monitoring, storm drain stenciling, or others.

**Action Plan:**

(1) Illicit Discharge Reporting: The City has established a system for the reporting and elimination of illicit discharges which utilizes the MS4 Coordinator as the contact for all stormwater related complaints. Methods of reporting an illicit discharge are by telephone at (717) 324-6532 or by email at [Stormwater@yorkcity.org](mailto:Stormwater@yorkcity.org) or [lbrown@yorkcity.org](mailto:lbrown@yorkcity.org). This contact information is provided under the Stormwater Management section of the City's Website and advertised on the local community television station, White Rose Community Television and on the York City Stormwater Facebook Page.



On the dates of May 24<sup>th</sup>, May 29<sup>th</sup>, May 30<sup>th</sup>, and May 31<sup>st</sup>, York City MS4 Coordinator volunteered with the Audubon Society to educate York City kids from Ferguson and Devers Elementary Schools about stormwater and the environment. We had 5 separate stations:

1. Stream Investigation #1 – This was located in Willis Run, downstream of Kiwanis Lake – between the church and the Graham Aquatic Center. Here, the kids were able to get into the stream and under the bridge to capture aquatic life, identify them, and record them in their journals. Some students brought out trash and other debris they found, which we disposed of properly. Some of the macro invertebrates found were: crayfish, fish (minnows) leeches, aquatic worms, freshwater clams, Damselfly larva, dragonflies, scud, snails, flat worms, midges and a Riffle Beetle – all caught with nets! The kids also took the temperature of the water, as well as the pH which was right on the number 7! Awesome!
2. Eco –station. The kids got to play an “escape room” type of game that was geared towards the environment and animals.
3. Bird-Watching station. The kids were taught the different types of birds that nest in the Kiwanis Lake area. They were able to use a telescope and binoculars to get up close looks.
4. Stream Investigation #2. This station is located upstream of Kiwanis lake, off of Wood Street. The children were able to take scientific measurements of the stream bank, velocity of the water, and do some plantings bankside.
5. Stormwater berm. For two of the days, the kids helped to plan trees along a dirt berm that was created by our City’s Parks Department. The idea is to divert the high velocity stormwater runoff from the top of Madison Avenue hill, allow it to flow along the berm and into the parking lot, instead of rushing into the field, eroding the ground and grasses. The kids were taught how to shape the berm, how to dig holes for trees, how to remove trees from their pots, and how to place them in the ground. They also had a chance to mulch around the trees. We placed about 18-20 trees.



**KEEP PENNSYLVANIA BEAUTIFUL**

**2017 GREAT AMERICAN CLEANUP OF PA - EVENTS BY COUNTY**



COUNTY	EVENTS	INVALUABLE VOLUNTEERS	POUNDS OF TRASH DISPOSED	MILES OF ROADS, SHORELINE AND TRAILS CLEANED	TREES, SHRUBS AND FLOWERS PLANTED	TIRES PROPERLY DISPOSED
Adams	47	382	13,140	115	0	1,409
Allegheny	227	10,127	623,940	361	2,275	1,818
Armstrong	6	228	4,540	52	0	13
Beaver	75	425	39,900	122	0	878
Bedford	18	204	49,760	54	0	109
Berks	41	2,641	33,220	155	0	66
Blair	62	1,443	99,480	147	0	92
Bradford	35	449	6,160	71	0	41
Bucks	249	5,577	208,800	699	0	208
Butler	67	540	9,260	66	0	59
Cambria	131	4,265	99,720	356	300	3,144
Cameron	17	114	2,640	21	0	1
Carbon	64	3,475	42,540	148	0	32
Centre	84	1,529	89,340	289	0	596
Chester	253	7,798	232,000	577	50	311
Clarion	29	449	8,620	60	0	2
Clearfield	29	616	10,700	41	0	5
Clinton	24	365	19,380	104	0	35
Columbia	20	331	3,820	46	3,559	12
Crawford	82	853	13,660	1,584	0	3
Cumberland	114	1,149	52,987	185	0	20
Dauphin	70	1,372	71,120	83	0	414
Delaware	52	2,043	32,320	102	250	32
Elk	30	352	18,680	84	0	250
Erie	84	2,524	21,300	102	0	9
Fayette	40	964	40,242	101	0	324
Forest	22	27	3,860	39	0	0



**KEEP PENNSYLVANIA BEAUTIFUL**

**2017 GREAT AMERICAN CLEANUP OF PA - EVENTS BY COUNTY**

<b>Franklin</b>	46	404	23,180	141	0	0
<b>Fulton</b>	2	12	15,320	103	0	0
<b>Greene</b>	32	335	20,460	64	0	0
<b>Huntingdon</b>	23	272	3,140	29	0	5
<b>Indiana</b>	91	1,177	47,460	185	0	7
<b>Jefferson</b>	71	728	10,880	147	0	0
<b>Juniata</b>	10	33	1,820	16	0	0
<b>Lackawanna</b>	70	1,383	94,600	231	0	10
<b>Lancaster</b>	151	3,392	77,200	550	0	8
<b>Lawrence</b>	57	550	18,600	461	0	5
<b>Lebanon</b>	41	907	10,300	93	0	3
<b>Lehigh</b>	93	5,895	110,640	123	0	75
<b>Luzerne</b>	269	6,122	729,260	173	8,180	55
<b>Lycoming</b>	80	432	28,700	209	0	4
<b>McKean</b>	44	1,120	41,026	177	0	1,928
<b>Mercer</b>	30	919	6,800	47	0	427
<b>Mifflin</b>	19	124	5,060	29	0	16
<b>Monroe</b>	199	2,661	87,680	506	0	23
<b>Montgomery</b>	181	4,658	186,360	119	555	271
<b>Montour</b>	5	42	6,080	33	0	0
<b>Northampton</b>	51	1,419	91,158	74	0	0
<b>Northumberland</b>	11	586	94,080	54	0	532
<b>Perry</b>	41	520	10,560	102	0	4
<b>Philadelphia</b>	2,863	35,258	959,750	47	1,268	4,382
<b>Pike</b>	96	803	209,600	200	0	222
<b>Potter</b>	38	250	8,200	45	0	0
<b>Schuylkill</b>	74	2,021	60,740	124	0	12
<b>Snyder</b>	20	127	6,200	68	0	0
<b>Somerset</b>	27	285	10,940	179	0	0
<b>Sullivan</b>	18	77	5,120	10	0	0
<b>Susquehanna</b>	107	1,137	55,880	140	0	1,286

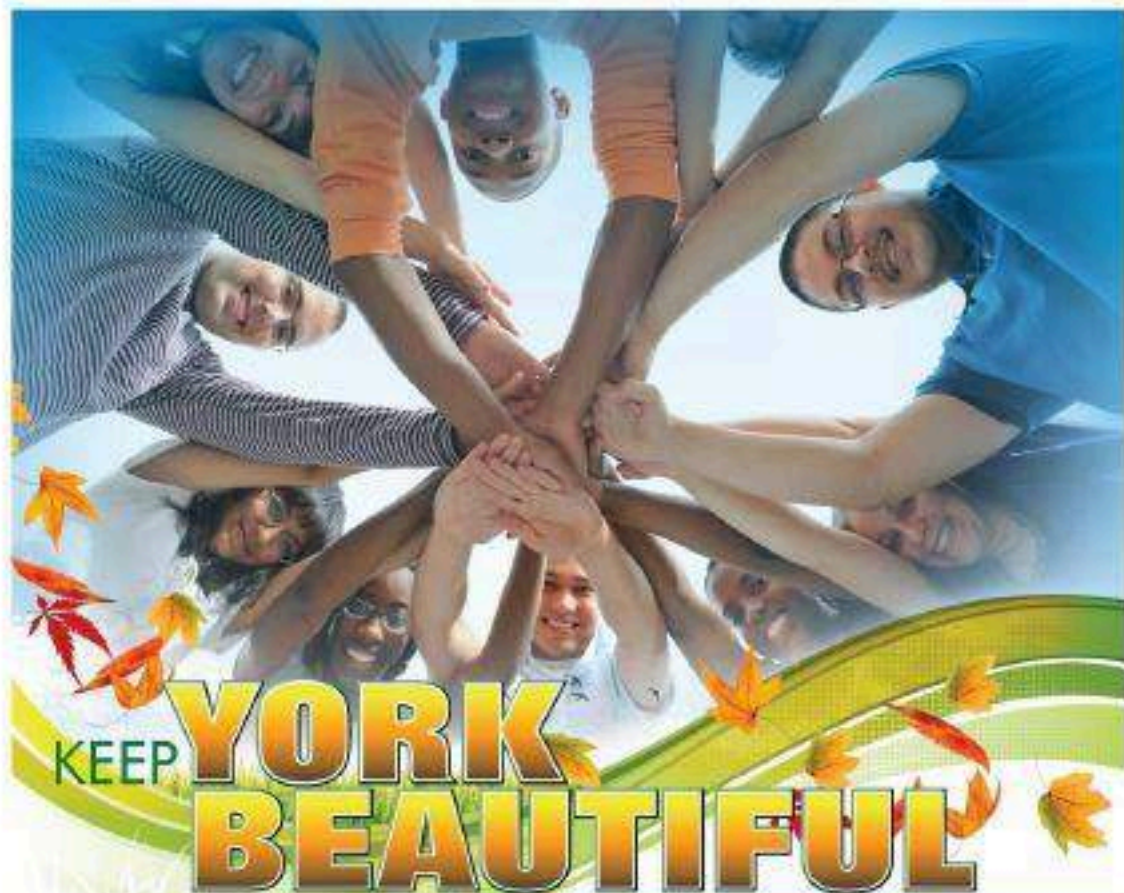


**KEEP PENNSYLVANIA BEAUTIFUL**

**2017 GREAT AMERICAN CLEANUP OF PA - EVENTS BY COUNTY**

<b>Tioga</b>	47	693	65,640	85	0	20
<b>Union</b>	23	274	10,640	92	0	0
<b>Venango</b>	47	507	13,360	121	0	8
<b>Warren</b>	27	176	237,380	164	0	0
<b>Washington</b>	92	1,103	23,100	89	0	1,059
<b>Wayne</b>	44	428	22,420	97	0	5
<b>Westmoreland</b>	70	904	42,740	144	0	304
<b>Wyoming</b>	6	55	2,120	17	0	0
<b>York</b>	92	4,664	41,620	116	0	304
<b>TOTAL</b>	<b>7,280</b>	<b>132,695</b>	<b>5,346,943</b>	<b>11,168</b>	<b>16,437</b>	<b>20,858</b>





# KEEP YORK BEAUTIFUL

## FALL LITTER CLEANUP

September 23, 2017

8:00-11:00am

Working together.

Cleanup our neighborhoods.

Education programs.

Hundreds of Volunteers.

Donations will aid in efforts.

Cleaning and planting.

Dedication.

Meet at 101 S. George Street (City Hall Parking Lot) at 7:30 am to pick up supplies.

Your involvement today will  
"Keep York Beautiful" tomorrow.



101 S. George Street  
P.O. Box 509, York, PA 17405  
(717) 849-2235  
Email: [TL535@psu.edu](mailto:TL535@psu.edu)





Photo/Video



Feeling/Activity



Jamie Lewis commented on your post.



**Lettice Brown** ► **York City: Tired of the violence!**

5 mins · 🌐

The York City - MS4 - Stormwater is looking for areas of the city that are in need of a litter clean up effort. Please post areas within city limits that you would like to see the MS4 Stormwater have some people out picking up trash and litter.

Thank you.



Like



Share



View 1 more comment



**Lettice Brown** Thank you Jamie Lewis

Like · 2 mins



**Jamie Lewis** Thank you!!!!

Like · 2 mins



**Lettice Brown** I will let you know if i organize some clean ups 😊

Like · 1 min

Suggested Post



**NuWave Marine**

Sponsored · 🌐



Like Page

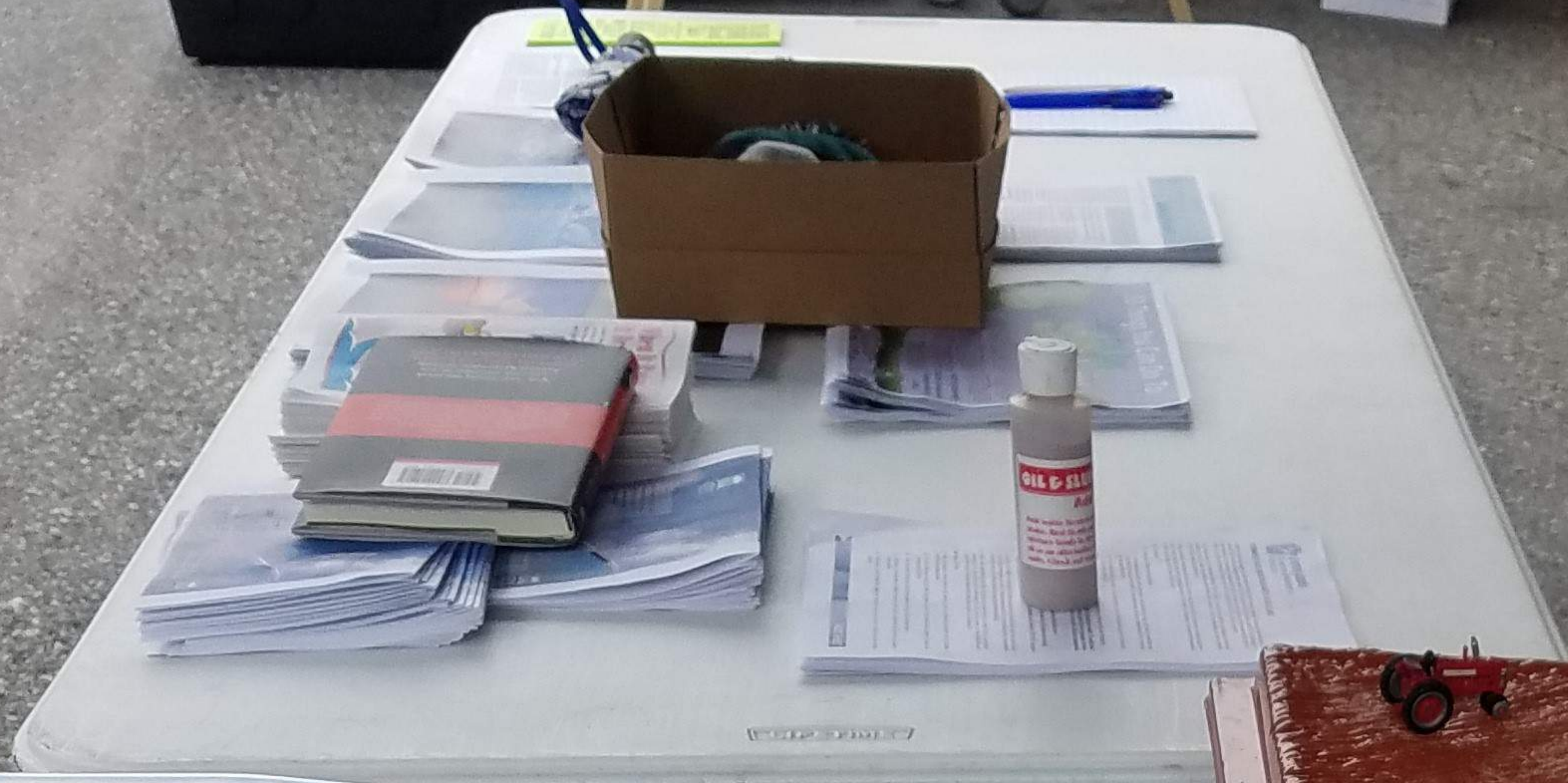
Marine Supplies, Boat parts, MerCruiser Parts, & More!











LIFETIME



and the Construction Industry

maintain your BMPs!

YORKSHIRE  
31

SOAP COMPANY

PETS  
WELCOME

WELCOME









PNC Bank

YORK CITY  
STORM WATER

Stormwater and the Construction Industry

Maintain your BMPs!



On Saturday May 20<sup>th</sup> 2017, Volunteers assisted York City Stormwater with a trash pickup in Willis Run. We had about 15 people come out to help us. Together, we managed to clean out: 3 couches, 2 boxsprings, 1 wet mattress, 4 bicycles, 2 shopping carts, a mud filled TV set, and multiple bags of trash.







## Social Media and other sites

FACEBOOK

Center for Watershed Protection

Chesapeake Bay Program

Pennsylvania Department of Environmental Protection

Stormwater PA MS4 Program

US Environmental Protection Agency

York County Conservation District

York County Planning Commission

## Have an Idea?

We would love to hear it! Please, let us know how we can help make York a better place. Share it with us using the form below!

Name \*

First

Last

Email \*

Phone

What's Your Idea? \*



May 24, 2017

MS4 Coordinator presented a MS4 Stormwater Powerpoint Presentation to City Council on this date to about 5 Council members and about 20 residents of York City. There were also 4 flyers that were available for residents and Council members: “When it Rains it Drains”, “10 Things You Can Do To Save The Bay”, “DEP Fact Sheet Stormwater”, and the Powerpoint presentation in paper form. The presentation lasted about 20 minutes.



# MCM #3 Appendix

- **MCM #3 Project Plan**
- **BMP 3.1 Attachments**
  - MS4 Outfall Screening Report 2018.pdf
  - MS4BenchSheet.300718.pdf
  - Illicit Discharge Determination Form\_V2.pdf
  - PublicComplaintsFlowChart 2018.pdf
- **BMP 3.2 Attachments**
  - York City Outfall Maps 1-6
  - York City Outfall Maps 7-11
- **BMP 3.3 Attachments**
  - City of York Storm Sewer Map
- **BMP 3.4 Attachments**
  - April to June 2018 Quarterly Report
  - April to June 2018 Quarterly Narrative
  - January to March 2018 Quarterly Report
  - January to March 2018 Quarterly Narrative
  - October to December 2017 Quarterly Report
  - October to December 2017 Quarterly Narrative
  - July to September 2017 Quarterly Report
  - July to September 2017 Quarterly Narrative
  - April to June 2017 Quarterly Report
  - April to June 2017 Quarterly Narrative
  - Outfall Field Inspections
- **BMP 3.5 Attachments**
  - Article 942 - IDDE Ordinance
- **BMP 3.6 Attachments**
  - Summary of CC48 Meeting.pdf
  - Meeting Minutes.pdf
  - Illicit Discharge Map.pdf



# MCM #3 Project Plan

- BMP 3.1

Description:

You shall develop and implement a written program for the detection, elimination, and prevention of illicit discharges into your regulated MS4s. Your program shall include dry weather field screening of outfalls for non-stormwater flows, and sampling of dry weather discharges for selected chemical and biological parameters. Test results shall be used as indicators of possible discharge sources.

Measurable Goal:

For new permittees, the IDD&E program shall be developed during the first year of coverage under this General Permit and shall be implemented and evaluated each year thereafter. For renewal permittees, the existing IDD&E program shall continue to be implemented and evaluated annually. Records shall be kept of all outfall inspections, flows observed, results of field screening and testing, and other follow-up investigation and corrective action work performed under this program.

Action Plan:

1) Procedures for identifying priority areas

A list of Priority Outfalls was identified on Attachment 12A in the 2012-13 Annual Report. This list is reviewed annually and outfalls will be added or removed from this list based on the results of field inspections. The 2017-2018 Priority Outfall List is attached to this Appendix. The MS4 Coordinator is responsible for maintaining this list.

2) Procedures for screening outfalls during various seasonal conditions

The City has created an Illicit Discharge Field Inspection Standard Operating Procedure which addresses this requirement. The MS4 Coordinator is responsible for inspection of all outfalls. Because of the large number of outfalls in the City's system and because the MS4 Coordinator must schedule these screenings with respect to all of the other responsibilities, the screenings naturally occur during different times of the year, over various seasons.

3) Procedures for identifying a source of an illicit discharge

The City has created an Illicit Discharge Field Inspection Standard Operating Procedure which addresses this requirement. The City will rely on the IDDE Manual as a backup document for any situation which isn't specifically covered by their Procedure.

4) Procedures for eliminating an illicit discharge

The City has created an Illicit Discharge Field Inspection Standard Operating Procedure which addresses this requirement. The City will rely on the IDDE Manual as a backup document for any situation which isn't specifically covered by their Procedure.

5) Procedures for assessing the potential for illicit discharges caused by the interaction of sewage disposal systems.

Properties within the City of York are serviced by a public sanitary sewer system. Because this is not a combined system and on lot septic systems are also not currently being utilized, the potential for sewage related illicit discharges is minimal.

6) Mechanisms for gaining access to private properties

Stormwater easements and O&M agreements are being executed and recorded with all new Subdivision Plans, Land Development Plans, and Stormwater Management Site Plans. The City shall identify any locations where legal access is a concern and work to establish an easement. City



crews do not currently have any issues with gaining access to City owned facilities.

7) Procedures for program documentation, evaluation, and assessment.

The York City MS4 Coordinator and the Public Works Director will review IDDE inspection data and procedures annually, at a minimum.

8) Procedures for addressing information or complaints received from the public.

Information received from the public is routed to our MS4 Coordinator and a discussion will determine whether immediate action should be taken or if educational information should be shared with the informant. All conversations and correspondence are documented and filed. Follow up phone calls or emails are made at the discretion of the MS4 Coordinator. If an issue is not resolved by the MS4 Coordinator, the informant will be directed to the Public Works Director. Informants are able to remain anonymous.

- BMP 3.2

Description:

Develop and maintain a map of your regulated small MS4. The map must also show the location of all outfalls and the locations and names of all surface waters of the Commonwealth (e.g., creek, stream, pond, lake, basin, swale, channel) that receive discharges from those outfalls.

Measurable Goal:

For new permittees, develop the map(s) of your regulated small municipal separate storm sewer systems and the information on all outfalls from your regulated small MS4 by the end of the fourth (4th) year of permit coverage. For renewal permittees, the existing map(s) of your regulated small MS4 shall be updated and maintained as necessary during each year of coverage under the permit.

Action Plan:

The MS4 Coordinator is responsible for maintaining the City's outfall mapping. This mapping will be updated as infrastructure projects are completed or additional outfalls are discovered in the field.

- BMP 3.3

Description:

In conjunction with the map(s) created under BMP #2 (either on the same map or on a different map), new permittees shall show, and renewal permittees shall update, the entire storm sewer collection system, including roads, inlets, piping, swales, catch basins, channels, basins, and any other features of the permittee's storm sewer system including municipal boundaries and/or watershed boundaries.

Measurable Goal:

For new permittees, develop the map(s) by the end of the fourth (4th) year of coverage under the permit and update and maintain the map(s) as necessary each year of permit coverage thereafter. For renewal permittees, update and maintain the map(s) as necessary during each year of permit coverage.

Action Plan:

The MS4 Coordinator is responsible for maintaining the City's storm sewer mapping. This mapping will be updated as infrastructure projects are completed or additional facilities are discovered in the field.

- BMP 3.4

Description:

Following the IDD&E program created pursuant to BMP #1, the permittee shall conduct outfall



field screening, identify the source of illicit discharges, and remove or correct any illicit discharges using procedures developed under BMP #1.

**Measurable Goal:**

For all permittees, outfall inspections need to be prioritized according to the perceived chance of illicit discharges within the outfall's contributing drainage area. Observations of each outfall shall be recorded each time an outfall is screened, regardless of the presence of dry weather flow. Proper quality assurance and quality control procedures shall be followed when collecting, transporting or analyzing water samples. All outfall inspection information shall be recorded on the Outfall Reconnaissance Inventory/Sample Collection field sheet excerpted from the Illicit Discharge Detection and Elimination: A Guidance Manual for Program Development and Technical Assessments (CWP, October 2004). Adequate written documentation shall be maintained to justify a determination that an outfall flow is not illicit. If an outfall flow is illicit, the actions taken to identify and eliminate the illicit flow also shall be documented.

**Action Plan:**

1) Every regulated outfall must be screened at least once during the permit coverage term. The MS4 Coordinator will complete the required annual screenings. Screenings shall follow the Illicit Discharge Field Inspection Standard Operating Procedure and all procedures identified as part of BMP 3.1.

2) Outfall Inspection Timing

The MS4 Coordinator will perform inspections at different times of the year. Because of the large number of outfalls in the City's system, the screenings will occur during different times of the year, over various seasons.

3) Outfall Inspection Summary

The MS4 Coordinator is responsible for completing IDDE Quarterly Summary Report to track inspections and log complaints related to illicit discharges. These reports are all included in the City's MS4 Annual Reports.

- **BMP 3.5**

**Description:**

Enact a stormwater management ordinance (municipal entities) or develop an SOP (non-municipal entities) to implement and enforce a stormwater management program that includes prohibition of non-stormwater discharges to the regulated small MS4.

**Measurable Goal:**

Within the first year of coverage under the permit, new permittees shall enact and implement an ordinance from an Act 167 Plan approved by the Department in 2005 or later, the MS4 Stormwater Management Ordinance; or an ordinance that satisfies all applicable requirements in a completed and signed MS4 Stormwater Management Ordinance Checklist. (For non-municipal permittees, new permittees shall develop and implement a Standard Operating Procedure (SOP) within the first year of coverage).

Renewal permittees must continue to maintain, update, implement, and enforce a Stormwater Management Ordinance that satisfies all applicable requirements. (For non-municipal permittees, the SOP satisfies this requirement. If no existing SOP exists, it should be developed during the first year of coverage).

New permittees shall submit a letter signed by a municipal official, municipal engineer, or the municipal solicitor as an attachment to their first year report certifying the enactment of an ordinance that meets all applicable requirements of this permit. Renewal permittees shall update their existing ordinance, if necessary, and submit documentation of completion to the Department. (For non-municipal permittees, submit the SOP to the first report).



#### Action Plan:

The City adopted an ordinance consistent with the York County Model Act 167 Ordinance on September 20, 2011. Article 942 of this ordinance address detection and elimination of illicit discharges. The City included a copy of the approved Act 167 Stormwater Management Ordinance in the 2012-2013 MS4 Annual Report. In the event this ordinance is amended or replaced, a copy of the new ordinance will be forwarded to DEP and included in the City's Annual Report.

- **BMP 3.6**

#### Description:

Provide educational outreach to public employees, business owners and employees, property owners, the general public and elected officials (i.e., target audiences) about the program to detect and illicit discharges.

#### Measurable Goal:

During each year of permit coverage, appropriate educational information concerning illicit discharges shall be distributed to the target audiences using methods outlined under MCM #1. If not already established, set up and promote a stormwater pollution reporting mechanism (e.g., a complaint line with message recording) by the end of the first year of permit coverage for the public to use to notify you of illicit discharges, illegal dumping or outfall pollution. Respond to all complaints in a timely and appropriate manner. Document all responses, include the action taken, the time required to take the action, whether the complaint was resolved successfully.

#### Action Plan:

##### 1) Illicit Discharge System

The MS4 Coordinator is responsible for receiving, documenting, and routing all complaints to the proper agency or staff for corrective actions. The City utilizes a compliant flow chart which is attached to this plan. Utilization of White Rose TV, the City website, and social media pages are effective means of notifying the public of this system.

##### 2) Illicit Discharge Education

Methods of reporting an illicit discharge are by telephone at (717) 324-6532 or by email at [lbrown@yorkcity.org](mailto:lbrown@yorkcity.org). This contact information is provided under the Stormwater Management section of the City's Website and advertised on the local community television station, White Rose Community Television, and through the Stormwater social media website. Contact may also be made via Facebook through private message and other posts.





## MS4 OUTFALL FIELD SCREENING REPORT

### BACKGROUND INFORMATION

Permittee Name:	NPDES Permit No.: PA
Date of Inspection:	Outfall ID No.:
Land Uses in Outfall Drainage Area (Select All):	Latitude: _____ ° _____ ' _____ "
<input type="checkbox"/> Industrial <input type="checkbox"/> Urban Residential	Longitude: _____ ° _____ ' _____ "
<input type="checkbox"/> Commercial <input type="checkbox"/> Suburban Residential	Dry Weather Inspection? <input type="checkbox"/> Yes <input type="checkbox"/> No
<input type="checkbox"/> Open Space <input type="checkbox"/> Other:	Date of Previous Precipitation:
	Amount of Previous Precipitation: _____ in
Inspector Name(s):	Were Photographs Taken? <input type="checkbox"/> Yes <input type="checkbox"/> No
	Are Photographs Attached? <input type="checkbox"/> Yes <input type="checkbox"/> No

### OUTFALL DESCRIPTION

TYPE	MATERIAL	SHAPE	DIMENSIONS	SUBMERGED
<input type="checkbox"/> Closed Pipe	<input type="checkbox"/> RCP <input type="checkbox"/> CMP <input type="checkbox"/> PVC <input type="checkbox"/> HDPE <input type="checkbox"/> Steel <input type="checkbox"/> Other	<input type="checkbox"/> Circular <input type="checkbox"/> Single <input type="checkbox"/> Elliptical <input type="checkbox"/> Double <input type="checkbox"/> Box <input type="checkbox"/> Triple <input type="checkbox"/> Other <input type="checkbox"/> Other	Diameter: _____ in	<input type="checkbox"/> In Water <input type="checkbox"/> With Sediment
<input type="checkbox"/> Open Channel	<input type="checkbox"/> Concrete <input type="checkbox"/> Earthen <input type="checkbox"/> Rip-Rap <input type="checkbox"/> Other	<input type="checkbox"/> Trapezoid <input type="checkbox"/> Parabolic <input type="checkbox"/> Other	Depth: _____ in Top Width: _____ in Bottom Width: _____	

Dry Weather Flow Present at Outfall During Inspection? ☐ Yes ☐ No (If No, skip to Certification Section)

Description of Flow Rate: ☐ Trickle ☐ Moderate ☐ Significant ☐ N/A

### DRY WEATHER FLOW EVALUATION

Does the dry weather flow contain color? ☐ Yes ☐ No If Yes, provide a description below.

Does the dry weather flow contain an odor? ☐ Yes ☐ No If Yes, provide a description below.

Is there an observed change in the receiving waters as a result of the discharge? ☐ Yes ☐ No  
If Yes, provide a description below.

Does the dry weather flow contain floating solids, scum, sheen or substances that result in deposits? ☐ Yes ☐ No  
If Yes, provide a description below.



Were sample(s) collected of the dry weather flow? <input type="checkbox"/> Yes <input type="checkbox"/> No (If Yes, No. Samples: _____)					
<b>FIELD / LABORATORY ANALYSIS</b>					
<b>PARAMETER</b>	<b>RESULTS</b>	<b>UNITS</b>	<b>PARAMETER</b>	<b>RESULTS</b>	<b>UNITS</b>
Flow Rate		GPM	Fecal Coliform		No./100 mL
pH		S.U.	COD		mg/L
Total Residual Chlorine (TRC)		mg/L	BOD5		mg/L
Conductivity		µmhos/cm	TSS		mg/L
Ammonia-Nitrogen		mg/L	TDS		mg/L
Other: _____			Oil and Grease		mg/L
Other: _____			Other: _____		
Indicate the parameters above that were analyzed by a DEP-certified laboratory:					
<b>ILLICIT DISCHARGES</b>					
Is the dry weather flow an illicit discharge? <input type="checkbox"/> Yes <input type="checkbox"/> No					
If Yes, describe efforts made to determine the source(s) of the illicit discharge.					
Describe corrective actions taken by the permittee in response to the finding of an illicit discharge.					
Inspector Comments:					
<b>RESPONSIBLE OFFICIAL CERTIFICATION</b>					
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 gathered and evaluated 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 knowledge of violations. See 18 Pa. C.S. § 4904 (relating to unsworn falsification).					
Responsible Official Name			Signature		
Telephone No.			Date		



## City of York MS4 Program Dry Weather Testing

**Sample Type:** Grab                      Composite                      **Sample ID:** \_\_\_\_\_  
**Turbidity:** Turbid Slightly Turbid Clear/Colorless                      **Date:** \_\_\_\_\_ **Time:** \_\_\_\_\_  
**Color:** \_\_\_\_\_ **Odor:** \_\_\_\_\_ **Collected By:** \_\_\_\_\_  
**Sheen/scum:** \_\_\_\_\_ **Field Screening ID:** \_\_\_\_\_  
**Comments:** \_\_\_\_\_ **Location:** \_\_\_\_\_  
**Grab pH** \_\_\_\_\_ **SU**    **Temp** \_\_\_\_\_ °C                      **Watershed:** \_\_\_\_\_  
**Field verified pH 4.0:** \_\_\_\_\_ **Time:** \_\_\_\_\_ **Weather:** \_\_\_\_\_

Chain of Custody	Sample Vessel				
Independent Lab:	<b>Test</b>	Stream	Field Test	Plastic	Glass
Delivered by:                      Date:    /    /    Time:	Chlorine, T				
Analysis Requested:					
	Fecal Coliform				
	pH				

Parameters Requested		Field Test Kit			
<b>Fecal Coliform</b>		Chlorine, T			pH

### Additional Parameters

		Chlorine, T	Time Reagent Added:
			Time Reading Taken:
			Result:
<b>Fecal Coliform</b>	Set Up:    Date                      Time		
	Read:    Date                      Time		
<b>pH</b>	If Litmus Used, Reading:		
	If MIPP Probe Used, Record Above		
	<b>If Pocket Pal Used:</b>		
	Buffer Reading Before:		
	Adjustment Made?		
	Buffer Reading After:		
	Pocket Pal Reading:		



# Illicit Discharge Determination Form

Date Entered: \_\_\_\_\_  
By: \_\_\_\_\_

## 1. Basic information:

Incident start: \_\_\_\_\_(time) \_\_\_\_\_(date) Incident end: \_\_\_\_\_(time) \_\_\_\_\_(date)  
Incident location/address: \_\_\_\_\_  
Weather during incident: \_\_\_\_\_  
Time when the following observations were made: \_\_\_\_\_ Date: \_\_\_\_\_

## 2. Who reported the event to the City of York?

- |  |   |
|--|---|
| <input type="checkbox"/> Field survey screening by illicit discharge inspector         | <input type="checkbox"/> Other City employee      |
| <input type="checkbox"/> Maintenance crew ( <u>not</u> through field survey screening) | <input type="checkbox"/> Non-City government      |
| <input type="checkbox"/> Public call, email, public report to police desk              | <input type="checkbox"/> Non-Profit Organization: |
|  | <input type="checkbox"/> Other: _____             |

## 3. Material discharged: (please "✓" all that apply).

- |  |   |
|--|---|
| <input type="checkbox"/> Paint   | <input type="checkbox"/> Concrete cutting slurry/washwater                          |
| <input type="checkbox"/> Concrete  | <input type="checkbox"/> Vehicle cleaning washwater                                 |
| <input type="checkbox"/> Construction debris   | <input type="checkbox"/> Building/sidewalk washwater                                |
| <input type="checkbox"/> Medical wastes  | <input type="checkbox"/> Other washwater  |
| <input type="checkbox"/> Food wastes   | <input type="checkbox"/> Sewage   |
| <input type="checkbox"/> Industrial wastes (solvents, metals, corrosives, cooling tower blowdown, etc) | <input type="checkbox"/> Automotive fluids (antifreeze, used motor oil, fuels, etc) |
| <input type="checkbox"/> Sediment  | <input type="checkbox"/> Unknown material   |
|  | <input type="checkbox"/> Other: _____   |

## 4. Amount of material discharged (i.e., 55 gallons, 18 pounds, 2 super sacks):

\_\_\_\_\_ (quantity) \_\_\_\_\_ (units) ☐ Unknown

## 5. Describe the material in terms of odor, color, turbidity, viscosity, pH, sheen, etc.

\_\_\_\_\_

## 6. The material was discharged to:

- |  |  |
|--|--|
| <input type="checkbox"/> Sanitary sewer              | <input type="checkbox"/> Curb, street            |
| <input type="checkbox"/> Storm sewer, inlet, swale   | <input type="checkbox"/> Soil                    |
| <input type="checkbox"/> Body of water (creek, pond) | <input type="checkbox"/> Other (describe): _____ |

## 7. Who responded to the event? (please "✓" all that apply):

- |   |   |  |
|---|---|--|
| <input type="checkbox"/> City Fire                  | <input type="checkbox"/> Parks and Recreation | <input type="checkbox"/> Other Municipal Fire/Police       |
| <input type="checkbox"/> City Police                | <input type="checkbox"/> DEP                  | <input type="checkbox"/> Permits, Planning & Zoning        |
| <input type="checkbox"/> MIPP                       | <input type="checkbox"/> YCEMA                | <input type="checkbox"/> York County Conservation District |
| <input type="checkbox"/> Sanitary Sewer Maintenance | <input type="checkbox"/> PEMA                 | <input type="checkbox"/> MS4 Coordinator:                  |
| <input type="checkbox"/> Highway Department         | <input type="checkbox"/> Hazmat               | <input type="checkbox"/> Other: _____                      |



8. Describe the incident:	
---------------------------	--

[illegible]

9. What actions were taken?
-----------------------------

This image shows a single sheet of white paper with horizontal blue or grey ruling lines. The lines are evenly spaced and run across the width of the page, providing a template for handwriting practice. There are no margins, text, or other markings on the paper.

10. The source of the material was:
-------------------------------------

- |  |   |
|--|---|
| <input type="checkbox"/> Could not be identified | <input type="checkbox"/> Construction site                  |
| <input type="checkbox"/> Industrial              | <input type="checkbox"/> Transportation/major auto accident |
| <input type="checkbox"/> Commercial              | <input type="checkbox"/> Minor auto accident                |
| <input type="checkbox"/> Residential             | <input type="checkbox"/> Utility repair or installation     |
| <input type="checkbox"/> Other (describe): _____ | <input type="checkbox"/> City of York municipality          |



**11. Which of the following abatement descriptions best describes this event?**

- ☐ This illicit discharge was abated (mitigated or terminated by action of responders).  
☐ This illicit discharge is on-going and was previously reported. The date of previous discharge(s) is: \_\_\_\_\_  
☐ Abatement not required.  
☐ Not abated.  
☐ Unknown if abatement occurred.

**12. Was the party responsible for the illicit discharge found?**

- ☐ Yes    ☐ No    ☐ na

**13. Which enforcement activities were conducted?**

- |   |  |
|---|--|
| <input type="checkbox"/> None           | <input type="checkbox"/> Administrative Action                                     |
| <input type="checkbox"/> Verbal Notice  | <input type="checkbox"/> Administrative Action w/Penalty and/or Fine/Cost Recovery |
| <input type="checkbox"/> Warning Notice | <input type="checkbox"/> Legal Notice  |

**14. Data collection:**

- Were photographs taken?    ☐ Yes    ☐ No  
If yes, the images are located in:    ☐ Fire/Codes    ☐ Permits/Zoning    ☐ MIPP/SSM    ☐ Highway  
Were samples taken?    ☐ Yes    ☐ No    If yes, attach chain of custody, analysis and/or bench sheet.

**15. Stormwater system information:**

Watershed Name: \_\_\_\_\_ Outfall Number: \_\_\_\_\_  
Inlet ID: \_\_\_\_\_

**16. Illicit discharge determination:**

- |                               |                              |                             |   |
|-------------------------------|------------------------------|-----------------------------|---|
| Source in the City of York?   | <input type="checkbox"/> Yes | <input type="checkbox"/> No | <input type="checkbox"/> Cannot be determined |
| Affected the City of York?    | <input type="checkbox"/> Yes | <input type="checkbox"/> No | <input type="checkbox"/> Cannot be determined |
| Is this an illicit discharge? | <input type="checkbox"/> Yes | <input type="checkbox"/> No | <input type="checkbox"/> Cannot be determined |

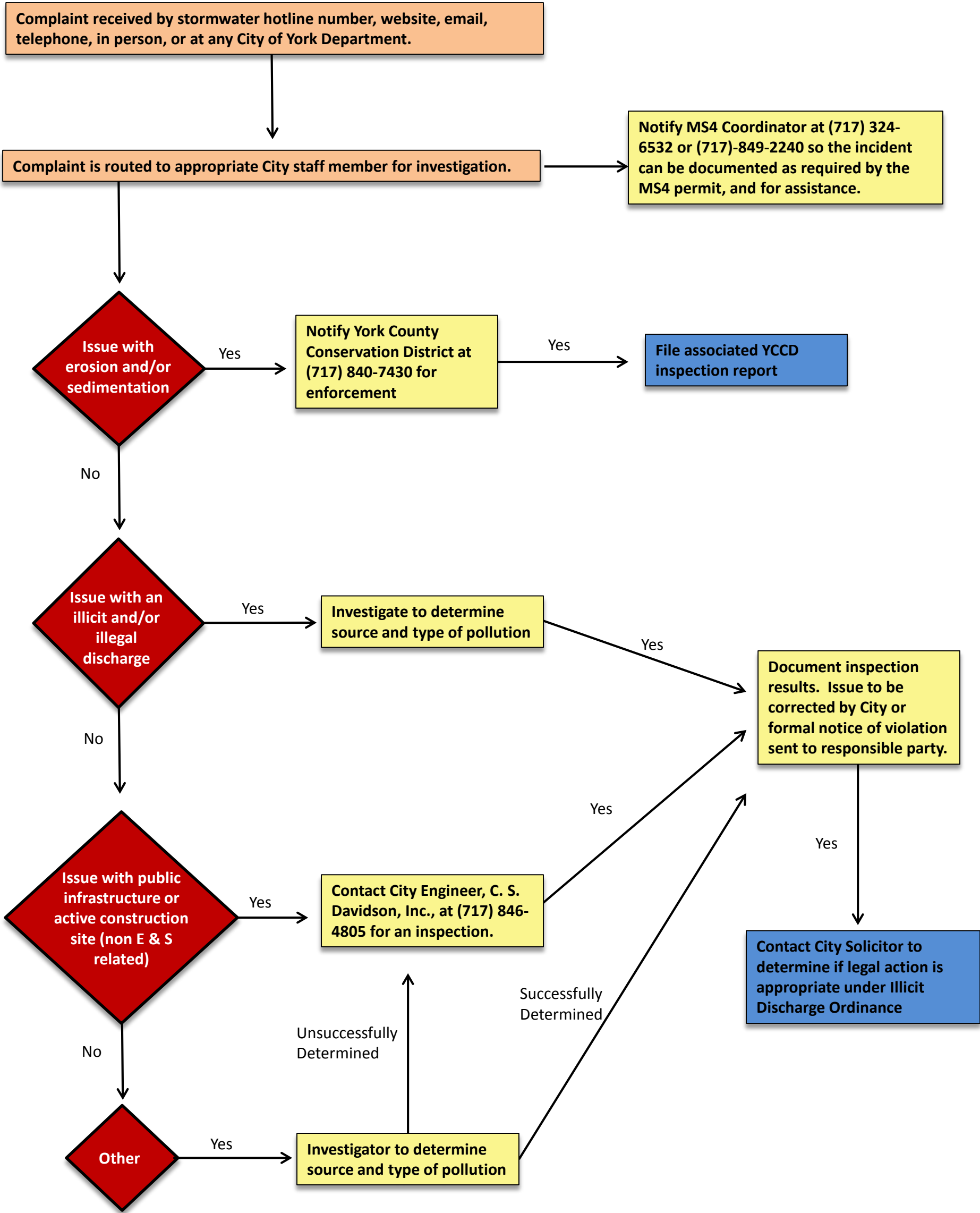
**17. Evaluator information:**

Evaluator Name: \_\_\_\_\_ Title: \_\_\_\_\_

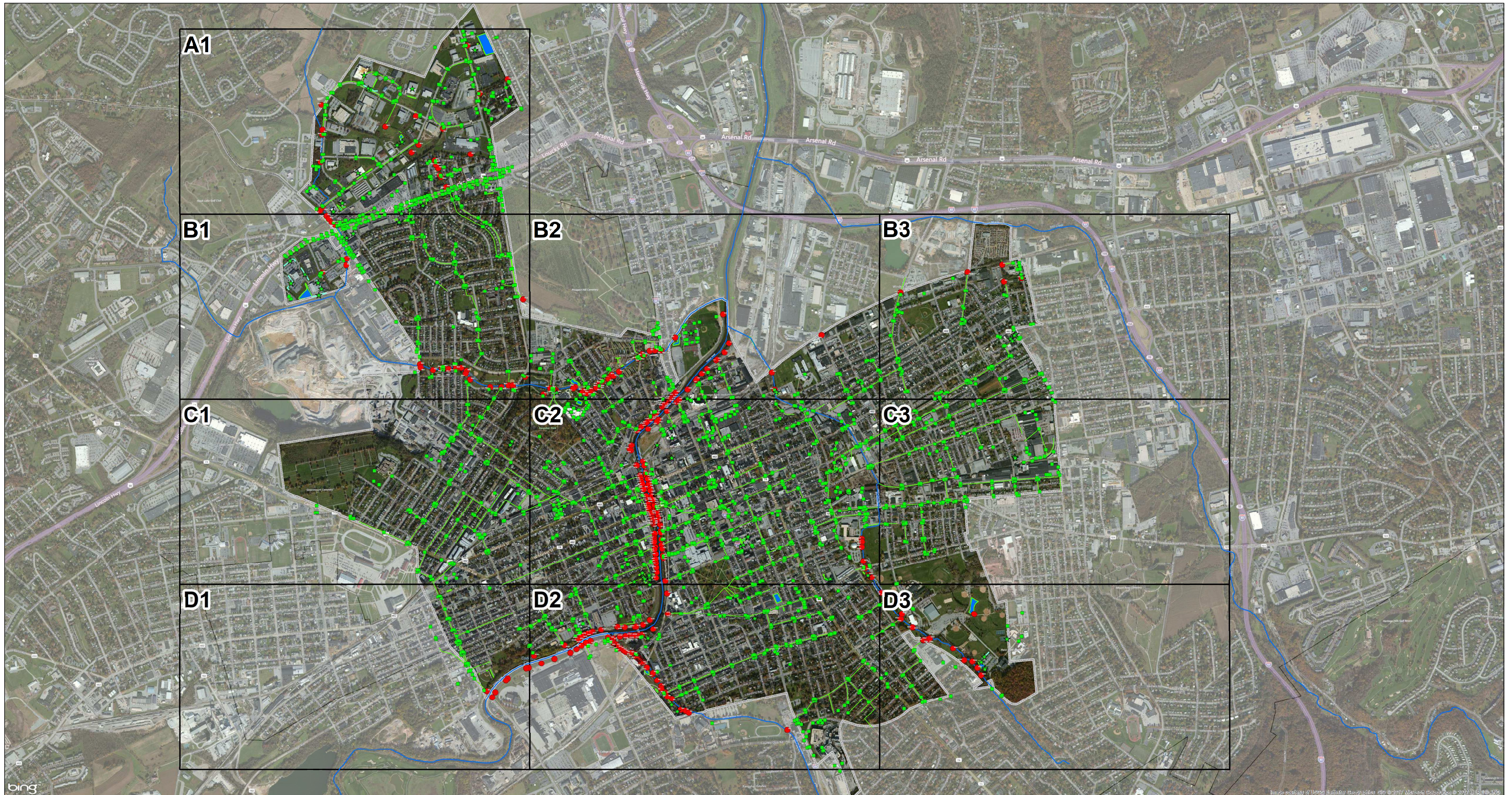


# CITY OF YORK

## PUBLIC COMPLAINTS PROTOCOL

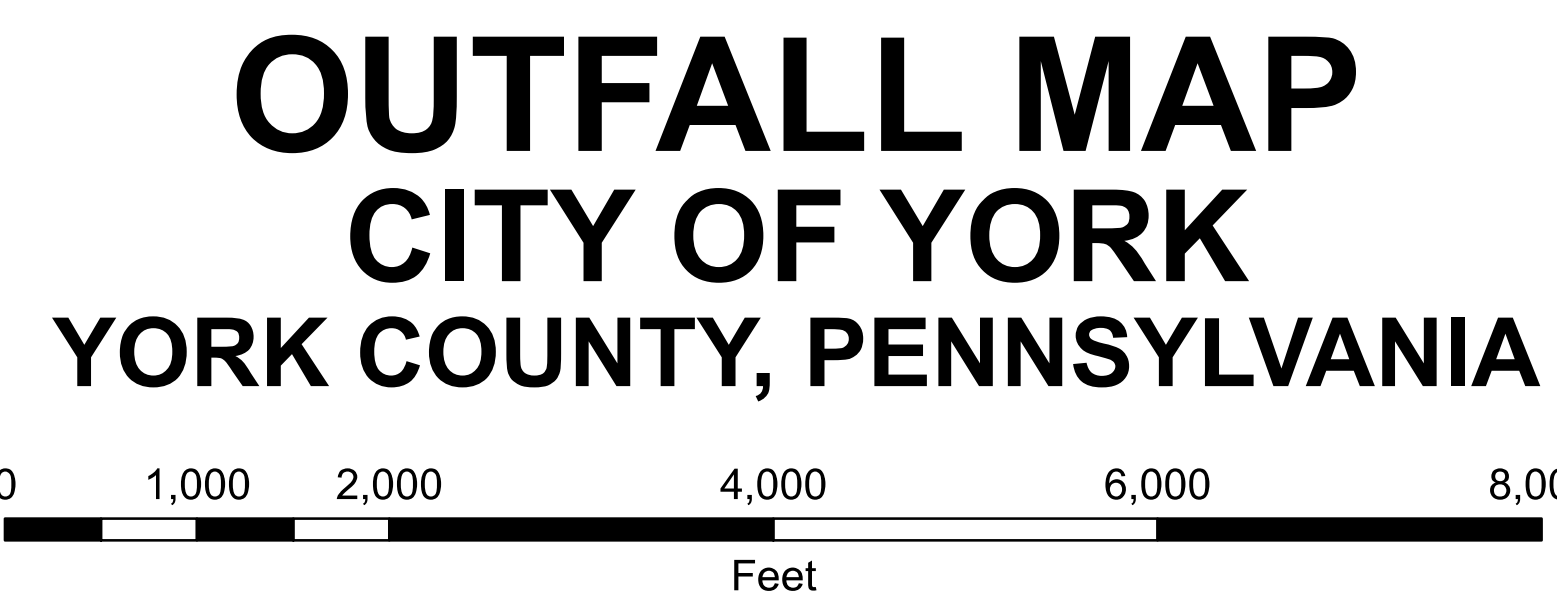




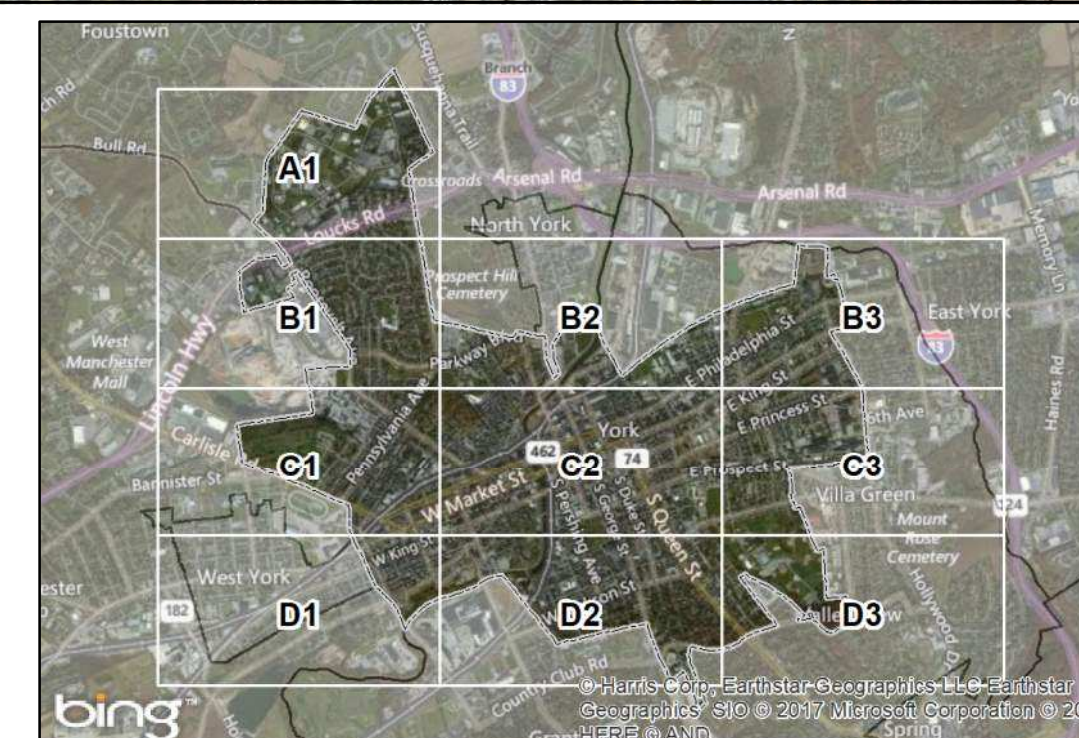


## Legend

- |                 |                         |
|-----------------|-------------------------|
| ■ Inlet         | — Swale                 |
| ● Outfall       | — Streams               |
| ● Storm Manhole | ■ Basin                 |
| ● Downspout     | □ Matchline             |
| ★ BMP           | □ City of York Boundary |
| — Storm Pipe    |                         |



**SHEET NUMBER**  
**Index Map**

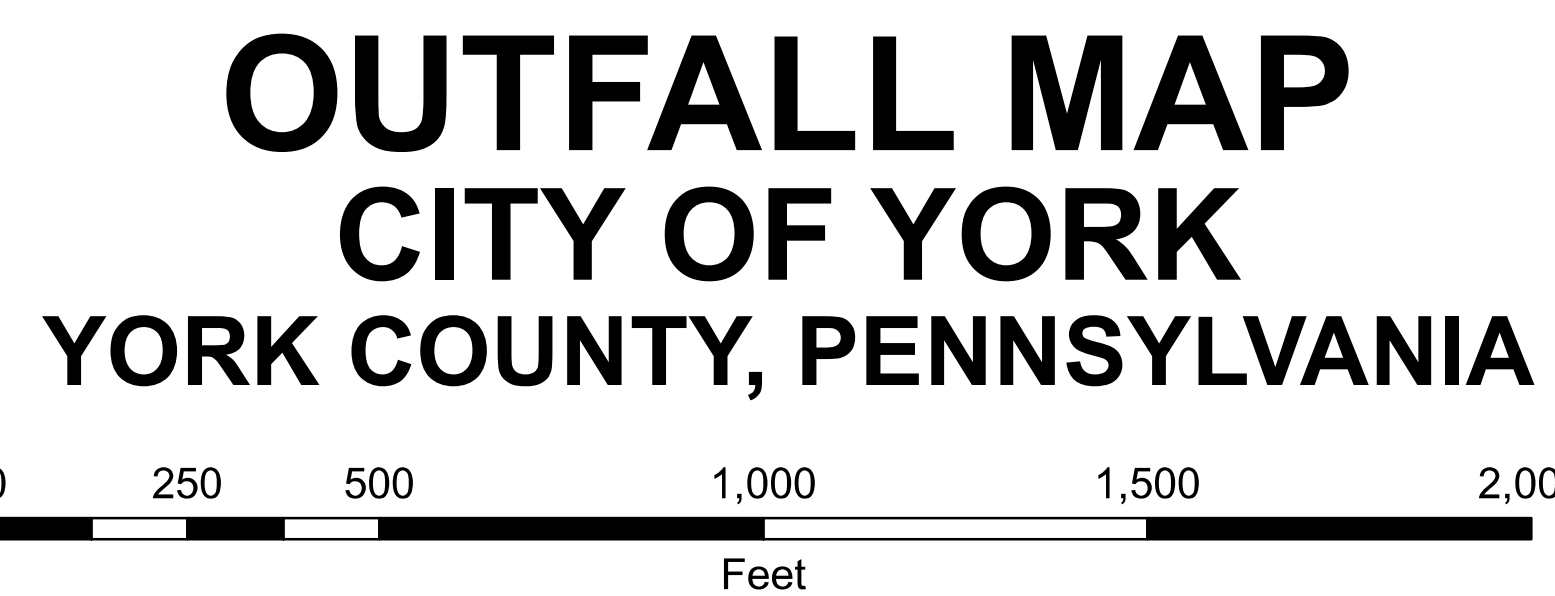






## Legend

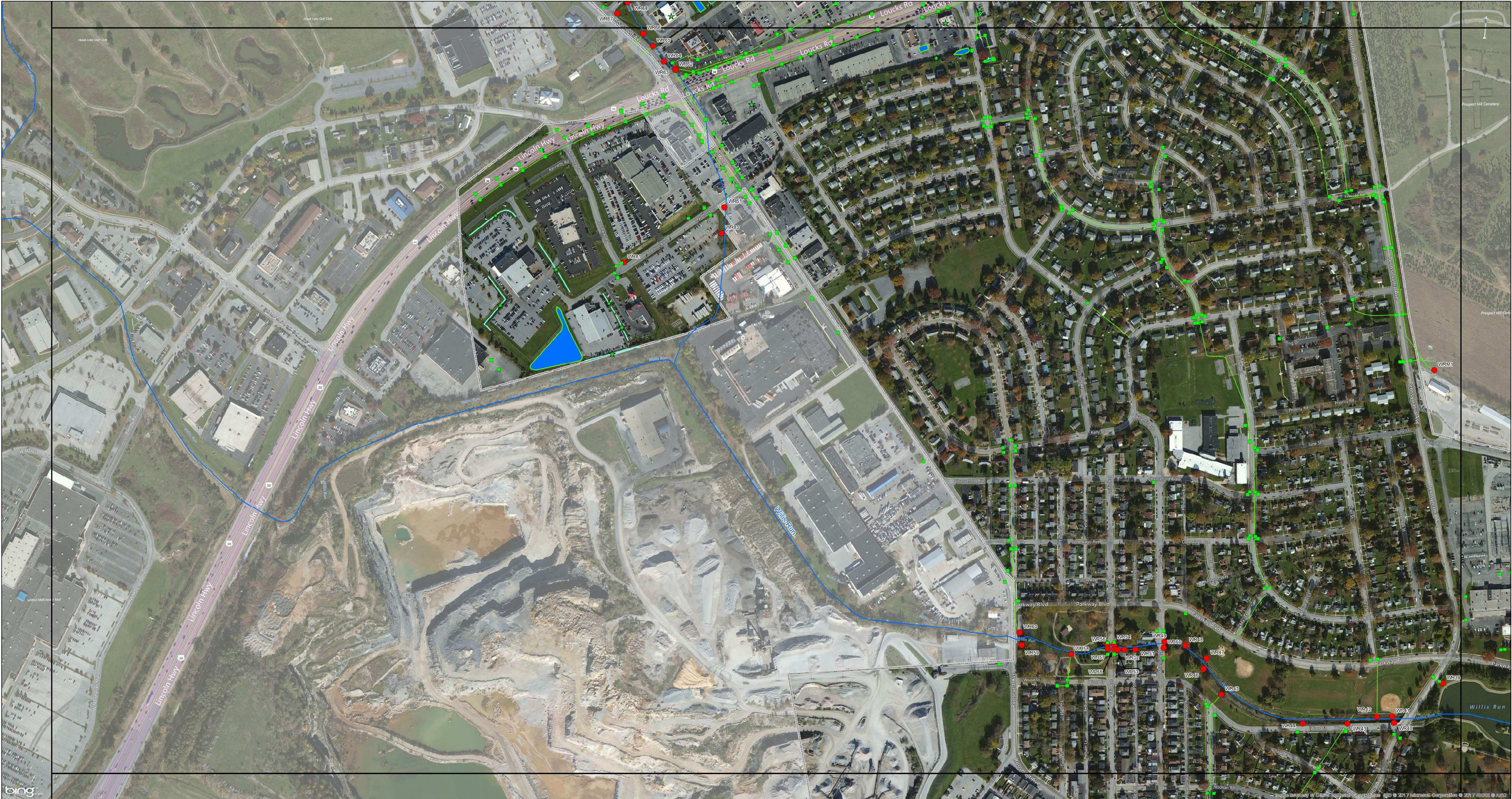
- Inlet
- Outfall
- Storm Manhole
- Downspout
- ★ BMP
- Storm Pipe
- Swale
- Streams
- Basin
- Matchline
- City of York Boundary



**SHEET NUMBER**  
**A1**



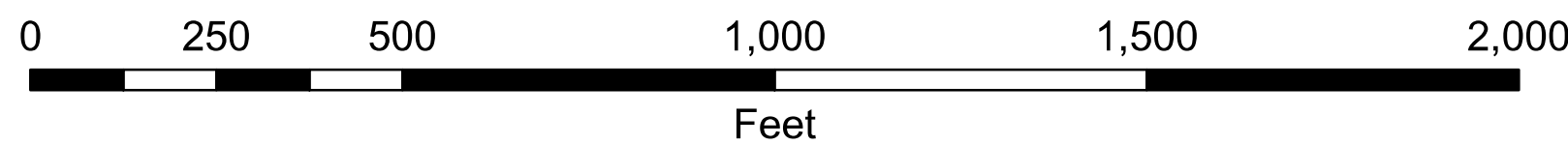




**Legend**

- Inlet
- Outfall
- Storm Manhole
- Downspout
- ★ BMP
- Storm Pipe
- Swale
- Streams
- Basin
- Matchline
- City of York Boundary

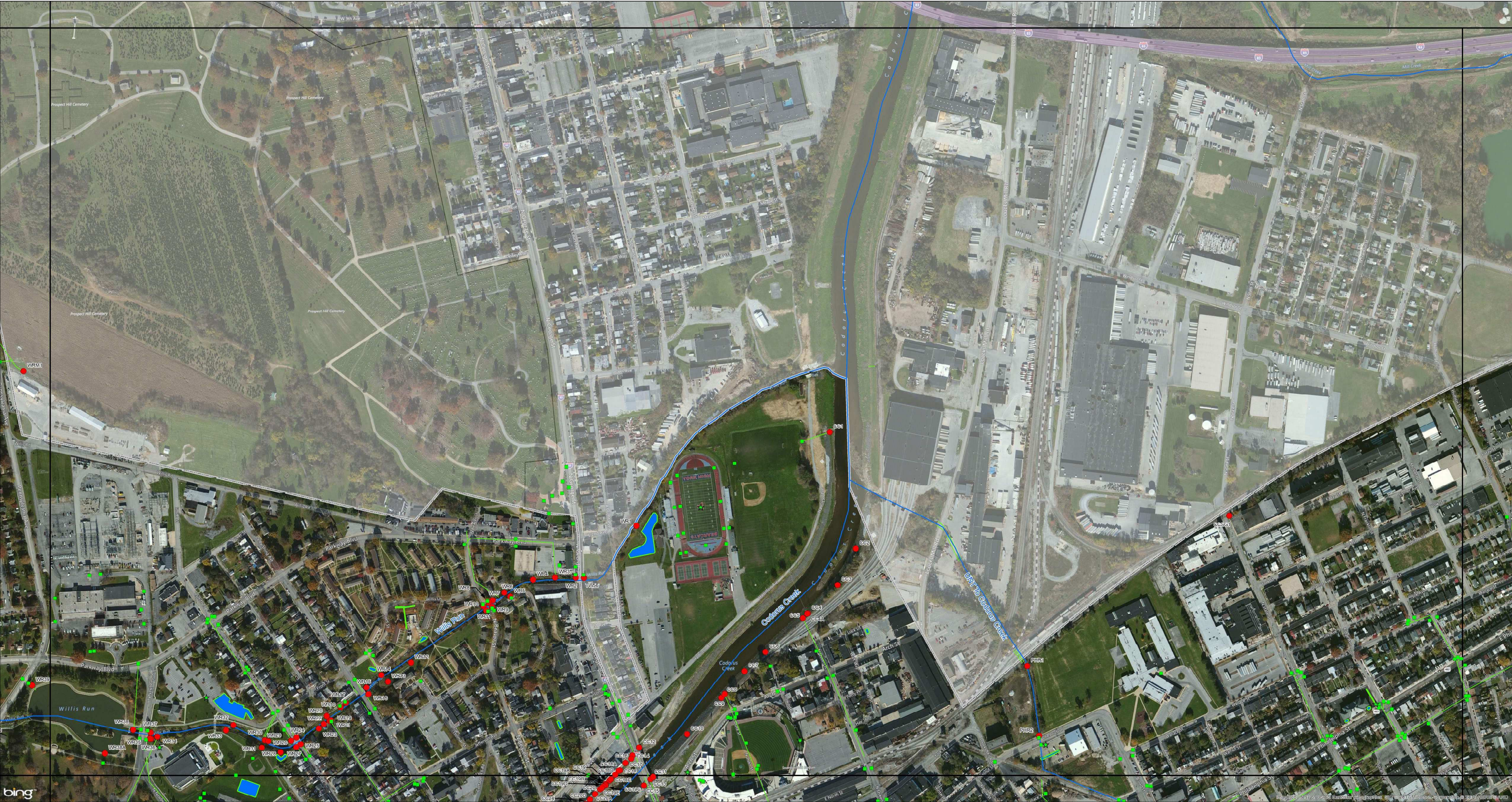
**OUTFALL MAP  
CITY OF YORK  
YORK COUNTY, PENNSYLVANIA**



**SHEET NUMBER  
B1**



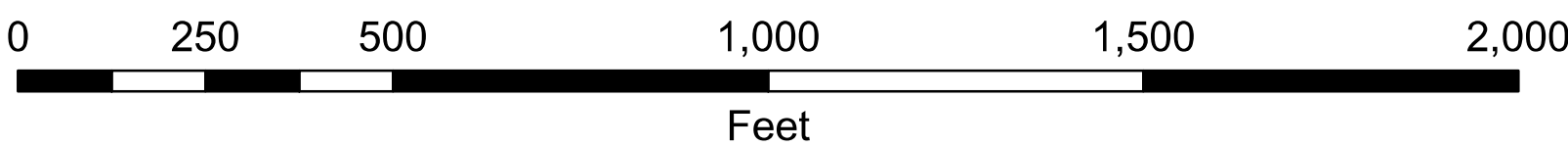




Legend

- Inlet
- Outfall
- Storm Manhole
- Downspout
- BMP
- Storm Pipe
- Swale
- Streams
- Basin
- Matchline
- City of York Boundary

OUTFALL MAP  
CITY OF YORK  
YORK COUNTY, PENNSYLVANIA



SHEET NUMBER  
B2

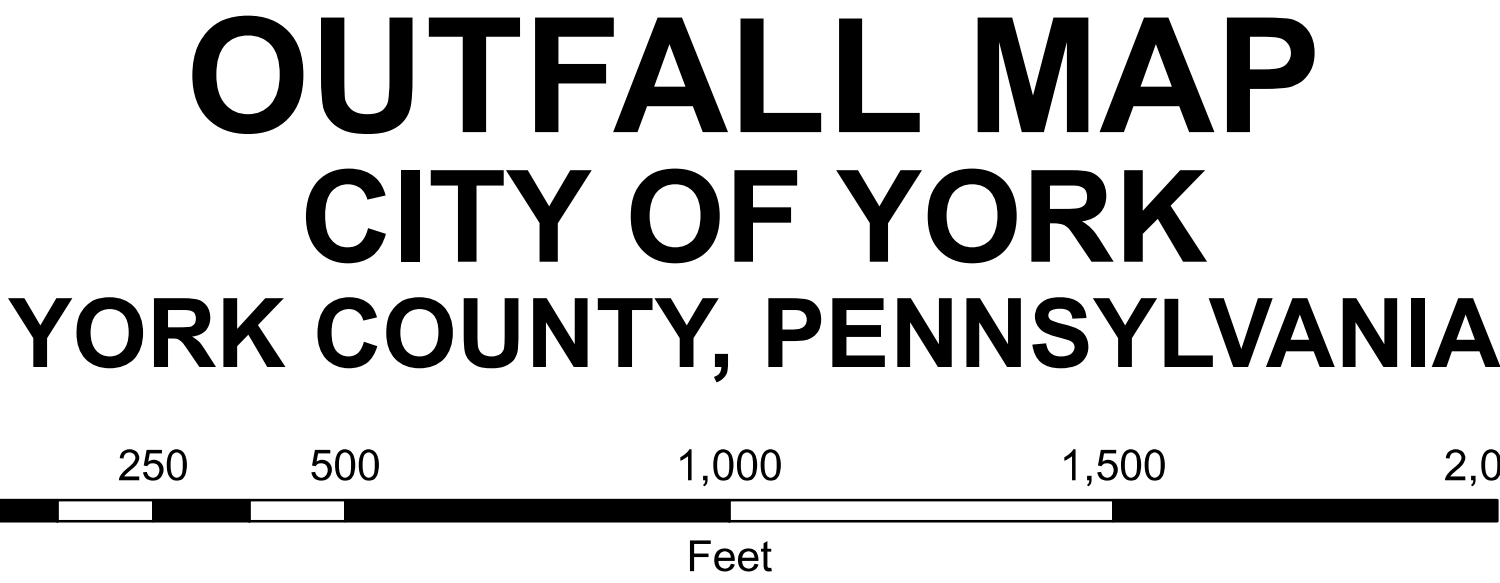






**Legend**

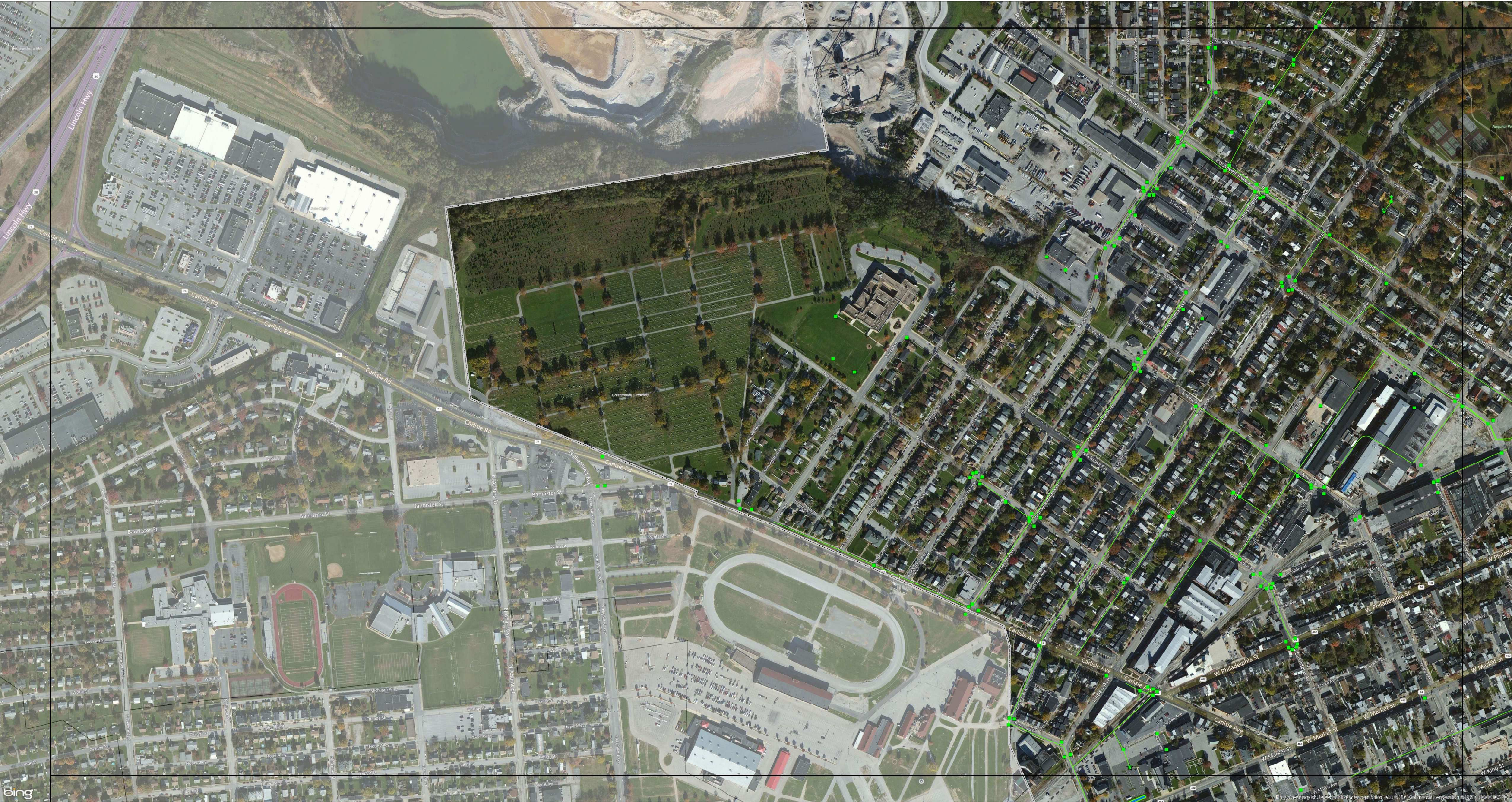
- Inlet
- Outfall
- Storm Manhole
- Downspout
- BMP
- Storm Pipe
- Swale
- Streams
- Basin
- Matchline
- City of York Boundary



**SHEET NUMBER**  
**B3**







**Legend**

- |                 |                         |
|-----------------|-------------------------|
| ■ Inlet         | — Swale                 |
| ● Outfall       | — Streams               |
| ● Storm Manhole | ■ Basin                 |
| ● Downspout     | □ Matchline             |
| ★ BMP           | □ City of York Boundary |
| — Storm Pipe    |                         |

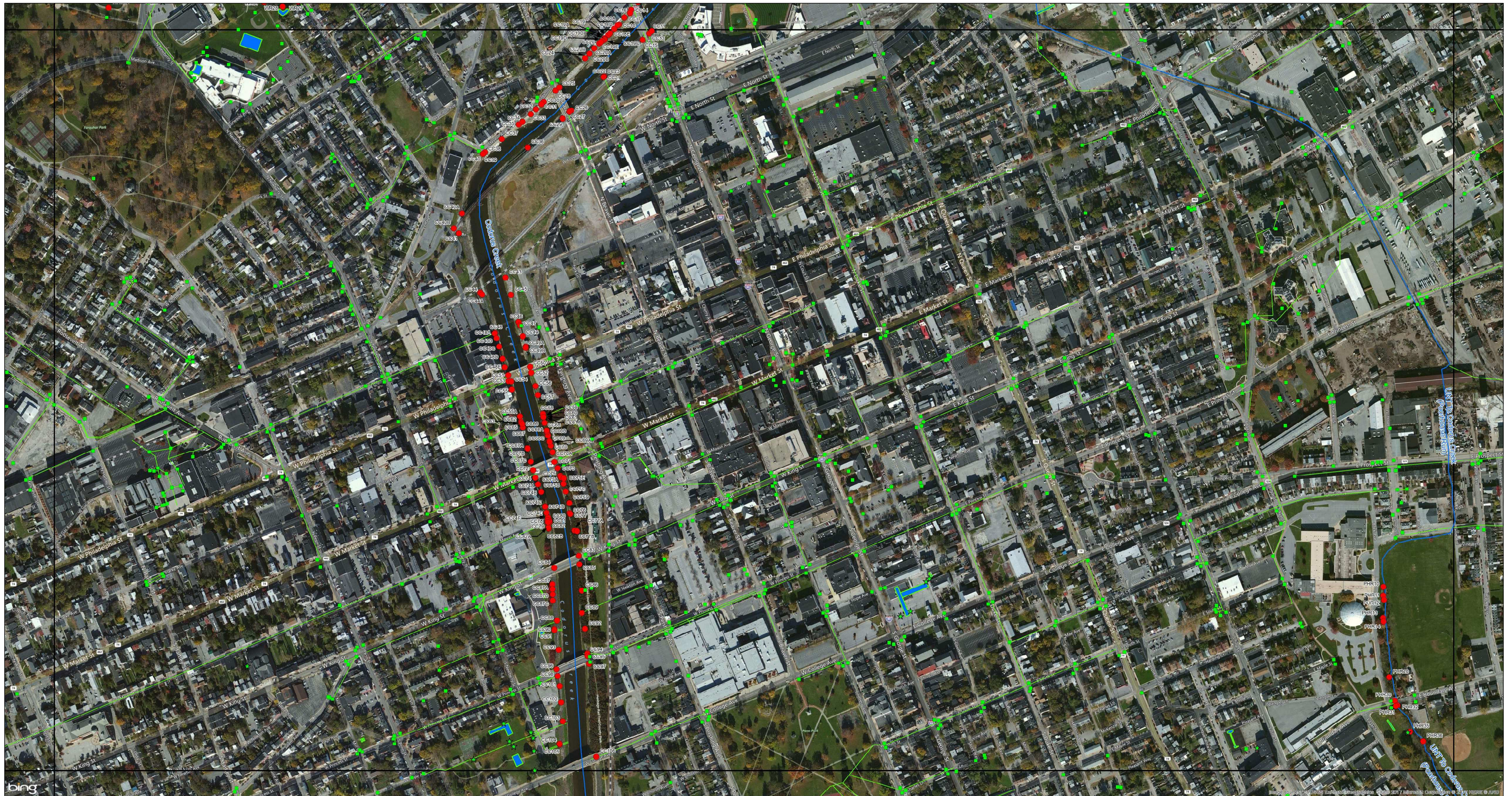
**OUTFALL MAP**  
**CITY OF YORK**  
**YORK COUNTY, PENNSYLVANIA**

0 250 500 1,000 1,500 2,000  
Feet

**SHEET NUMBER**  
**C1**







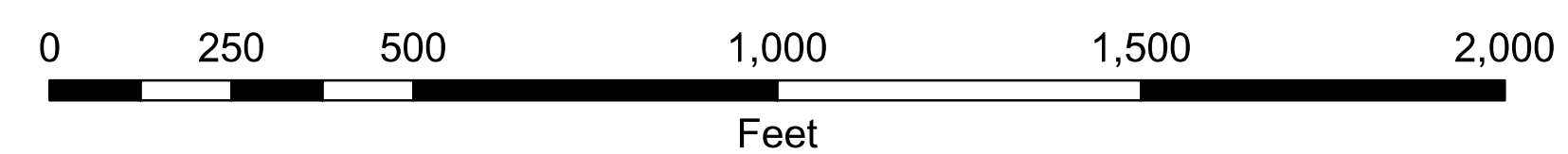
### Legend

- Inlet — Swale  
● Outfall — Streams  
● Storm Manhole  Basin  
● Downspout  Matchline  
★ BMP  City of York Boundary  
— Storm Pipe

# OUTFALL MAP

## CITY OF YORK

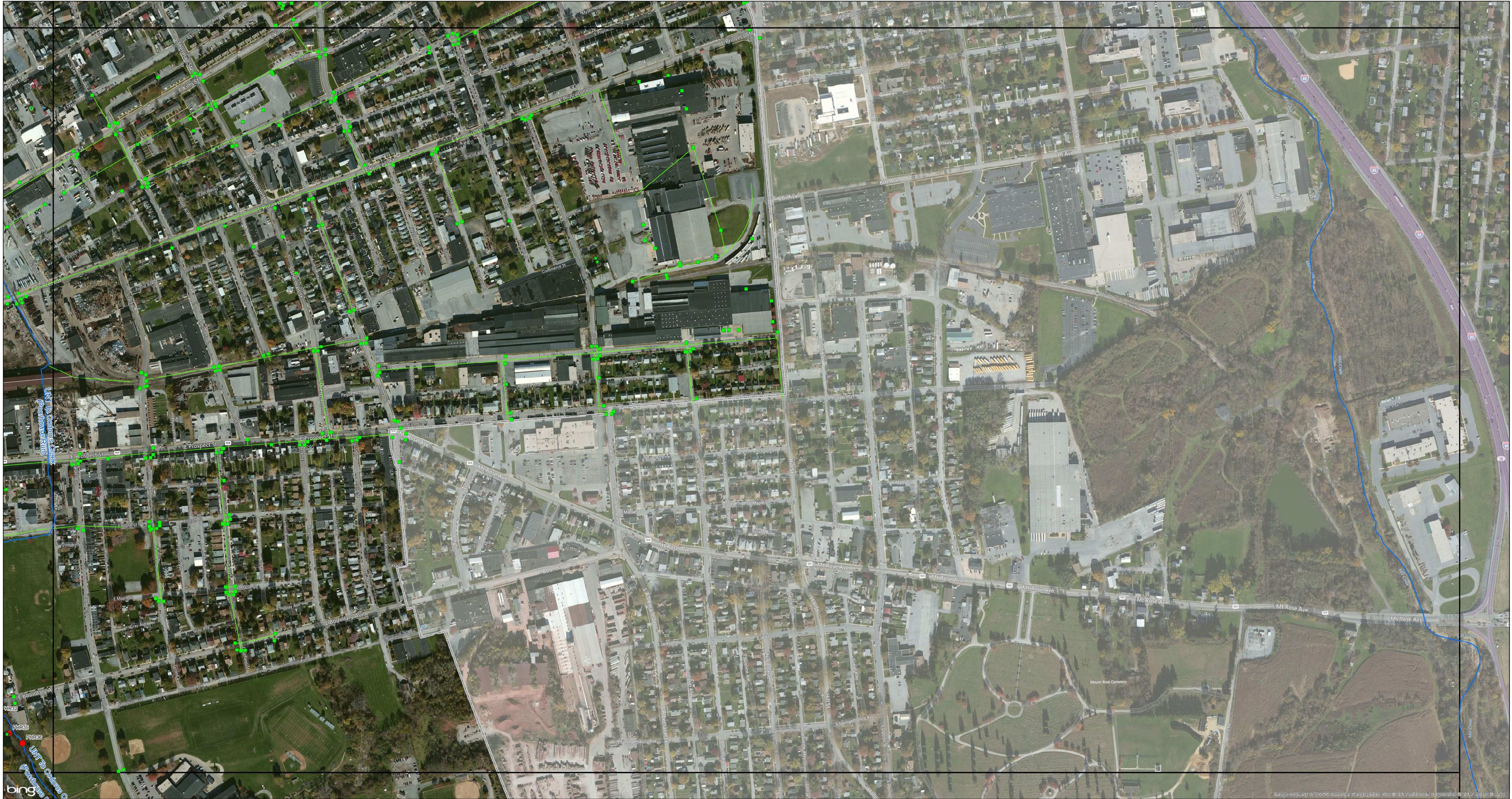
### YORK COUNTY, PENNSYLVANIA



**SHEET NUMBER**  
**C2**

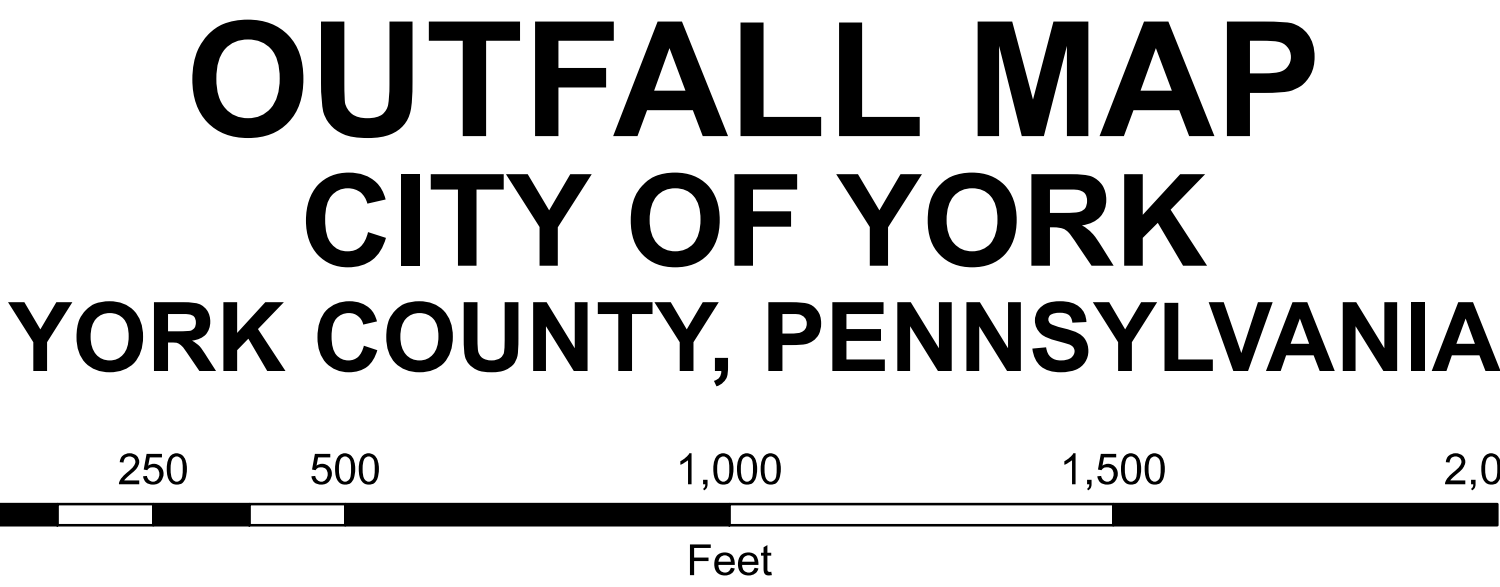






**Legend**

- |                 |                         |
|-----------------|-------------------------|
| ■ Inlet         | — Swale                 |
| ● Outfall       | — Streams               |
| ● Storm Manhole | ■ Basin                 |
| ● Downspout     | □ Matchline             |
| ★ BMP           | □ City of York Boundary |
| — Storm Pipe    |                         |



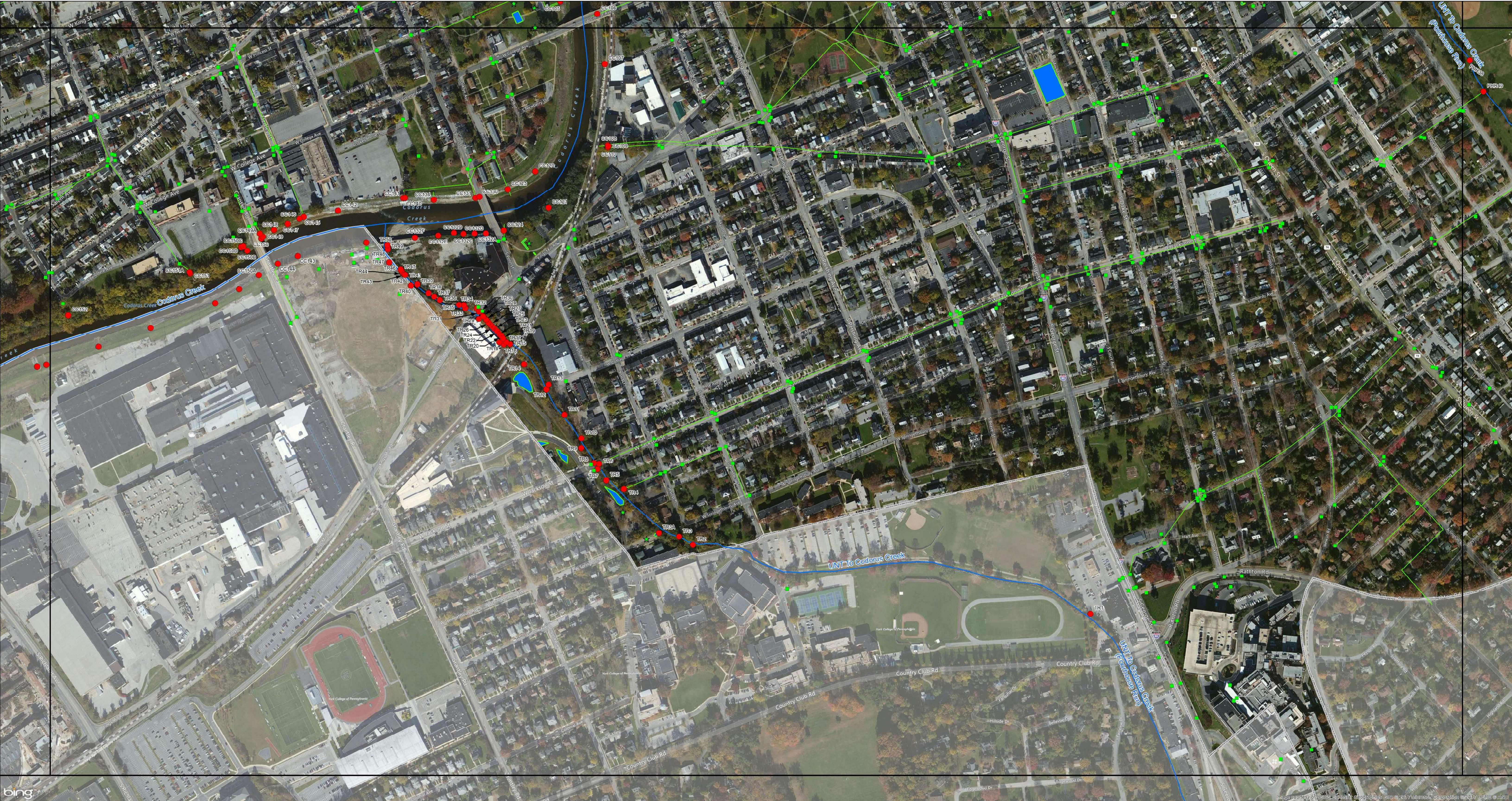
**SHEET NUMBER**  
**C3**







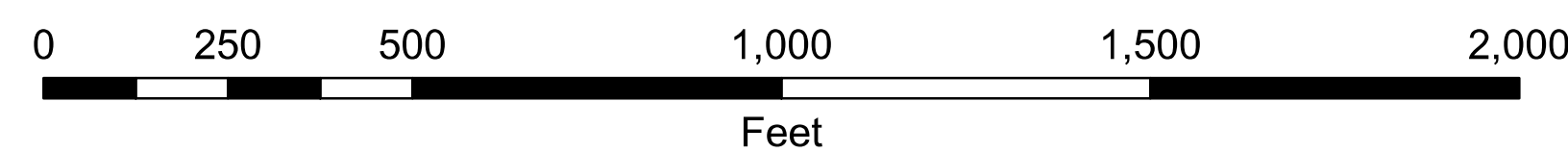




**Legend**

- Inlet
- Outfall
- Storm Manhole
- Downspout
- BMP
- Storm Pipe
- Swale
- Streams
- Basin
- Matchline
- City of York Boundary

**OUTFALL MAP  
CITY OF YORK  
YORK COUNTY, PENNSYLVANIA**



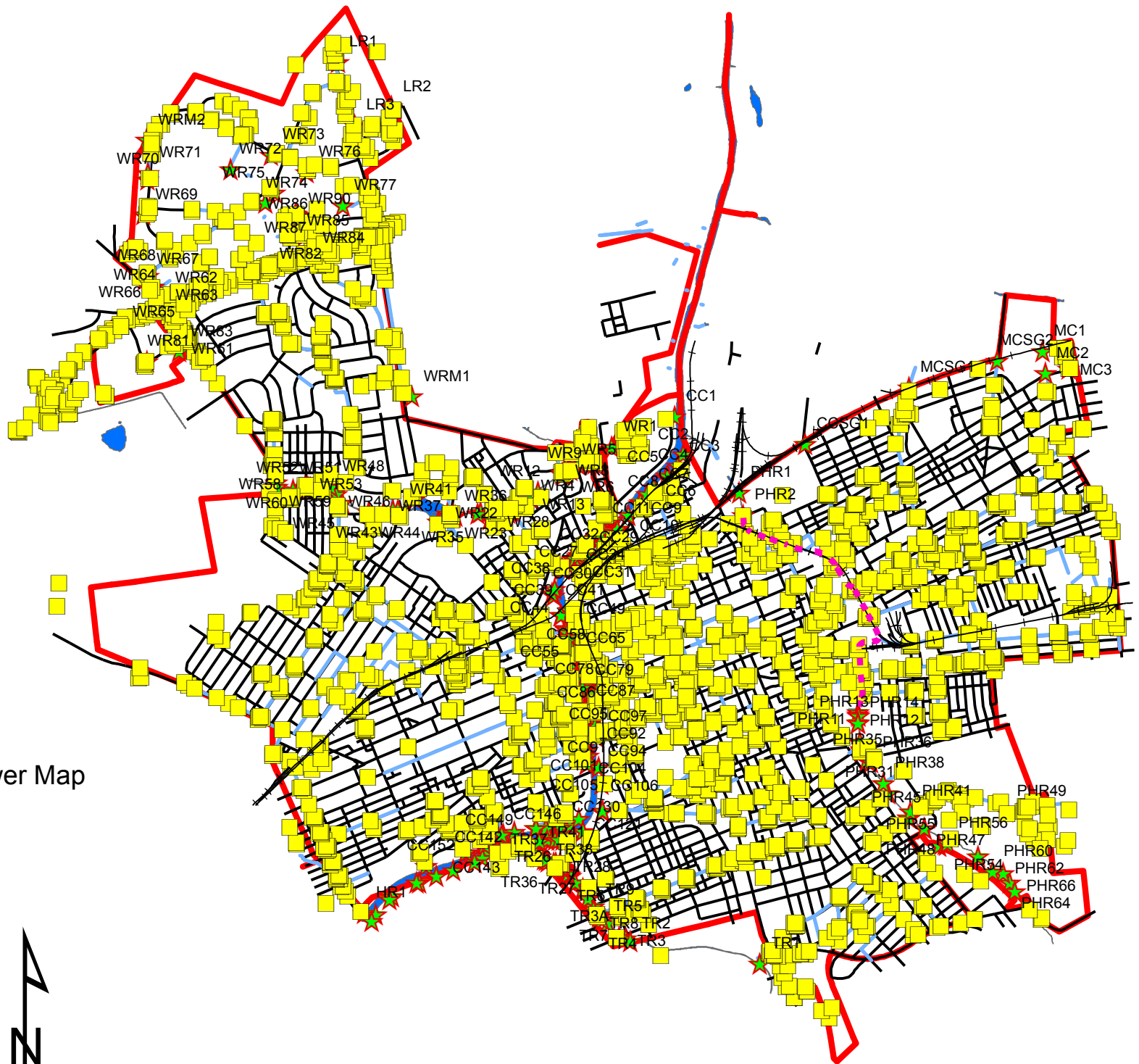
**SHEET NUMBER  
D2**











City of York Storm Sewer Map

Date: 3/15/2017

Legend

- poorhouserun
- railrd
- SWStructures
- Stormlines
- SWOutfalls
- CLINE-ROAD





4/2/2018 - Received a phone call from Nancy stating that she is forwarding me a sewer call on W. Philadelphia Street. She said the caller said the sewage was flowing onto the sidewalk into a parking lot. Received the email, noted the address and phone number of the caller. Responded to the scene and tried to find the location of the leak. I called the caller (Luz) and she came to her door. She explained that a lot of sewage was coming out over the weekend and flowing onto the sidewalk and into the street. She said it's a little now but it flows high sometimes. I explained that if the tenants don't know there is a clog, they will continue to flush which causes the rise in flow. She states that she has an elderly grandmother and they sometimes park on the other side of the house and she doesn't want her grandmother to have to walk through the sewage. I told her thank you for calling. I took photos but with the overnight snow and extreme melting going on, I didn't see much sewage residue. I did however take photos of the dark silt like stuff coming from the two holes. I also got a slight whiff of sewage odor. I tried knocking on the door but no one answered and mail was still in the mailbox. Luz said these new tenants have only been in the house for a couple of weeks. I then called Kelli Hill and left a message. After lunch I decided to send her a follow up email to which I found that she is out of the office until Tuesday. Her away message said to call Charly Forrest at her number. I dialed her number and she directed me to Michele Painter who took down the information and said one of the inspectors would be out to look at it when they are back from lunch. I said that was fine and if they needed any assistance to give me a call. 4/3/2018 - Called Michelle Painter and asked if any inspectors were able to go out there yesterday afternoon, and she said I would have to speak with Shelton Scott about that, but she said he was currently at lunch. I said I just wanted an update so I could update my records so I will email him and he can get back to me when he can. She said ok. I emailed Shelton for an update. Shelton called me and told me he just went by and thought there was poop in a pink plastic pool sitting in the area of the leak but he saw it was dirt and that the owner had been digging up the area near the leak. He said the owner stated that he thinks the neighbors' sewer pipe comes into his basement and connects with his pipe and that is where the leak is.....Shelton and I think it is highly unlikely. Shelton said he is meeting with the owner tomorrow morning to discuss what's going on. Shelton invited me to see if I would like to go along and I said that's ok he can investigate and just follow up with me after. He said he would. 4/4/2018 - Received a call from Shelton stating that during his investigation this morning it was found that the fresh air vent was covered by the siding that was put on the home. He said the whole house is backed up and somewhere between the trap and the cap is a clog. He could hear the sink gurgling when he flushed the toilet. The sewage was coming out of the fresh air vent that was behind the siding on the home, running down the inside of the siding, and then onto the sidewalk. Shelton also mentioned that the owner has been digging in the area of the leak and left a hole that was filling with dark water. Shelton told him that he cannot allow that water to overflow onto the sidewalk and that is going to need to call someone in to fix the clog and clean up that black water in the hole. I thanked him for this information and to let me know when everything is cleaned up and fixed to his satisfaction. He said he would. 5/17/2018 – I have left multiple messages for Shelton and I have not received any response. I am closing this case.

4/3/2018 - Call from SUSCOM Center about oil across the whole creek, not coming from CC48. Lettice received a voicemail from Lynn at the SUSCOM center explaining that there is dark oil in the creek and it's a lot of it. He says it spans across the whole creek. Lettice listened to the voicemail at 12:18pm due to being in a training class from 8am-noon.



Nancy called asking for Lettice and Veronica stated that Lettice is in a training until Noon. Nancy explains a call she received about the SUSCOM center and left Lynn's number (717) 577-7550. She explains that he told her there is oil in the creek and LOTS of it.

Veronica calls Lynn at 11:04am. He again explains there is dark oil in the creek and it is the entire length/width of the creek. He said he can see it at the Phila Street Bridge and he walked to the market street bridge and it is there as well. He says it's floating in the creek. He explained it was dark in color. Veronica asks that it is not coming from the outfall pipe, and it is already in the Codorus Creek and he said that is correct.

11:09am Veronica and Sally responded to the SUSCOM center. Veronica states that the creek is darker than usual due to the overcast, and thick cloud cover, and sediment in the creek due to the heavy rains we had this morning.

11:29am They headed to the Market Street bridge and saw the same. They headed to the S Penn Street Bridge and it was the same. She stated there was no odor at all.

11:38am Sally and Veronica left the Zinns Quarry Road location and noticed the same dark color.

Conclusion: The dark tint in the water is the excess sediment kicked up by the mornings' heavy rains. The creek depth is higher than normal. And the dense overcast sky allows the creek to look very dark. The depth of visibility in the creek is about 1", that's about it.

12:07pm Called Lynn back and explained their conclusion and findings. Veronica notes that he seemed unbelieving but said he would "take our word for it".

4/6/2018 - Received a call from James H about a yellowish grease or oil looking substance in a stormwater inlet on Neu Road between HACC and Blue Line Rentals. I asked him what it looked like, and he stated it was yellow in color, looked like grease or oil. I asked if it was near Protech and he said no, up the road further near Blue Line Rentals and HACC parking lot. I asked if he would be there in a few minutes that I will come take a look, he said he would. I arrived and he showed me the inlet with the yellowish substance in it. It was not a lot, pretty minute amount but there may have been more at an earlier time as the side of the out pipe was stained with the yellow material. We checked the outfall across the street and saw a slight residue on the bank of the creek above the water level. We then walked to the upstream inlet near the entrance to the parking lot to HACC. Did not see any water flow, or residue. Checked the grass swale on HACC property, the inlet has a large cement block in the inlet, and the pipes have leaves and other debris in them. Checked the inlets on the parking lot property. Most are filled with road salt, silt, and other gravel like items, but minimal water. We then pulled the manhole that was between the inlets. Did see some water and a slight grayish sheen in the manhole. The manhole water and the stains/grease were photographed. I did not see any benefit for abating the oil as it would be more of a pain for such a small amount. It does not look like the oil was dumped, but probably comes from the runoff from the very large parking lot at HACC and just accumulated in the drain. It is not flowing out to the outfall. I will keep my eye on these inlets.

4/9/2018 - During a routine check on CC48, I discovered that there is a slight sheen coming from the outfall. Took a photo and documented the time and conditions. This is an ongoing investigation.



4/12/2018 - During a check of the outfall due to a prior and completely different complaint, James H and I went to check out the outfall. We were trying to determine if there is a trash or sediment clog at the outfall that could be causing flooding upstream. When we arrived, we saw the dump site. Photos were taken and an inventory was also noted. We tried to pry open the flap gate to HM1 but was unsuccessful due to the sheer weight of the flap gate. We went up the bank to the concrete pad on "top" of the outfall and noticed a large metal grate on the ground. We figured this is an access point to behind the outfall, however, it was padlocked shut. We also determined that the pole on the pad has a device that is used to open the outfall manually - a sort of "crank" device. I then called Albert M. from highway to come out and take a look. We showed him the dump site and he said he will try to work on this tomorrow and will call me if he needs help. He then tried to use a few keys on his key ring for the padlock on the grate but was unsuccessful. We then thought maybe it was the Army Corps of Engineers property and they may have a key. We then decided to possibly dig all the trash out the next day.

When I got back to the office, I sent an email to Steve Young about the padlock and obtaining access to the outfall. Awaiting reply. 4/13/2018 - Yesterday afternoon Albert M from Highway started to fish out the items from the creek and outfall. Friday morning, I went out to help him carry the items from the outfall up to the truck. The outfall and pool below is now clean. ACOE did come by in the morning to open the metal grate so we could take a look. There was no sediment buildup or trash seen. There is a steady flow of water. Photos of this were taken.

4/13/2018 - James H from Sewer Maintenance notified me that he was driving down Clarke Alley and saw some pink stuff coming from one of the parking lots and had flowed into the sewer manhole. I told him I would come by and he met me there. There is a stream of pinkish colored dust coming from the side of the building across the street and up the hill from the YMCA entrance. This may be the building that is being demoed from a conversation Chaz, Jeff Shue, and I had with a lady from there the day prior. It looks like they are disassembling the roof and some dust may have been sprayed or at one point flowed off site and pooled at the sewer manhole that has depressed into the road. I will send an email to Chaz to see if he can contact someone from the YMCA and have their contractor ensure their debris does not leave their work site. They can use absorbent socks along the fence line as a line of defense.

4/19/2018 - Received an email from James H. about a substance he found in two of the inlets at this intersection. He was unsure of what it is but it looks like grease. He said it was in two of the inlets. When I responded, I noticed the inlets straddled the nail salon, which could be a source, but there are no other indications in where this substance came from. I then noticed the inlet across S Queen Street from the nail salon is full and nearly completely covered by sediment. I took photos and documented this incident. When I returned to the office, I sent Tom Landis (HWY Super) an email stating where this has occurred and asked if members of the highway crew could vector out the inlets.

4/24/2018 - During a routine inspection of this outfall, I noticed what looked like sewage particles laying on the outfall. I took photos and then went down to the outfall to inspect. I did not smell any odor. I did not see any discolored water, just the filtered toilet paper particles everywhere. I swished them with my boot and it did not break apart easily. I went back to the office and showed Veronica C. what I had found because I was not 100% sure it was sewage. She said it definitely looks like sewage and she offered to go out with me to take a better look. We first went down to Sewer Maintenance and asked if they had any call outs in the area, they said they had not. We then thought about taking a sample of the outfall water, but figured it was too late in the day for the lab to process the sample since there are



certain parameters that need to be met. We inspected the substance again and she 100% thinks it is sewage. She explained the only way to find out where it came from is to either do dye or smoke testing into the SS or to cam the outfall. We drove around the area on our way back to the office but did not see any actively flowing sewage on the surface. The next morning Veronica emailed Frankie to let him know of our find and suggest that a further investigation may be necessary. At 745am on April 25th (the next morning) I went by the outfall and the sewage was gone. We had heavy rains overnight which washed the sewage out. I will continue to monitor the outfall to see if any more sewage is seen.

4/25/2018 - As I was out doing routine checks, I came across a large spill of blue and pink sand-like material. Tavares (highway bureau) was already stopped and was about to move the large blue bin that was sitting vertically in the middle of W King Street. I asked what happened and he said he did not know, he turned the corner and there it was. I said ok, let me pull over and I will help him get the bin out of the street. I pulled over, grabbed gloves and we both pushed the very large blue bin over onto its wheels. We then wheeled it out of the street. I proceeded to snap photos as Tavares moved the other items out of the street. He moved a shovel, a full propane tank, seat beads, and a cooler that contained a bottle of water and 1 or 2 Gatorade's. Tavares noticed that the words "York Rescue Mission" was written on the propane tank. He called YRM and told someone what happened and they said they know who it was and that someone would be there to clean it up immediately. Tavares then tried to call Tom Landis to let him know what was going on but it went to voicemail. I was going to pull around the block to block the side of the street so traffic wouldn't track the salt farther up the road. As I was going to pull off Tavares said he didn't reach Tom. Tavares said he was going back to Highway to get the street sweeper. I called Tom as I was pulling around the block and left him a voicemail. As I was pulling onto W King to block off the side of the road, Albert Murray pulled up. He said he had gotten a call from a relative who lived nearby and saw what was going on. As Albert and I were talking, Tom Landis called me back and I explained what was going on. He said ok and he was around the corner and would be here shortly. As I was hanging up, a gentleman from the Rescue Mission rolled up with a forklift. He stated he must have forgotten to latch the gate to his truck before pulling off and it all must have fallen out when he made the turn. Albert and I situated the large blue bin onto the forks of the forklift and the man lifted it enough so the wheels were off the ground and situated it near the salt. The three of us then shoveled the salt back into the blue bin. We moved several times to ensure we got all the material up. Tom Landis showed up and we explained what happened. When we were finished, the man put the other items into the bin and took them back around the corner. Soon after, Tavares showed up with the street sweeper. We cleared out the nearby inlet and gutter to get the road clean. He made 2-3 swipes with the sweeper and the road was then clean. I took a photo showing the road was now clean.

4/27/2018 - During a routine inspection, I found that there was a discharge at CC48 during a high flow since we had rains overnight. I photographed the area and documented the find. After our Public Works meeting at 9am, it was suggested by Chaz Green (PW Director) that he thinks it is time for DEP to take over. He stated that we have exhausted all our resources and have come up with nothing. We are stuck and need some assistance. When I returned to the office, I sent an email to Scott Arwood (Harrisburg Office) and to Summer Kunkel at the local DEP office, stating our difficulties and recommendations. I asked for assistance and that I am willing to meet with them to discuss what procedures we took and possible next steps. As of right now, I have not heard back from either party.

4/30/2018 - Received an email from Buffington about this address and he stated I might want to document this. I arrived at the scene. First time down the alley I did not see anything. Second time



around I found the puddle. It was a very dark brown material, no odor, no sheen. I followed the stain on the street around two corners onto Lynch Way and documented where it seemed to have ended. Along the way I noticed that oil dry was put down the whole way, except for the puddle near the beginning. As I was walking back up to the beginning, a neighbor stopped me and asked if I was from the fire department. I told him I was with public works with the City and just checking out the spill that must have happened yesterday. He said he was the one that called it in. He said it was not there yesterday morning, but around 1pm he came out and saw it running down the street and he called 911 to have the fire department come out. He said they put oil dry down. He then told me about some other things that has been going on in his neighborhood including someone who used to dump their radiator fluid onto the street. He says he used to just put dirt or sand on it and sweep it up. I told him if he sees it happening again and know who it is, to call us and let us know. He said he would but it was several years ago. After speaking a few minutes with the neighbor, I walked back around the corner and put absorbent towels on the puddle. Unfortunately, it was pretty windy today so the towels did not stay put, even after I had stepped on them. I used what oil dry I had in my truck to try to sop up the puddle but it wasn't enough. I called for Albert in Highway but Tom said he was off today. I asked Tom if there was anyone nearby this address that has some oil dry with them that could help me out with the puddle. He said that Jay could go get some and meet me there, I said no that is ok and that I had some back at the shop and I didn't mind going to get some. Afterwards Jay said he will go ahead and get some and bring it out. I gave him the address again and in a few minutes he arrived with a bag of oil dry. I explained what happened and he placed the bag on the puddle. He spread it out with his foot. I thanked him, took a photo and we left. I will sweep up the oil dry tomorrow because the street sweeper would be too wide to fit down the small alleyway.

5/4/2018 - Received a call from James H about sewage coming from the side of 258 E King Street and I needed to come out and take a look. I arrived at the scene and James showed me where the discharge was coming from. I took photos and documented the situation. I called Elite Property Management's office number and the automated recording directed me to call a different number for maintenance. I called the maintenance number and the lady (with an attitude) said she would try to get a hold of the maintenance manager. I explained that a plumber needs to come out immediately. I then called the PPZ office but no one was in the office yet. I then called Steven Buffington and explained what was going on. He said he will be by. I then walked down the street and followed the sewage. It looked like there was a high volume at one point but when I got to the inlet, the substance looks to have dried up before it got to the inlet. I looked into the inlet and there was standing water but I could not tell if it had sewage in it or was just water. I noticed which way the pipe went and walked across the street to check out the inlet across from there. It was dry with some leaf debris. I then talked to a few of the workers for Kinsley. They took James to look at something else farther up the street and I finished my evaluation of the inlet. I walked back up the street to document what I had seen and take more photos. While I was at my vehicle, James, Dustin and another worker from Kinsley walked over and explained that the sewage had to be running for at least a week because the remembered seeing it around April 24th. They explained that had dug a trench and had to throw stones to keep the liquid from getting into their trench and that was back on April 24th, so it has been running since then. He said it smelled bad. James then said that a City employee lives on the second floor of the home. I did see Galen who works at the WWTP go into the apartment and James went to go talk to him. I don't know what they spoke about. Buffington arrived and I explained everything that was going on. While we were talking, we noticed a man on a cell phone looking at the home and went down the alley. I suspected this was the property



manager. Buffington said he called someone directly and this is the person he called. We walked over and Buffington went down the alley to talk with him. He came back and said there was no leak into the basement but when the guy took the trap cap off, it sprayed. So they think the fresh air vent is also clogged. After a while, Buffington said he had the situation from here. I left and went to check outfall number CC8 where this line runs into the Codorus Creek. I did not see any residue or smell any odors at the outfall. I also walked over to the priority outfall CC9 and did not see any sewage residue. The creek looked fine. When I got back to my car, I called DEP's emergency line around 8:36am. I left a message and my call was returned at 8:41am by Dave Linton. I gave him the info, he asked a few questions then stated he will give this information to the clean water team. I will check on this situation later in the day to ensure it is all cleaned up.

5/7/2018 - At around 1020pm on 5/7/2018, John Bean with the Highway Department received a call from Mark Skehan who was frantic about a member of DEP was at the ice rink and asking him questions about the ice that was left in the bin and was/had been leaking into the creek. It is unknown how DEP was called. John assumes it was a passerby who allows her dog to play in the creek and she may have seen something suspicious. John was able to go out to the scene and help Mark with questions from DEP. John relayed to the DEP representative what their procedures are, described the products used, and explained what was happening that evening. He explained that the dumpsters were scheduled for pick up at 7am the next morning, due to scheduling. John was able to call Chaz Green and Chaz got ahold of someone at the WWTP to go pick up the bins right away. John said the DEP representative left once he explained that someone was coming to get the bins tonight.

I met with John Bean the next morning and he explained to me how they scrape the ice off the pads and what the Zamboni does once it is finished. He said he received a call from Mark the previous day (5/7/2018) at 2:46pm that the bins were full and were ready for pick up. The problem was that WWTP employees that drive the truck leave at 330pm and no one went to get the bins. So it was scheduled for the next morning (5/8/2018) to be picked up at 7am. John also said that some of the bins are so old that they have holes in them and if the ice was sitting, it probably melted and got onto the pavement they sit on and began the journey towards the creek. John and I discussed that there should be communication and an understanding between Mark, Chaz, and Frankie about who will be responsible for scheduling and picking up the bins as soon as they are ready to avoid this issue. If someone from the WWTP is willing to stay an hour or so after hours (and be compensated) then we can have Mark schedule the pickup time during the day. OR Mark move the schedule around to ensure there is enough time during the day for an employee to come get the bins before clock out time. John also says that this only happens once a year and usually in May, so we should have a better understanding and procedure by next May when this happens all over again.

After meeting with John Bean, I met with Chaz in his office. I explained what John and I had talked about. Chaz asked me if we are looking at a fine from DEP and I said I did not know, but hopefully not considering we got there and took care of it right away. I also let Chaz know that a meeting should be held between he, Frankie and Mark to determine when the bins will be authorized to be picked up and by whom. Chaz put the reminder to have a meeting on his white board. I told Chaz that I will write this up for our records and he said OK.

5/9/2018 - Main Line Sewage clog from excessive grease. From Nancy Griffin: Apparently the residents called Sunshine's emergency number around 10 p.m. last evening stating the line was busy. Not sure



that they were calling the correct number for Sunshine. Since the call did not come through Sunshine I was unaware of the incident. Hidalgo eventually got the call, more than likely from 911, and dispatched the guys at 11:30 p.m. Upon Jimmy Rawlinson and Mike Kinard arriving they discovered the main blocked with an extreme amount of grease possibly from the restaurants on 30 due to the resident being directly behind them. Resident states they get sewage in basement approximately every 6 months.

Nancy called Lettice around 8:58am stating that she had just received notification that there was a sewage back up at the address above last evening around 1130pm. She listened to the voicemails and figured out that the residents were trying to call the emergency number (unsure if they had the correct number/if Sunshine itself had an issue). MS4 Coordinator was not notified at the time of the incident and did not respond. No photos were taken. MS4 Coordinator interviewed the two employees that responded the night prior and this was their observations:

5/21/2018 - During a routine inspection, a grayish rainbow sheen was observed coming from the outfall. I took photos and documented the time and conditions. On May 22nd a group of City employees and the property owners of the vacant lot on Park and Hartley streets are meeting to come up with a solution to this problem.

5/8/2018 - Received an email from Cindy Mendoza stating she was contacted by Noah with PA DEP about a diesel spill on N State Street. The email stated that Noah had laid down some absorbents and is requesting the City bring out the street sweeper to clean up the absorbent and the fuel. John Bean from the Highway department replied via email stating that he spoke with Noah and is going to run the sweeper in the area to clean up the mess and dispose of it in their dumpster. 5/21/2018 at 11:35am called Noah from PA DEP to gather more information about the incident. He explained that the actual spill happened on May 8 2018 and someone reported it to their Regional Office. He said that he only received this complaint on Friday so he immediately responded. He stated he used "peatsorb" as their oil-dry. He stated he is actually down there again as we are speaking because he noticed some more fuel coming out of the black top. He stated he spoke with a gentleman at the towing company about putting some more oil-dry down. I asked what exactly happened. He stated that one of the tow trucks had a leak. He told me the name of the company is Albright Towing and their phone number is (717) 501-3402. He also wanted to personally thank John Bean for his quick response and cooperation on Friday when Noah had asked for assistance. I gave him John's office number so that he may call him directly. Noah stated that he will come back later this afternoon to see how things are progressing. I told him that if he needs anything from the City that he can call me or call John and we would be happy to help. He said OK.

5/21/2018 - Veronica (MIPP) told me that when she was driving through, she saw a lot of grease in and around the storm drain near the Revival Social Club. She wanted to go back to "poke it with a stick" and assess. We arrived on the scene. There was a very potent odor of old grease. We found that the inlet was "caked" in old grease. It was very cruddy and smelled horrible. She used the stick to scrape off some of the grease from the inlet grate and I took a photo of it. She then scraped off some of the grease from the grease bin nearby and it was the same thing. I called Tamika but her phone went right to voicemail. I then called Steven Buffington and I left him a voicemail too. I tried Tamika again and it went right to voicemail so I left a message. We then returned to the office. I sent an email to Tamika -



who has an away message stating she will not be back into the office until about July 15th - and to Buffington. 5/22/2018 - Buffington sent an email back to me stating that we should see if we have any prior reports of this discharge. Buffington and I went into a meeting together and I told him that I think I was at this site before but it was when it was a different restaurant. And I believe we sent Tamika out. I told him I would look at my records. I received an email from Margarita who said she spoke with the restaurant and they said they would clean off the inlet grate and the inlet itself. I emailed her back to ensure the restaurant knows they cannot dump grease in or around the inlet. And that they might want to move their grease bin away from the inlet. Or they may be required to install a BMP on their property to prevent any grease from going into the drain.

Update 6/14/2018 – Closed the case but the inlet will be cleaned in the near future. I will still request the grease bin be moved and relocated away from the inlet.

5/23/2018 - As I drove by the location twice, I noticed water running from the site down the street and into a water quality structure. I stopped and took photos. I noted the name of the construction company on the fence. The water was coming from a broken hose or from where the hose was being used. The water is running East on W. Market Street to the water quality structure and inlet at W. Market and Newberry Street. I sent a letter to Royal Square Development and Construction Company about the discharge.

5/25/2018 - Nancy called me stating that a resident called about sewage coming up out of the pipe onto the street. Originally, it was assumed that the car shop on Parkway that we had issues with before had backed up again. As I was responding to the scene, Buffington called me about other incidents and I told him where I was going. He said he was a few blocks away and would be right over. When I reached the scene at 33 Parkway Blvd, I did not notice any water, sewage, or liquids coming from the vent cap where it had been backing up before. I called Nancy back and told her I didn't see anything here at the car shop and gave her the address. She said no it is near the 900 blk of Parkway, and we didn't think there was a 900blk, so she said she was going to call the sewer maintenance guys who responded to the call to see where they are and she would call me back. Meanwhile, Buffington pulled up and I told him that I didn't see anything at this location and told him it may be in the 900blk of Parkway. While waiting for Nancy to call back, we discussed some other incidents we were working on together. Nancy then called back and said she had spoken with the homeowner and confirmed that the sewage was coming out of the drain inside his basement, not out onto the street. A few minutes later, I received a call from James R. from sewer maintenance stating that when they were trying to unclog the main, sewage and grease came out from another manhole onto the street and got into a drain. He did not believe it got to the creek nearby. I asked where they were and he said Parkway and Pacific Avenue. Buffington and I headed that way. We pulled up and they were in front of 625 Pacific Avenue, on the bridge over Willis Run. We got out and asked what was going on. James R. explained that as they were unclogging the pipes, the sewage rose up out of the next manhole which is a siphon and came out onto the street and into the nearby drain. I looked in the drain and there was a little bit in there and it didn't look like it left the drain. Buffington walked across the street and checked the creek; he didn't see any residue, or discolored water. The maintenance guys were waiting for the water to drain and the flow to decrease. James R. asked what I wanted them to do about the grease chunks that was on the street from the overflow. After looking around and into the inlet, I suggested they put the vacuor into the inlet and wash down the road, paying careful not to allow any of the sewage or water to leave the inlet, because the pipe goes directly into Willis Run a few feet away. While the continued to wait, Buffington leaves



and I walk back to my car to notify DEP. I called the emergency number at 8:41am and as I was leaving a message, my phone cut off. So I called back again at 8:42am and left a quicker message with my name and phone number. I wait for about 10 minutes and I did not receive a call back. So I thought maybe my messages aren't going through. I called a final time at 8:53am again leaving my name and phone number. After a few more minutes, James R. and Kevin decided to hose down the street while vactoring the inlet to ensure they caught all of the sewage. I took photos of the cleanup. Afterwards, they stated they were going to remain on scene until the siphon completely empties to ensure a blockage does not occur again. I leave the scene around 9:15am. When I return to the office, I notice I have an email from Summer Kunkle who notifies me that she received a message about the SSO. I told her that I wasn't sure my messages were going through because I never heard back from anyone at the emergency number. She then told me the duty officer is at an incident in Lancaster Co and may not have been able to call back. I told her OK and that I would have the reports to her as soon as possible. This case is resolved.

5/24/2018 - Received a call from Dave Rudolph about a company hosing down their equipment in the rear of this block on Market Street. Lot of water flowing as well from E King and Broad. MS4 Coordinator was at Kiwanis Lake for stormwater learning with the kids from Devers during this incident. Tom Landis, highway superintendent, responded to the scene for me. He called later and stated that Construction Company had just got done laying a concrete pad and they were washing down their truck and tools on a stone pit but some of it did run into the street. Nothing reached an inlet. Tom spoke to them about it and they stated once it hardens they will scrape it off with shovels and dispose of it correctly. Will check back to see if the substance had been removed. Nearby, the York Water Company was doing work on a water line or hydrant and potable water was flowing down E King to Broad and had picked up some trash along with it and disposed of it when the water trail crosses the street. This will be checked out as well.

5/25/2018 - Received a phone call from David Rudolph about a white soapy substance coming from under a vehicle near this location and going into the storm drain as he was riding by. I called Buffington back and told him about the incident and he said he would meet me out there. I arrived to find Buffington speaking with a woman named Elizabeth and she is the owner of the building Pandora's Box is in. We found that the water was coming from under a gate leading to their back yard area. She took us through the bar to show us where the manager of the bar was washing down the area where the trash cans are kept. She said he was using just water but told him he can't be doing that. We noticed a hose with a nozzle on it and a bunch of trash cans. A pool of the white water had gathered around one of the cans and we were able to then see what the washwater looked like. I then noticed a bucket with a white liquid in it. Elizabeth said she had no idea what it was. Buffington grabbed a pole that was in the bucket and swished the water around then pulled it out so we could look at it. Then Elizabeth said she bets it is Ajax soap powder. She took the stick and sniffed the end that had been in the water, and she said that is exactly what it smells like. As we were walking back to the door, I told her that we cannot have this soapy water leaving their property. As we got inside, she seemed upset that she had told the manager Angel that they cannot do that. I told her that I will have to write this up for our records but for future reference they cannot power wash anything with soap. I took down Angel's phone number as well as her name and phone number. She asked if they will be receiving a fine and I told her that I will have to follow up with a warning letter and I will have to probably call DEP because the substance got into a storm drain. She asked if DEP will fine her, and I told her that will be up to DEP.



I will send them my report. She then asked if we wanted to talk to and tell Angel that what he did was no good and it cannot be done again. We said she can talk to him because basically this falls on the property owner. Buffington and I went outside to check the drains while she contacted Angel. We walked down the street and noticed a few pools of white stuff in the gutter. We looked into the first inlet and couldn't see anything because of the type of inlet. We would have to pull the small lids off to look down inside the inlet. We did notice that water had been rushing past this inlet and actually went all the way down to the second inlet before the RR tracks. I also looked into this inlet the best I could and realized that these inlets probably drop right into Poorhouse Run which runs under the city. Buffington was worried about whether we should vacuum the inlets but I said the substance is gone, these inlets do not contain any water, they are just an inlet that allows water to flow directly into the underground creek. It would be pointless. Then I knew I had to call DEP since it probably got into Poorhouse Run. As I walked back up to where Buffington was standing, he pointed to the foyer of the bar and pointed out a gas blower sitting on a box. He said that it is against codes to keep something like that in a business or something. He took the blower outside and set it down. He then went inside to get the owner. They both came out and he explained about the gas blower not being able to be in the vestibule and it's against codes. A worker took the blower out back. I explained to Elizabeth that DEP will be called because more than likely the washwater got to Poorhouse run. She was surprised and worried. She promised that this will not happen again and she will see to it. I let her know a letter from my office will be written as a warning. I asked her would she prefer I mail it or I can drop it off. She asked if I could drop it off and provide a copy for her as well. She says she likes copies of whatever the manager has so she can stay on top of things. I said I would leave two copies of the warning letter, one addressed to Angel and one addressed to her. We reminded her again that nothing but water can be used to wash down sidewalks and other areas. No soaps. She said she understood. At 1:44pm I called the DEP Emergency line and left a message. I received a call back at 1:50pm. The man asked me for the address of the incident and said someone would get back to me probably on Tuesday, I said ok. This case has been resolved.

5/29/2018 - Received a phone call from Steven Buffington stating that a member of the public called into their front desk frantic about a substance in the gutter on Penn and Market Streets. She was worried if children were walking to school and walked in it with bare feet, something bad may happen. I met Buffington at the scene. We followed the substance to the starting point at the door to the Dutch Kitchen on the Penn Street side. The wet area stopped there. I took photos and Buffington knocked on the door. An employee named Hector answered the door and said he did not dump anything but a bucket of water onto the street. We asked if there were any cleaning agents or chemicals in the bucket, he insisted there was nothing in the bucket. I asked did he know what the bucket had in it before he dumped it, he said he did not know. He said he was mopping the floor and there is no way nothing but water was in the bucket. Buffington and I agreed that Hector did not care and would not fuss up to what he did. He gave us the run around and we finally told him that he and/or the company cannot dump anything that is not plain water onto the street. He said he knows that and didn't do it. He told us he has seen other people do it though. We told him if he sees it, then he should call us. We walked away. I snapped a few more photos and followed it around the corner to Market Street and noted where it stopped. It was a considerable amount of water; he had to wash the bucket out with water. There was more than 1 bucket of water dumped. Buffington suggested that I call highway department and get someone to clean it up and we bill the Dutch Kitchen for the cleanup. I said ok. I called Tom Landis the superintendent of Highway and he said he is on vacation this week but he would



try to get someone at highway to get it cleaned up for me. I told him to ensure we make a bill for what we used and we will be sending it to the Dutch Kitchen, he said OK.

5/31/2018 - Suspected broken sewer lateral on private property. At 11:34am this morning we received a phone call to Nancy, sewer maintenance secretary about sewage coming from a pipe in the rear of Martin Library. She sent the sewer maintenance guys out to investigate. She then called me and let me know. I was unavailable at the moment so I sent Albert from Highway to check things out. Albert called back and said all he saw was a large pipe coming from the side of a building with some clear water coming out of it. He stated he thinks it's an AC unit on the roof that is running and condensation is going into the pipe. When I returned to the office later this morning, I stopped Nancy and asked if the guys found anything and she said didn't they tell you that they didn't find anything. I said no but Albert told me he didn't see anything either. Nancy then told me she just took over another SUNSHINE call in the same area at 29 N Queen Street. I asked if the guys were going to go out. She said she didn't know but didn't think so because they didn't find anything the first time they went out. Eric was walking by and she asked him and he told us it was an apartment building but didn't answer as to if they were going out. I said I will go check things out. I went to the scene and walked down Clarke Ave behind the Library. I didn't see anything suspicious. So I walked the other direction on Clarke Ave across N Queen Street. A property maintenance guy from Elite Property Management came over and asked if I was from the city Sewer Department. I said no I am with the Stormwater Department but I am here to take a look. He showed me a pipe in the ground that has a cap broken off. Couldn't be more than a 3-4 inch pipe, but there as a very dark, liquid coming from the pipe. There was some leaf debris and some trash that came out of it as well. I didn't think it was sewage at first because of the leaf and trash debris and we didn't smell anything foul. I checked to see how far the water got to and it has pooled in spots but they were filling up and will run out onto the street soon. I called Nancy back to see if the guys were coming out and she said she didn't know but will call over. As I hung up an employee of the Penn Legal services at 29 N Queen said she was the one that called and she showed me photos of what it looked like earlier that day. Nancy called back and said that Kevin is going to clock back in from lunch and come out. I said ok and waited. They arrived and I asked Kevin to take a look at the pipe. He was baffled as well. We thought maybe it was a water turn off valve until we all got a whiff of sewage and concluded it is sewage. Kevin and Joe ran the main on N Queen and also the main on Clarke Ave. The flow of the pipe did not change. At this point we told the manager of the business and the property maintenance guy that it is on private property and is a private issue. The maintenance guy told us he was going to get their machine to try to run the pipe to try to clear it out. I told him if that doesn't work they must get a professional company to come out right away to find out the problem. He said they would. I mentioned that this is very time sensitive as rain is coming in and will wash it into the storm drains. I told him I would check back out in a few hours to see how the process was going. Once back to the office I sent an email to Steven Buffington and Kelli Hill about the incident and if they wanted to send someone out they could, but if the incident was not taken care of by 230, I would call them to ensure they get things done today.

6/19/2018 - Received a text message from Steven Buffington (PPZ Supervisor) about mud or wet concrete all over the road in the construction area on the Unit Block of E King Street. I asked if it was the Gas Company or Kinsley. He said Kinsley. I emailed the Environmental Compliance Officer Dean about the incident and sent the photos that Buffington had sent me. Dean responded that he will go out to the site and take a look and get back to me. 6/19/2018 11:43am - Received an email from Dean



with Kinsley. He stated the substance was due to the saw cutting and the necessary stream of water needed to ensure the equipment stayed cool. He said that if they did not get all of their saw cutting done today, they would bring in the cleaning crew including a street sweeper to ensure the mess is cleaned up. He did state that they placed inlet bags for protection of the downstream inlets to catch any residuals in case of more rain today. I responded that I am satisfied with that plan and welcomed any other questions or concerns. I will keep this case open until they are finished saw cutting.

6/19/2018 - Received an email from Michelle Painter that she was notified of an illegal dump behind 157 S. Pine Street. When she responded, she noticed oil overflowing the black bucket it had been left in, presumably from the rain overflowing the bucket onto the street. I responded to the scene, to find a small dump site where a 5 gallon black bucket was filled to the brim with oil. There also was a gallon plastic MOBILE jug in the bucket as well. I walked down to the end of the alley to find the water pooled up. I grabbed my oil dry and tried to get the substance from spreading down E Poplar Street. As I was walking up the street, I noticed more water coming from under the garage door which was making the oil flow further. I called Michelle back to see if she had noticed water coming from under the garage when she was out there, she said no. I asked her if someone would be able to come out and see if they can make contact with the residents to get the hose or whatever turned off so the water stops pushing the oil downstream. She said she would have someone come out. A lady named Patricia came out and I explained what was going on and what I needed to happen and why. She went around to the front to make contact. Meanwhile I tried calling Tom Landis, John Bean, Chaz Green, and Cass Wile to help to try to get someone from Highway to come out with some sand. I couldn't reach anyone. Then John Bean called back and said he was on vacation in Rehoboth Beach. I apologized since I didn't know he was on vacation. He volunteered to make some phone calls to try to get someone out there with sand. I was texting Chaz because they were in a training explaining what was going on. I then explained that John Bean was calling someone in for me. Moments later the garage door opened up and some people living there and Patricia came out. I started to explain why we needed the water to stop and showed them that there was oil or gas coming from under that car with the water. They tried to argue with me that its clean water until I made her stand in front of me and look at the puddle of water, and then she said the rainbow sheen. She got on the phone and was speaking in Spanish to someone, then she called someone else. A few men came out and she explained in Spanish what the issue is. The man then said he understood and told the kids to not splash the water outside of the pool any more. He also said he could see the sheen on the puddle in their garage. I then asked her if the stuff came from inside their garage and she said yes, and motioned that they put the stuff in the alley. I told her she cannot set that kind of stuff outside. The man must have over heard and said the stuff did not come from inside their garage. I asked again, and he said no. I asked a third time and they both said no. Patricia and I asked them for a plastic bag to put the over flowing bucket in to prevent any more spillage. I was surprised to see they brought out the exact same type of pink plastic bag for the bucket that was laying in the street full of clothes from the "dump site". Now I am suspicious about this house. I believe that the items dumped in front of their garage came from their house. There is no way they happened to have the same exact pink trash bags as the "dumper". I thanked Patricia and stated that Ralph and Jay are coming with some sand and will clean it up. She leaves. I walk down to the end of the alley as Jay pulls up in a pickup truck. I explained to him what happened and what was going on. He said Ralph is coming with the loader full of sand and he will shovel it onto the spill. He asked who is going to pick up the remaining stuff and I said that Keith was on the email to come get it but I couldn't get a hold of him. We thought of ways to try to get the over flowing bucket back to the highway garage. Then Ralph shows up



and they get to work. In about 10 mins they have the area sanded. Keith calls me back and I told him what was going on. He didn't understand why the highway guys wouldn't take the stuff. I told him we talked about it but I can ask them to take it back with them. He said no he will just call Bruce in to collect the items and dispose of the oil. Ralph told me to text Tom Landis to see if Bill can come by before or after his shift to sweep up the sand. I thanked Ralph and Jay for their work and they left. I then told the tenants that we must keep the water in their garage and that someone will be by tonight with the street sweeper to sweep up the sand. I also said that someone was coming in to get the oil and the dumped items and dispose of them, probably within an hour. The man then asked how he could apply for work with the City. I gave him the website and told him to look for jobs and apply. He said he would. I then leave the scene. 6/20/2018 – I returned to the scene early in the morning to find the street sweeper had gone through and picked up most of the sand that was on the ground. I closed this case.

6/21/2018 - While giving a presentation to a group of folks, we decided to go to Hokes Mill 1 and show them about sampling. When we got down to the outfall, we noticed a large area of foam on the water, leading from the outfall into the pool, then out to the creek. We quickly decided it must be washwater from someone washing their car. So we went on with our demonstration and even took a sample of the water coming from the outfall. While above the outfall, we noticed a car dealership washing their vehicles and floor mats etc. So we assumed the soapy water was coming from there. We sniffed the sample water we took and noticed it smelled like corn. After we disbursed the site, Veronica and Lettice headed down Richland Avenue to check out the car lot washing their cars. We noticed a large puddle of water near the alley and Richland Avenue. We turned up the alley which was blocked off by red cones. We noticed a large amount of foam and water rushing down the alley from a building. We followed the trail of water to the side of a building where water was coming out of a downspout leading from the roof. We also noticed that foam was overflowing the gutters on the roof, onto the ground below. The flow was a pretty high rate of speed. Veronica walks into the open garage door on the side of the building as she is familiar with this industry (she monitors them for their pre-treatment). She finds someone to talk to and they go check out the issue. Lettice remains outside and begins taking photos of the foam, water, and the entire area for documentation purposes. Veronica then comes out and calls DEP and leaves a message. Lettice asked Veronica if it would make any difference to put a sock down at the outfall to try to capture some of the foam, she said no it wouldn't make much of a difference because the foam is dissipating pretty quickly after it reaches the creek and what is done is done. Not much we can do, she says. DEP calls her back and she explains what happened. After speaking with DEP, Veronica calls West Manchester Township Zoning office. She explains what happens and asks them to come out ASAP. The plant manager then shows up and checks out the situation. Veronica lets him know that W. Manch Twp will probably give them a cease and desist order, but that Veronica is not authorized to do so because of the plant being in W. Manch. Twp. The manager voluntarily shuts down his plant until the pump is fixed. Veronica learns that the discharge has been happening sporadically throughout the morning. She tells the manager that DEP has been notified and the W Manch has also been notified. After W Manch Zoning officer arrives, along with the Compliance Manager for Hanover Foods, Veronica fills them in about what happened. The group then talks to the manager and develop a plan of action. If/when the pump gets fixed, they are to call Veronica and she will then call W Manch Zoning officer and they will respond to the plant together. They must inspect the facility and pump to ensure compliance and that the illicit discharge has ceased. Once that happens, they can being production again. During the night of 6/21 and 6/22 – Veronica received a call that the problem had be



rectified. She then called Rachelle Sampere (West Manch Zoning Officer) and asked her to meet her back at the scene. She did. They toured the facility and spoke with the staff. They lifted their verbal cease and desist order and production resumed. Veronica then revisited the site at around 130am on 6/22 and walked around the facility again to ensure there were not issues during start up. She also pulled the manhole to ensure the wastewater was flowing and flowing where it was supposed to go. She then left the scene. This case is closed.

6/24/2018 - Heard over the scanner that Chief 99-1 was looking for Lettice Brown to check out the motorcycle accident at 100 W College Avenue. I called County Control and told them that Chief 99-1 was looking for Lettice Brown so I was calling in to give him my phone number. The operator told me to hold a moment. He came back and asked again what I needed, so I told him. He walked out to the 911 floor and asked an operator if someone was looking for me. She said Chief 99-1 was and she called him over the radio. I left my phone number with the lady. She then called Chief over the radio stating she had my phone number. He said to tell me that there is something I need to see out at the accident scene. She calls me on my phone and relay's this message. I told her I am responding. When I reached the scene and was allowed into the area, I park and get out to speak with the fire police. They were not sure what the Chief wanted but offered to talk me to the other side where the Chief was. There were officers at the top of the hill on the bridge. They walked over and I told them the situation. They said that Chief left. They radioed 911 to see if someone could get ahold of Chief to see what he needed me to see. After a few moments, the officer told me that Chief was on his way back to the scene. I said ok and walked the rest of the way across the bridge where fire police was on the other side. I saw chief pull up and he got out to speak with me. He showed me where there was blood on the roadway and because of the training, they were wondering if they should use the bleach solution that I had noted in my presentation. I said, technically yes, but we do not have this plan in place yet, so they are OK to just wash it down with water. I told them the bleach solution is the proper way to do it, but I haven't spoken with Chief Michaels about it yet so just do what we have been doing. He said OK. I then asked if the motorcycle had been leaking. He said he was not sure, but there was a small puddle under the bike which was laying on its side. Chief and I stood around for a few minutes talking with the fire police guy. I decided to stay around until the scene was cleaned up. Around 830, Darrahs and J&K showed up to tow the car that apparently hit the cyclist and took the motorcycle in another trailer since it is evidence. Darrah's driver put oil dry on the gas/oil that had leaked out more once the bike was sitting upright. He then swept up the oil dry. The fire engine returned to wash down the blood on the other side of the bridge. I took photos of both for evidence. I left the scene around 8:50pm.



**ILLICIT DISCHARGE QUARTERLY SUMMARY REPORT – CITY OF YORK**

Reporting Period: \_\_\_\_\_

**I. Outfall Screening Activities Summary**

Number of outfalls screened: \_\_\_\_\_  
Number of priority outfalls screened: \_\_\_\_\_  
Total number of outfall inspections: \_\_\_\_\_  
Number of outfalls with flow: \_\_\_\_\_  
Outfalls with illicit discharge: \_\_\_\_\_

**II. Illicit Discharge Investigation Summary**

**A. Summary**

Investigations with Illicit Discharges: \_\_\_\_\_  
Investigations without Illicit Discharge: \_\_\_\_\_  
Total Illicit Discharge Investigations: \_\_\_\_\_

**Reported to the City of York by...**

Maintenance Crews: \_\_\_\_\_ Public: \_\_\_\_\_ Non-Profit: \_\_\_\_\_  
IDDE Inspector: \_\_\_\_\_ Government – Non City: \_\_\_\_\_ Other: \_\_\_\_\_  
City Employee: \_\_\_\_\_

**B. Type of Pollutant or Potential Pollutant**

Automotive Liquids/Oil: \_\_\_\_\_ Ground Water-Sump Drain: \_\_\_\_\_  
Building/Sidewalk Washwater: \_\_\_\_\_ Industrial Wastes: \_\_\_\_\_  
Concrete, Cutting Slurry/Washwater: \_\_\_\_\_ Medical Wastes: \_\_\_\_\_  
Debris – Construction: \_\_\_\_\_ Minor Auto Accident: \_\_\_\_\_  
Debris-Other: \_\_\_\_\_ None: \_\_\_\_\_  
Food Wastes: \_\_\_\_\_ Other Washwater: \_\_\_\_\_  
Glue, Pastes, Adhesives: \_\_\_\_\_ Paint: \_\_\_\_\_  
Grass Clippings, etc: \_\_\_\_\_ Pet Wastes: \_\_\_\_\_  
Sediment: \_\_\_\_\_ Sewage: \_\_\_\_\_  
Swimming Pool: \_\_\_\_\_ Unknown: \_\_\_\_\_  
Vehicle Cleaning Washwater: \_\_\_\_\_

**C. Pollutant Source**

Unknown: \_\_\_\_\_ Residential: \_\_\_\_\_ Municipality: \_\_\_\_\_  
Industrial: \_\_\_\_\_ Construction Site: \_\_\_\_\_ Minor Auto Accident: \_\_\_\_\_  
Commercial: \_\_\_\_\_ Transportation/Major: \_\_\_\_\_ Other: \_\_\_\_\_ Utility: \_\_\_\_\_

**D. Discharge Abatement Status**

Yes: \_\_\_\_\_ Abatement Not Required: \_\_\_\_\_  
No: \_\_\_\_\_ Unknown: \_\_\_\_\_  
Ongoing: \_\_\_\_\_ Percent of Bateable Events Abated: \_\_\_\_\_

**E. Enforcement Activity**

None: \_\_\_\_\_ Verbal Notice: \_\_\_\_\_  
Warning Notice: \_\_\_\_\_ Administrative Action: \_\_\_\_\_  
Administrative Action with Cost Recovery: \_\_\_\_\_ Legal Action: \_\_\_\_\_  
Unknown: \_\_\_\_\_

**F. Responsible Party Found?**

Yes: \_\_\_\_\_ No: \_\_\_\_\_  
N/A: \_\_\_\_\_



**ILLICIT DISCHARGE QUARTERLY SUMMARY REPORT – CITY OF YORK**

Reporting Period: \_\_\_\_\_

**I. Outfall Screening Activities Summary**

Number of outfalls screened: \_\_\_\_\_  
Number of priority outfalls screened: \_\_\_\_\_  
Total number of outfall inspections: \_\_\_\_\_  
Number of outfalls with flow: \_\_\_\_\_  
Outfalls with illicit discharge: \_\_\_\_\_

**II. Illicit Discharge Investigation Summary**

**A. Summary**

Investigations with Illicit Discharges: \_\_\_\_\_  
Investigations without Illicit Discharge: \_\_\_\_\_  
Total Illicit Discharge Investigations: \_\_\_\_\_

**Reported to the City of York by...**

Maintenance Crews: \_\_\_\_\_ Public: \_\_\_\_\_ Non-Profit: \_\_\_\_\_  
IDDE Inspector: \_\_\_\_\_ Government – Non City: \_\_\_\_\_ Other: \_\_\_\_\_  
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**B. Type of Pollutant or Potential Pollutant**

Automotive Liquids/Oil: \_\_\_\_\_ Ground Water-Sump Drain: \_\_\_\_\_  
Building/Sidewalk Washwater: \_\_\_\_\_ Industrial Wastes: \_\_\_\_\_  
Concrete, Cutting Slurry/Washwater: \_\_\_\_\_ Medical Wastes: \_\_\_\_\_  
Debris – Construction: \_\_\_\_\_ Minor Auto Accident: \_\_\_\_\_  
Debris-Other: \_\_\_\_\_ None: \_\_\_\_\_  
Food Wastes: \_\_\_\_\_ Other Washwater: \_\_\_\_\_  
Glue, Pastes, Adhesives: \_\_\_\_\_ Paint: \_\_\_\_\_  
Grass Clippings, etc: \_\_\_\_\_ Pet Wastes: \_\_\_\_\_  
Sediment: \_\_\_\_\_ Sewage: \_\_\_\_\_  
Swimming Pool: \_\_\_\_\_ Unknown: \_\_\_\_\_  
Vehicle Cleaning Washwater: \_\_\_\_\_

**C. Pollutant Source**

Unknown: \_\_\_\_\_ Residential: \_\_\_\_\_ Municipality: \_\_\_\_\_  
Industrial: \_\_\_\_\_ Construction Site: \_\_\_\_\_ Minor Auto Accident: \_\_\_\_\_  
Commercial: \_\_\_\_\_ Transportation/Major: \_\_\_\_\_ Other: \_\_\_\_\_ Utility: \_\_\_\_\_

**D. Discharge Abatement Status**

Yes: \_\_\_\_\_ Abatement Not Required: \_\_\_\_\_  
No: \_\_\_\_\_ Unknown: \_\_\_\_\_  
Ongoing: \_\_\_\_\_ Percent of Bateable Events Abated: \_\_\_\_\_

**E. Enforcement Activity**

None: \_\_\_\_\_ Verbal Notice: \_\_\_\_\_  
Warning Notice: \_\_\_\_\_ Administrative Action: \_\_\_\_\_  
Administrative Action with Cost Recovery: \_\_\_\_\_ Legal Action: \_\_\_\_\_  
Unknown: \_\_\_\_\_

**F. Responsible Party Found?**

Yes: \_\_\_\_\_ No: \_\_\_\_\_  
N/A: \_\_\_\_\_



MCM 3, BMP 5, #1

1/5/2018 - James H. alerted me to the discharge and told me James R from Sewer Maintenance emergency call about the discharge. James H was already out and checked on it. James H took photos and sent them to me. I documented the discharge but I did not respond as I had to leave for a family emergency. This is an ongoing issue and active investigation.

1/8/2018 - Saw there was a broken water main break near CC48 and a debris removal also in the same area so I decided to check on CC48. I noticed on Sunday Jan 7 2018 around 1125am, there was a very slight stream of rainbow sheen colored water coming out of the outfall. I snapped a few photos but the discharge was so light, I don't think it showed up in the photos. On Monday January 8 2018 around 10:43am I stopped by again to check on the outfall and there was a considerable amount of discharge coming from the outfall. I took more photos and they did come out in the photos this time. The weather was cloudy and 24 degrees. This is an ongoing issue and is being investigated. I also checked the outfall on Jan 9<sup>th</sup>, 10<sup>th</sup>, 11<sup>th</sup>, and 12<sup>th</sup> with a discharge showing on all of these days. I again stopped by on Monday Jan 15<sup>th</sup> and the discharge had stopped.

1/11/2018 - Received a phone call from James H in the Sewer department stating that there is a considerable amount of sediment on the roadway at N Pershing Avenue and Parkway Boulevard. He said there is a stormwater inlet at the bottom of the hill near Smith Street and that I should come take a look. I was emailing with the Highway Super. Tom Landis and gave him a heads up about the sediment and that we may need the sweeper and/or someone to clean up the sediment. I arrived at the scene and Steve Buffington was also there and was talking with James. Steve said he was riding by and saw what was going on and stopped. James told me that the sweeper was by but told Ricardo with Highway that I may want to get photos before he tried to sweep up the sediment. So he went on his way and said he would circle back. James explained that the York Water Company had repaired a broken water main on N Pershing overnight and believes the sediment from that. I took some photos of the area and decided to walk down to the nearest stormwater inlet and found that some snow and leaves were the only things in the inlet. But the inlet is directly down the hill from the sediment. Ricardo showed up with the sweeper again and motioned me up to talk to him. As I was walking back up the hill, Tom from Highway pulled up. We all decided that using the sweeper would just spread the sediment out and probably wouldn't pick up anything because the sediment is already wet and mud-like. I told Tom that Steve B suggested that we call the Water Company and tell them to clean up their mess. Tom said to just call the dispatch number and tell them what's going on. I said I would. I snapped a few more photos and left the scene. When I returned to the office I called the York Water Company dispatch and explained the situation. The lady told me that they will send the street sweeper out to take care of it. I informed her that we were going to do the same thing but will only spread it around because it is mud. She said they will go out and check things out and try another course of action if the sweeper does not work. I said ok and thanked her for her help. I will ride back through this afternoon to ensure the area is cleaned up properly. I rode through the area that afternoon and saw that nothing had changed. I also went back out twice the next day, Friday Jan 12<sup>th</sup> and nothing had been done. We had rain on that Friday and probably washed away the sediment now, and the area was never adequately cleaned. I wrote an email to Steven Buffington about it but never received a response. I closed this incident on Jan 12<sup>th</sup>.



1/16/2018 - Received a call from the gentleman at the SUSCOM center notifying me that there is a discharge coming from the outfall again. I told him that I would respond shortly. I first went to meet Albert from Highway at the manhole at Park and Hartley. I wanted to see if there flow was coming from there. When he arrived we took a look and could see a pretty good sheen on the water, flowing from under PCC out to CC48. The sump skimmers were also covered with "Gook". We then checked the manhole on Hartley near Linden and found a smaller amount of flow and a slight sheen. Photographs were taken at Park and Hartley. After we were done there, I went over to CC48 and took a few photos. There was a slight sheen coming from the outfall, but difficult to see. The flow was a little elevated as well, probably from the melting snow we had gotten this morning. This is an ongoing issue and will be following up.

1/22/2018 - On my way back to my office I noticed a considerable amount of sediment streaming alongside the road, in the gutter, leading directly to an inlet at the intersection of N Queen Street and York Street. I stopped, got out, and took some photos. I noticed there is brown sediment/mud in the inlet on York Street, and that there were leaves and mud covering the inlet on N Queen Street. I cleaned off the inlet on N Queen Street and took more photos. I started to follow the sediment trail back to Chestnut Street where a construction crew was doing work, way up in the middle of the block. I snapped a photo of them working as well. I phoned James H. in the sewer department and asked if he knew who was doing the construction work on Chestnut Street? He said it is Kinsley. He explained that they completed the water main on N Queen last week and are probably working on the laterals on Chestnut today. I explained to him what I saw and then thanked him for the information. I will be writing another letter to Kinsley about their construction practices and ensure that they clean up their mess ASAP.

1/23/2018 - Received a phone call from James H. with the sewer department. He was out doing PA1 calls in the area above and noticed that Kinsley was pumping mud and water from the pit they were working in. He told me he took photos and sent them to my email. I looked at the photos and decided to write up the violation due to the amount of sediment that was pumped out. The substance was running to the nearest storm drain. This is the second violation and two days for this company and discharging their sediment to the MS4. I sent a letter to Kinsley yesterday Jan 22 2018 about the previous days' violation. I will refrain from sending another letter, to see what, if any, response I get from them. I sent an email to Steven Buffington and Chaz Green about the second violation. I even suggested that if Kinsley would like to sit down and talk with me, or with other City members, I/we would be happy to do so. But this needs to be stopped. I also suggested citing them for yesterdays' and todays violations.

1/24/2018 - Received multiple calls on my cell phone while I was in a meeting. I could not answer. Then, my cell phone's batter died. I received an email from Tom Landis at 11:22am stating that Albert M was trying to reach me about a grease spill at 156 E Cottage place into a storm inlet. I emailed him back and told him I was in a meeting and that my phone died. I asked him to ask Albert to take some photos just in case the evidence is gone by the time I arrive, and that I would be at the scene as soon as I could. Once out of the meeting I called Albert on the radio. He told me he just left there and would meet me there. I told him I was 10-15 minutes away at Pleasant Acres. So he said he would meet me at the scene with the vactor truck at 1pm. I said ok. Since I had an hour, I stopped by the area before doing some other stops in the City. I photographed the area, the home, and the inlet. There was a really strong odor of old cooking grease. At 1pm I met Albert and his crew back at the scene. The guy's



vactored out the inlet. They also washed down the sediment that had caked on the sides of the inlet. I told them that I would make up flyers for the two homes we suspect the grease came from. Since we could not positively identify which house it came from, we thought we would have a difficult time citing them for the dump. Once the inlet was clean, we all left the scene.

1/24/2018 - Received a call from Nancy G. on Jan 24 around 8pm stating there was a SUNSHINE coming from this area. She stated she called the guys in to go check it out and would let me know if it got to the street or drains. About 30 minutes later she called and told me the guys said the main line is clear and that it was just water. The next day, Frankie, Scott, and I returned to the scene to ensure it was just water. While there, the backup started to flow out of two pipes near the side of the building. One was on the one said of the parking stopper and one was on the other. The caps were not secure and the water was flowing pretty well from both pipes. Frankie went inside to speak with the manager and she said that the plumber was out last night and didn't see anything. We determined that there must have been a clog near one cap, closer to the building that had lint residue around it. We also speculated that's the line they ran and that the clog is not in that line. Water was now coming out of two of the pipes that were closer to the other end of the corner of the building. The water was flowing faster as Scott, Frankie and I waited for Eric and Kevin from Sewer Maintenance. When they arrived they confirmed that it is not the main line. They checked out the overflow and lifted up the caps and said the caps should be welded to the metal, not plastic pipes. We also noticed the ground in that area is very uneven and looks like things have been leaking for quite some time. As the water started flowing harder towards the storm drain in the alley behind the Laundromat, we kept our eye on it. I phoned Steve Buffington and told him what was going on. He said he would be right out. I then phoned Tom Landis to see if Highway department had any water absorbing socks we could put either in the drain or around the drain to protect it. He radioed Albert and asked him and he said he would respond as soon as he was done his previous project, in 15 minutes. Buffington arrived and he assessed the scene. He suggested we shut them down until a plumber could get there to prevent any more water from going into the storm drain. Buffington and I went inside and told the lady behind the counter that we have to shut down until the plumber comes because the water is running into the storm drain. She said ok and phoned the owner. She put a sign up and locked the door. We told her that whatever is running can finish up but nothing new can be started. She agreed. We then went outside to talk more and wait for Albert to arrive. Sewer Maintenance guys left. Since I rode to the scene with Frankie and Scott, I decided to ride back with them to get my own vehicle since I had more work to do at the scene. I went inside to tell Buffington who was speaking with the owner on the phone. He then gave me the phone so I could give the owner my contact information. I gave him my name and phone number and asked him to call me once the plumbers are done and I will reassess and let him know if they can open back up. Buffington offered to stay at the scene in case Albert showed up. As we were heading back Albert pulled up. As I was heading back to the scene, Albert radioed to see if I could meet him back at the scene, told him I was on my way. When I got there, he and Buffington were putting socks into the inlet to try to soak up the water. By that time the flow had decreased considerably. We then decided to check the outfall at the Codorus Creek and Buffington wanted to go along so he could see what we saw. As we were gearing up to leave, the plumbers showed up. I hopped back out and said hello. I showed them the problem area and said they will TV the line and get it all sorted out. They asked that when they are done if they needed to contact me. I told him that the owner will call me to reassess once they are done and he said OK. We went down to the outfall and determined the wash water had not reached the Codorus, but possibly had last night and had frozen before going into the creek. Our next worry is



what is already in the pipes; when it rains, the detergent going into the creek is going to create a larger problem. Albert suggested he will talk to Scott and Tom about finding out how far the water got, and have the vac truck suck out the water from there as another vac truck sprays water into the inlet at Queen and Princess, to ensure all of the wash water gets sucked up. Albert said he will call me later to let me know what he finds. At 9:48am on Jan 25th, I received a call from the owner of the Laundromat, asking me if it was ok to run about 10 washing machines to ensure the water is flowing properly. I told him as long as the plumber stays on scene just in case it backs up again, that would be fine. He then was trying to explain something the plumber was saying, so he handed the phone to the plumber. I asked the plumber what they found. He said there was a considerable clog of lint from the dryers and feminine products. I said ok and thanked him. I told the owner that he can call me when the test is complete and I will come out to reassess. At 9:57am he calls back and said that everything is in working order and no clogs had formed. I told him I would be out in 10 minutes. I arrive at 10:18am and met the owner. He shows me that everything is working and that nothing else is flowing from the pipe. I asked him about the feminine products and he said he just told his worker to put a sign on the bathroom requesting patrons not place used feminine products into the toilet to prevent other backups. He agreed. I snapped more photos to document nothing else was flowing. I then returned inside to see if he could put more salt down on his parking lot and sidewalk to prevent anyone from falling on the ice that has now formed. He said he would. As I was leaving I saw him putting salt down.

1/25/2018 - During a routine inspection, found very light discharge coming from outfall. It was gray in color. Took photos and documented the time and date. This is an ongoing investigation.

1/26/2018 - Received a FB message with photos of the area mentioned above from James H. The area is a complete sheet of ice, with a lot of debris and sediment on the street and around the storm drain inlets. I asked James who is responsible, and he said Kinsley is replacing the water main here. I saved the photos and wrote up a report. The photos and incident will be forwarded to the PW director and PPZ Director. We are scheduling a meeting with Kinsley to address this and other similar concerns in the City.

1/26/2018 - Routine check on CC48 that we have been having issues with and found another illicit discharge. Took photos and noted required information. Investigation is ongoing.

2/2/2018 - During a routine check, the IDDE inspector noticed an illicit discharge coming from CC48. Photos were taken. This is an ongoing issue and is currently being investigated.

2/6/2018 - Received a call from the maintenance person at the SUSCOM center stating that the discharge is starting at the outfall again. I told him that I had planned on coming out this morning to check on it and I would be out as soon as possible. I responded out, took photos and wrote up this report. This is an ongoing investigation.

2/12/2018 - During a routine inspection, I noticed that there was an illicit discharge coming from the outfall. Took photos, documented the weather conditions, the time and date. This is an ongoing investigation.

2/12/2018 - Received a phone call from James H who stated that there was a large amount of mud being tracked from the yard of a home at 402 E King Street onto Edgar Street and E King Street - heading towards Broad Street. I responded to the scene and drove around to take a look. I parked and got out



to take a few photos. I noticed a yard that had a break in their wooden gate where some kind of vehicle had been going in and out of. There are tracks of mud on the sidewalk, onto Edgar Street and out onto E King Street. I took photos of the area and documented the address. I will be sending a warning letter to the homeowner this afternoon. I also sent an email to the Highway Super. Tom Landis to see if we could get the street sweeper out to make a pass or two to get as much sediment off the road as possible. I also sent him the photos so he could use his best judgment. In the letter to the homeowner, I will be requesting that they clean off the sidewalk and what chunks of mud are under the vehicle parked right outside of the broken fence. I will be sure to warn them NOT to use water, but to try to shovel it back into the yard.

2/12/2018 - Received a phone call from Nancy at the Admin building and she stated that she just got a message off of the answering machine about a sewage leak at this address. She stated that Brad from Kinsley told the tenant on Friday, when he noticed it, to call the landlord and get a plumber. Brad had to go back out today (Monday) and said that nothing had been fixed and sewage was continuing to come out of the fresh air vent on the side of the house. He then called into Sewer Maintenance. I responded to the scene the same time that Eric from Sewer Maintenance showed up. We both examined the wipes and debris collected at the base of the fresh air vent. I took photos of the area. Brad from Kinsley was there and explained what he had done on Friday and then said when he came back today, nothing was different so he called us. Eric knocked on the door and a lady answered. Eric asked if she has any water or sewage in her basement and she said that she did not. She said that she called the Water Company on Friday and that they came into her basement and didn't see any issues and she said he told her about something with the drain pipe. She then said there was a little bit of water down there but it did not smell or have an odor. We then asked her to flush her toilet to see if it was coming out of the vent. She did and sure enough sewage water came from the pipe. I took photos of this. She came back out and we showed it to her running out. We made sure she understood that she needed to call her landlord right away and get a plumber because their lateral is backed up. We also explained that the water coming from that vent should be going through the lateral to the main and it is not. So it must be clogged. She then saw what we were talking about. She said she would call her landlord right away. I then walked down to the stormdrain to see what was going down in, if anything. Kinsley had the blue fiber mats over the drains which helped keep the sewage out of the drain. However, if any did make it into the drain, the rain from the weekend has washed it away. There was no evidence of sewage in the drain. We then figured that there was enough leaf and other debris in the gutter that most likely the sewage never reached the drain. I took photos of the blue fiber mats and looked underneath each one. I took a photo of the closest drain which didn't look like it had any sewage in it. There was no odor. What did get into the drain must have washed out with the rains over the weekend. We then cleared the scene. I will revisit the site later this afternoon to see if any progress has been made. I will also leave a letter for the landlord.

2/6/2018 - Received a notification from Tom Landis to check out the site that we had a previous issue with at Locust and Sheridan Street. He said there was dirt everywhere, being tracked from the site onto the street. He also said the silt fencing was damaged. I responded to the scene and took photos. I didn't see anyone around so I gave the guy from Habitat for Humanity (that I had spoken with before about the site) a call. He stated that his men were tied up at another site and he is aware of the dirt. He said that a truck that was helping build the deck was supposed to pull in from the alley but drove off the side, knocking down the silt fencing. He said he would get right on it as soon as he could. I sent Robert



Fetter an email about the site to see if he needed to know about what was going on. I received no response.

I rode by later that day and nothing had changed.

A week later on Feb 14th I drove by again and nothing had changed. Since it had been a week, I phoned Steve Buffington asking if he had any contacts with Habitat for Humanity because the gentleman I spoke to didn't seem concerned and did not do what I had asked him. He said he thinks he did and wrote down the location and said he would let me know. Later that morning I received an email from Steve Buffington and he stated he spoke with George Myers from H4H and downplayed the seriousness of the situation. He said that it is basically going to be that way until they put the concrete down which is scheduled for this week. I wrote Steve back letting him know the phone numbers of the person he called and talked to is the same person I talked to. I told him I didn't write up the incident that day because I was assured it would be taken care of ASAP. I told Steve I am now going to write this up as an illicit discharge because it has been way too long and he did not do what he told us he would.

2 minutes after I sent Steve the email, he calls me and tells me he didn't realize the site was THIS BAD. He said it is very, very bad and we need to move on this. I told him what I had sent in the email and he said it should be written up. He also said he is going to take a few photos to give to the Mayor to see what he suggests our next step should be. Steve felt that a fine right off the bat could cause some friction between the company and the City because we have worked on projects with them before. I said I was ok with that. I told him I had photos from Feb 6th and that I will go back out today and take more so we can validate that it was like that for over a week. I went back out and took the photos and awaited a response from Steve.

Steve Buffington called me on the morning of Feb 16<sup>th</sup> 2018 and stated that Nicole Gallup and the Mayor's office had talked to the guy from Habitat 4 Humanity along with their executive person about the dirt being tracked everywhere. Steve said he got a rather nasty phone call from the guy stating that the dirt wasn't that bad and it wasn't a lot. But Steve told me that the guy said the dirt will be cleaned up by the end of the weekend. I told Steve I will ride by on Monday morning to make sure everything is cleaned up before closing the case.

2/15/2018 - During a routine check, I noticed more of the illicit discharge coming from the outfall. Took photos and documented the time, date and weather conditions. This is an ongoing investigation.

2/22/2018 - During a routine check of outfall number CC48 - I noticed a pretty significant rainbow and gray discharge coming from the outfall. I took photos and documented the weather conditions. I then went to the manhole at Park and Hartley to see what it looked like. The water was thick-like and gray. It was still a little dark out so I couldn't see the proper colors of the water. I took a photo of the inside of the manhole. This is an ongoing investigation.

2/22/2018 - Received a phone call from Michelle Painter a property inspector on Feb 22nd at 12:52pm stating that as they were riding by 901 W Princess Street, they noticed a hose coming from a basement door that is on the side of the building. She stated there was a clear liquid coming out from it. She said



there was a language barrier with the property owner but she said that he said he had a sewage back up in the basement and they were pumping it to the street. As I was responding to the scene, I put in a call to the Sewer Emergency line to get the guys mobilized to check the main to ensure it was not a City issue. Veronica called me on my cell because she was in Scott's office and had noticed an email from SUNSHINE that had my name on it. She was just checking to see what was going on. I explained to her and she said ok, and would give the message to Scott, to have the guys come out. I then arrived at the scene and PPZ was still there. Shelton and Eric showed me where the hose was at the time. They said that the liquid flowed down Sheridan to W Poplar Street but there is no drain there. We walked down and they described that there was no odor and the water was clear. I had asked if the resident was going to have a plumber come to check out their line. He said they wanted to ensure they got the water on the street handled first and then ask him. When we got to W Poplar and Sheridan, there was no drain in sight and they explained to me that the resident had walked down and put kitty litter in a "dam-like" pattern to catch the excess runoff. Shelton then showed me where the water had just dried up and/or soaked into the ground because of all the construction debris there. It does not appear to have reached any stormdrain. I took photos of the dams and of the direction the flow was coming from. We walked back up to the store and Eric went back in to talk to the owner. I took photos of the basement door and of the property, which is a corner store. When they returned from the store, they asked if we are all good and I asked whether they asked the owner if he plans to get a plumber, he said no and went back inside to ask. When they returned with the owner (who speaks Spanish ONLY) Eric explained that the owner says that NO SEWAGE was in the basement and that he was only cleaning the floor of the basement with just water. I asked again to make sure that there was no sewage blockage, or in the water he pumped to the street. Eric translated and the owner said no. Eric explained to the owner that he cannot pump anything to the street but it may go into the sanitary sewer. The owner says he understood. Once the owner said he understood, we all left as there was no sewage leak. Once in the car I called James Hoffnagle to see if the sewer maintenance crew had left yet, and he said no, I told him to tell them not to respond as it was a misunderstanding. He said ok and told the guys. I returned to the office and closed the case.

2/26/2018 - Received a call from Shelton from PPZ letting me know they found a sanitary sewer overflow at 109 N. West Street. He said the sewage is coming from the fresh air vent in the concrete porch between 109 and 107 N West Street. He said they followed the sewage to Company Street but did not know how much farther it had gotten and unknown if it had gotten to a storm drain. They were in search of the owner. On my way to the scene, I called the Sewer Emergency hotline at 9:27am, spoke with a man, gave him all the information and he said he would pass it on. When I arrived on scene I did not see anyone. I started taking photos of the fresh air vent and the sidewalk. There was still a small amount of sewage coming from the vent. Shelton, Carlos, and the owner came from the alley between the houses and said they were just in the basement. There was a small amount of sewage in their basement. The owner spoke Spanish and was very sorry it had happened. Shelton and Carlos had instructed the owner to go purchase a few bags of kitty litter to clean up the mess. He left to do so. I then took more photos of the direction of the flow and began to follow it. It ran from N West Street, turned right onto Company Street, ran all the way down the block, to Manchester Street where it crossed the street and turned left. There are some large rocks and chunks of asphalt in the gutter before the storm drain which helped to contain the sewage. The sewage never reached the drain but pooled up in some spots. I walked back around to where Shelton and Carlos was. The owner then returned and Shelton and Carlos showed him where to "dam" up the sewage so it would not reach the



drain on Manchester Street. They all left and I continued to wait for the SS crew. After about 20 minutes, the owner came back around and started placing kitty litter in the gutter on N West Street. I walked over and he said Shelton and Carlos told him to do this street down to Company St and can stop. I told him that would be ok. I took more photos of the kitty litter to prove clean up. The owner then told me the plumber is coming this afternoon to clean everything out. I gave him my name and phone number and he said he would call me tomorrow to let me know the work had been complete. During my wait for the sewer crew, I called Scott Millar to see if they had been dispatched, he did not answer. I also sent him a text message. I then messaged Nancy and she told me she was out of the office today. So after about an hour, I left the scene. Back at the office I got a call from Scott saying he will be out for about 6 weeks due to an illness and that Nancy usually handles the calls when he is out. I then typed a message to Frankie about this morning. He asked if I had Eric's number and I said no. As of 11:01am, the crew had not been out. That afternoon I sent an email to Tom Landis asking if there were any highway members that could clean up the kitty litter tomorrow. He said he would have a worker out first thing in the morning. \*UPDATE\* The owner called and left me a message at 8:52am and I returned his call after my training at 2:47pm on 2/27/18 to confirm the plumber took care of everything and he did that they did. I closed this case.

3/1/2018 - Received an email from Tom Landis stating he received a phone call from a resident stating that there is grease coming from Joyful Garden's grease bin on the side of the building and is flowing down Pine Street between Market and Philly Streets. I responded to the scene and started to take photos. I then documented the time and weather conditions. I called Tamika Rascoe to let her know we have a grease bin leak or someone spilled on their way to or from the grease bin. She told me that they had an issue with this restaurant before and she does have the owner's information. She said she would be making rounds later today and would be sure to stop by and give them orders to clean everything up. I asked her that when she did give them orders if she could email me so I can add it to my report. I will then keep stopping by to ensure the cleanup is adequate.

Received an email from Tamika Roscoe stating that due to an emergency she was not able to stop by the Joyful Garden today and that she would ensure everything was taken care of tomorrow morning. I emailed her back and then called her to tell her that I was worried about the coming rains. The rain will wash the grease away into the storm drains and that I was going to speak with the owner and see if he can clean up the area at least for now. She said that would be ok.

I spoke with the owner in the restaurant around 2pm today and he is frustrated because someone else has been putting oil into his oil/grease bin and it is now full to the top. He said someone even left a jug of oil behind the grease bin and he is very angry about it. He said he has oil to get rid of and he cannot because the thing is full. He said he called the company to see if they could come dump it and he said they said they are full up today and they cannot get to it until tomorrow. He said he doesn't know what to do with the oil he has to dispose because it's full and he is tired of people using it. A woman who worked there came to the counter and asked about a lock on the bin. He said there is a lock for the large lid to empty the bin is from the company but the owner said he is going to talk to the company to see if he can put his own lock on the container so only they can use it. I told him that is a good idea. And that if he has the means to, to invest in a camera to point on that area to catch whoever is dumping into the bin and behind it. I then told him there is some on the ground that I will need him to take care of ASAP. I told him there is some on the ground in front of it and flowing over to the sidewalk. I told him we are concerned that people are walking through it and that the rain will wash it away. I told him to



use kitty litter and sweep it into a pan and put it in the trash. The woman asked to use hot water, and I said no because that will wash away the grease into the storm drain, NO WATER. I said use kitty litter and sweep it up. The owner said he will go now and get some kitty litter to clean up the mess. I then sent an email to Tamika with this information. She will check on the site tomorrow and let me know what's going on.

3/1/2018 - During a routine check and to check on our absorbent socks at the outfall, I noticed the discharge accumulating behind the socks. Took photos. Went down to adjust the absorbent socks as it looked like some of the substance was escaping through the sides of the sock. While down there I saw the substance was coming from the dirt that had soaked up the substance from previous discharges and I didn't have a way to soak that up. I noticed other areas of the sock not performing at 100% so I readjusted them. I used some rocks to anchor the socks because heavy rain is expected later this afternoon, night, and through tomorrow. We may lose a sock because the outfall has a very high velocity.

3/3/2018 - Received a call from Chief Deardorff of the City Fire Department around 11:05am. He left me a voicemail because I was in a CPR class at the time of the call. When I noticed he called, I texted him to see what was up. He notified me that they had a sewage leak with improperly disposed oil at 31 Parkway Blvd and it got into the street. He said the City was already out and told them it was a private sewer line issue. I told him I would respond as soon as my class lets out. I arrived at the scene at 12:35pm and when I pulled up I saw the owner power washing the oil dry and whatever substance it was absorbing into the street, directly into a storm drain. I jumped out and told him to stop spraying and told him never to spray into the storm drain. I told him several times that he has to sweep up the oil dry and material into the trash can. It didn't really seem like he understood me. So I repeated myself several times and ensured he understood you CANNOT power wash anything into storm drains. He did stop and grabbed a shovel and broom and proceeded to sweep up the rest of the oil dry and whatever was left on the road. There was a good amount of substance in the inlet and partially in the inlet across the street. I called Tom Landis at 12:38pm to see if he could get a crew in to vacator out the inlet. He said he would call Albert and someone to come in and do that for me. He called me back a few minutes later and told me that Albert and Tavaris will be coming and it would take them about 45 minutes to get there. I told him I would wait for them. I then phoned Chief Deardorff to see what happened earlier when he was at the scene. He stated that someone from the City was at this location the day before (Friday) and there was a rumor that the business dumped two 55 gallon drums of oil....and had a sewage leak today. Chief did not know where or any other information about the 55 gallon drums of oil. I then called DEP out of abundance of caution at 1pm. I left a message on the emergency number and someone called me back at 1:04pm. I explained what was going on. He said he would give this information to Sheena and she will most likely get back to me on Monday. I told him I hadn't checked Willis Run which was about 100 yards away to see if any of the oil or sewage impacted the creek. He said when I do look and do see an impact to call them back. I said ok. There was no impact to the creek at this time. The highway crew came and vactored out the inlet and tagged the one across the street for cleaning on Monday/Tuesday. There was a car parked in front of it and they will ask it to be moved when they come to clean it. We all cleared the scene at around 1:56pm. I will recheck the area on Monday morning.

3/5/2018 - Received a call from Buffington about more water being seen in front of 31 Parkway Blvd. He said he is also going to get Carlos out to help translate for the owner. We discussed what went on



Friday and Saturday. I said I would respond immediately. I arrived to find a small amount of water coming from the same location as was on Saturday March 3 2018. Buffington and I saw the fresh air vent was full of sewage water and was overflowing onto the parking lot. We discussed a course of action and waited for Carlos to show up. Meanwhile we talked to Nancy to see if there was a sewer call out on Friday March 2nd 2018. She said there was but she didn't know what was done or said. She called Eric and they said they were out there and the main was clear but the lateral that the shop is on, runs parallel to the main on their sidewalk, down to an alley behind the Rooster Club then across Parkway Blvd towards the main near the creek. Joe from Sewer maintenance showed up with a map and described the pipe going under the sidewalk and that it is a private lateral. So the shop is going to have to get someone to clear the clog. Once Shelton, Carlos, and Jason arrived, they said that on Friday they were told the Rooster Clubs adjacent property that they rent out to another organization did also have a sewer back up. PPZ also said that they had RotoRooter take care of their problem and that they found motor oil in the pipes. Now we assume that one of the car lots is dumping oil into their drains. While walking around the shop looking for someone, I noticed an oil/water separator in the floor of the shop that looks like it was overflowing. There was also a manhole inside the shop that had water on top of it. It also looked like there was water coming from the bathroom in the corner of the shop. We then spoke with the son of the shop owner and explained that they will have to get a plumber to clean the pipe out. The son says that his father rents a machine to do it and that he did it on Friday. We then notified them that the private lateral is about 240 feet long and that he will have to get a professional to get that long. The son then said his dad will get a longer hose and try the next day. Buffington was going to shut the shop down and turn off the water until they get it fixed. The owner showed up and told us what he planned to do. He planned to shut down operations for the day and take care of it first thing tomorrow. Buffington then had a thought about the shop above this shop and wondered if they are one the same lateral because we cannot punish this shop owner if we are not sure where the clog originated from. There are no other access points on that line. Ultimately, after much thought and conversation, we decided to get the sewer guys back out and clean what they can and to grab a sample. I waited for the sewer crew and they ran the line from across the street but did not see anything. They then took an empty plastic water bottle and filled it with the water that was coming from the fresh air vent near the car shop. It did not look like there was oil in it. At this point we will see what the shop owner can do tomorrow and see what the next step would be. \*\*\*UPDATE\*\*\* March 8 2018 - Rode by the area and saw that the fresh air vent was still overflowing. The problem had not been taken care of. I called Buffington and he met me out there in the afternoon. After a few minutes Albert rode by and parked to see what was going on again at that address. Buffington and I decided that their water need to be shut off until the problem is fixed. Buffington called the York Water Company and had someone respond. Albert offered to go get the vactor truck and vactor up the oil-dry that was replaced on the sidewalk. The inlet had some water in it but not enough to vactor out. When the York Water Company representative arrived, they opened the electric shut off manhole to find it was full of sewage water. The rep couldn't find the shut off valve through the water so he left and would come back once Albert came with the vactor truck. Meanwhile the owner of the business, Buffington and myself tried to rectify the situation. I gave the owner a number for Klines who could come to clean out their line. He did not call while we were there but said he would. Buffington had to leave for an appointment, and I waited for Albert. I walked across the street to WR3 and saw that there was some foam that accumulated a few feet from the outfall itself. I am not sure if this is a result of the sewage reaching the creek or if it is just nutrients in the water since this outfall is also spring fed. Once Albert got back with the truck he



vactored the water off the street and then vactored out the electric manhole. Tom Landis came by to see what Albert was working on. Once the manhole was vactored out the water company rep turned off the water, however, we noticed the manhole was filling with water again and concluded that the line was punctured and was leaking into the manhole. After everyone left, I phoned Buffington letting him know this owner may not have a bigger problem. When the owner told us he flushed 230ft of pipe, I really didn't believe him, there is one 90 degree turn and he did not know if the snake went the correct way. I think the snake punctured through his pipe because he was forcing it, leading to the break in the pipe. The sewer crew painted green lines where we calculated the actual lateral line is located according to our maps and other info. March 14 - Buffington and I met RotoRooter at 33 Parkway Blvd at 10am. We requested Sewer Maintenance accompany us but they arrived about 15-20 minutes late. RotoRooter had already started to try to snake from the fresh air vent on D&K property. There was a large gush of sewage water that flowed onto the street and into the storm drain. Buffington and I tried to stop the flow into the drain with pillows and absorbent towels. The sewer crew went back to the shop to get the vac truck. By then the flow had stopped and RotoRooter decided to TV the line from the dead head pipe in the alley by the Rooster Club. We had them vactor out the water manhole because it was full of sewage water again. Then they left. We watched as RotoRooter team tried to get the camera up into the hole where the clog was. They sprayed water once they thought the hose was up into the lateral pipe. No avail. RotoRooter wanted to again try from the fresh air vent on D&K property. We then called the sewer maintenance guys back and asked them to bring the vactor truck so we can be better prepared for the overflow. We waited about 45 mins for them to arrive. We told them we wanted them to have the vactor ready when they started to flush the line. This time, the water did not overflow as much and they found that they actually were able to clear the blockage. While we were waiting for the sewer crew, Buffington saw that there is universal codes that require a clean out at "every change in direction of the pipe and every 100 ft." We will be enforcing these regulations so this will not happen again. Once finished, I returned to the office and typed up a letter to the owner of D&K. I told him what we did that morning, and told him about cleaning up the oil dry by Friday. I also mentioned about the cleanouts having to be installed and will be following up with him about that. I finally then mentioned that Buffington and I would be returning to inspect his oil-water separator as this is what we think is clogging the pipes with motor oil. This case is finally closed.

3/21/2018 - Large 3-4 alarm warehouse fire at the corner of Broad and E Philadelphia Street. Has been burning for about 16 hours now. Partial collapse of back of the building, with more being bulldozed to put out hot spots. Veronica Chavez received a call on 3/22/2018 from Michael Shannabrook who was concerned about the large amount of hydrant water and material flowing from the fire scene into Poorhouse Run. Veronica explained to Shannabrook that firefighting activities are ALLOWABLE according to the allowable discharge list from PADEP. He then explained there are some suspicious items in the back of the building and was not sure if they were an issue if any fluids from machinery or equipment mixed with the hydrant water. It would still be covered under the allowable discharges considering firefighting activities are still going on. If anything looked crazy going into Poorhouse Run or if Mike had any other questions, to call Lettice and she will either respond or answer the question via phone. This event is considered an allowable discharge, however, it was recommended that we write it up as evidence of the event in case any other implications came down at a later date.

3/25/2018 - Received a text message from Dave Rudolph stating that as he was riding by earlier that day, D&K social club employee was power washing the hood to their grill onto E. Newton Avenue. He



said he had rode by about 4:30-4:45pm and saw them as he was heading to City Hall. I told him I would respond to take a look however when I arrived I did not see any residue of washing or grease particles near the area nor in the nearest stormdrain at the intersection of S Duke and E. King. I did smell a slight grease odor though but not enough to definitively say they did this.

3/26/2018 - Received a phone call from an employee with Protech this morning and he was telling me about the company dumping oil or ESO (Epoxidized Soybean Oil) into the sewers inside the building. I asked a few more questions to ensure the information got to the correct person. I asked if they are dumping it inside or outside. He said inside to the sewers. I then gave this information to Sally and Veronica. They stopped by and took a look around the outside of the building. They noticed a lot of trash and large metal debris in the back of the building but did not see any signs of oil. When they returned Sally called the number back and asked a few more questions. He said the oil was ESO and that some of the 6000 gallon tanks in the back were leaking into the gully across the street from the building. That afternoon I responded to the scene and drove around the back of Protech's building. I did see a lot of scrap metal and machinery pieces dumped behind the building. I stopped near the back and noticed rainbow colored beads in a tire mark in the mud, filled with a bluish water. I walked over to the inlet a few feet away and noticed water flowing into it from a pipe coming from the direction of the building. The water was clear, maybe slightly cloudy, but no sheen, oil, or beads. I then drove around to the drainage basin along Neu Road and noticed the water was a bluish gray. There is a yellow thing on the mouth of the outfall leading to the basin. It looked like it was inflated or full of something. There was water flowing from a bolt in the yellow cover. I took photos of the blue water. I then sent the photos to DEP so they can follow up if they desire, since we have had issues with this industry in the past. I also sent the photos and information about the dumped machinery in the back of the building to Permits, Planning, and Zoning for them to hopefully get the company to clean it up. The area is very trashy.



**ILLICIT DISCHARGE QUARTERLY SUMMARY REPORT – CITY OF YORK**

Reporting Period: \_\_\_\_\_

**I. Outfall Screening Activities Summary**

Number of outfalls screened: \_\_\_\_\_  
Number of priority outfalls screened: \_\_\_\_\_  
Total number of outfall inspections: \_\_\_\_\_  
Number of outfalls with flow: \_\_\_\_\_  
Outfalls with illicit discharge: \_\_\_\_\_

**II. Illicit Discharge Investigation Summary**

**A. Summary**

Investigations with Illicit Discharges: \_\_\_\_\_  
Investigations without Illicit Discharge: \_\_\_\_\_  
Total Illicit Discharge Investigations: \_\_\_\_\_

**Reported to the City of York by...**

Maintenance Crews: \_\_\_\_\_ Public: \_\_\_\_\_ Non-Profit: \_\_\_\_\_  
IDDE Inspector: \_\_\_\_\_ Government – Non City: \_\_\_\_\_ Other: \_\_\_\_\_  
City Employee: \_\_\_\_\_

**B. Type of Pollutant or Potential Pollutant**

Automotive Liquids/Oil: \_\_\_\_\_ Ground Water-Sump Drain: \_\_\_\_\_  
Building/Sidewalk Washwater: \_\_\_\_\_ Industrial Wastes: \_\_\_\_\_  
Concrete, Cutting Slurry/Washwater: \_\_\_\_\_ Medical Wastes: \_\_\_\_\_  
Debris – Construction: \_\_\_\_\_ Minor Auto Accident: \_\_\_\_\_  
Debris-Other: \_\_\_\_\_ None: \_\_\_\_\_  
Food Wastes: \_\_\_\_\_ Other Washwater: \_\_\_\_\_  
Glue, Pastes, Adhesives: \_\_\_\_\_ Paint: \_\_\_\_\_  
Grass Clippings, etc: \_\_\_\_\_ Pet Wastes: \_\_\_\_\_  
Sediment: \_\_\_\_\_ Sewage: \_\_\_\_\_  
Swimming Pool: \_\_\_\_\_ Unknown: \_\_\_\_\_  
Vehicle Cleaning Washwater: \_\_\_\_\_

**C. Pollutant Source**

Unknown: \_\_\_\_\_ Residential: \_\_\_\_\_ Municipality: \_\_\_\_\_  
Industrial: \_\_\_\_\_ Construction Site: \_\_\_\_\_ Minor Auto Accident: \_\_\_\_\_  
Commercial: \_\_\_\_\_ Transportation/Major: \_\_\_\_\_ Other: \_\_\_\_\_ Utility: \_\_\_\_\_

**D. Discharge Abatement Status**

Yes: \_\_\_\_\_ Abatement Not Required: \_\_\_\_\_  
No: \_\_\_\_\_ Unknown: \_\_\_\_\_  
Ongoing: \_\_\_\_\_ Percent of Bateable Events Abated: \_\_\_\_\_

**E. Enforcement Activity**

None: \_\_\_\_\_ Verbal Notice: \_\_\_\_\_  
Warning Notice: \_\_\_\_\_ Administrative Action: \_\_\_\_\_  
Administrative Action with Cost Recovery: \_\_\_\_\_ Legal Action: \_\_\_\_\_  
Unknown: \_\_\_\_\_

**F. Responsible Party Found?**

Yes: \_\_\_\_\_ No: \_\_\_\_\_  
N/A: \_\_\_\_\_



#### MCM 3, BMP 5, #4

10/4/2017 - Received a call from Chaz stating he got a call about a pink liquid coming out from a manhole. Unknown what it is or if it was a SS or Storm manhole. I arrived to find the caller standing by. He said he had a tough time getting to someone because the receptionist wouldn't connect him with anyone. Albert and Ricardo met me at the scene. We immediately determined it was a sanitary sewer manhole. We got a small sock and put it in front of the storm drain it was draining into. We then went to check the outfall into the Codorus and also found that the pink liquid had made it into the creek. While Albert tried to get someone on the phone from the sewer dept, Ricardo and I went down the bank to take a few photos and some booms down to try to keep the liquid from reaching the creek. However some of it did. DEP was called. They called me back and I told them some more information and he said he would give the information to their local water person and they would get back to me. Sanitary Sewer maintenance arrived and pulled the manhole cover off. The hole itself was 3/4 of the way full of the pink stuff and what looked like grease. Again very foul odor. SS Maintenance flushed out the upper manhole a few times. Albert, Ricardo, Kevin and I walked up the alley and pulled the next manhole cover off and saw there is a connection of pipes in there. Neither pipe had any pink stuff coming from them. So we assume that the pink stuff is coming from somewhere in between these two manholes. One whole side of the block is a parking lot. The other has a warehouse building. Steve Buffington and I set a 1030 appointment to go check out this building and see if we can find where this pink substance is coming from.

With speaking to Veronica, she stated that the nearby candy company is allowed to discharge the pink materials to the SS, and she thinks that the main backed up at the same time they were discharging which enhanced the urgency of the situation, seeing pink stuff coming from a manhole. So we determined that the nearby candy company didn't do anything wrong since they are allowed to discharge it, and the main was cleaned out, and it was just an unfortunate coincidence. I canceled the meeting with Buffington for the next day. Veronica has offered to speak with the company when they go out to pick up their sampler tomorrow morning and let me know of anything that seemed off. Still waiting to hear from DEP.

10/5/2017 - Received an email from Raphael Caloia from Springettsbury Twp stating that his PW employees had spotted some rust coming from the junk yard into Mill Creek. He also sent a few photos and said he was passing on the information because it was within the City's boundary. Sent a reply to his email asking for clarification on where he took the photos. He sent back a map locating he was standing on the bridge over Mill Creek on Eberts Lane. I inquired about this with Veronica and we both guessed the substance is the iron loving bacteria that she had showed us in the area when we first started working for the City. The next morning Sally and I went to the location. I took photos from the bridge and Sally went down to the bank to collect a sample of the substance. She noted that it did have an oily smell to it and "broke apart like glass" when it was poked with a stick. We will show the collected substance to Veronica on Monday and see what her recommendations are and go from there. Monday morning, Veronica inspected the sample and we all determined that it is an "iron-loving bacteria" that naturally occurs in Mill Creek. She also said that John Roth, who used to work for DEP, had confirmed this in the past.

10/6/2017 -- Received an email from Shilvosky that contained a photo. There was no other narration. I replied asking where this was taken, an address, or cross streets and a description of the photo. No response. I asked James H. if he knew where this location was. He stated that he had gotten a PA1 call



and its 834-838 W Locust St. I then sent an email to Nicole Gallup to see if she had any information about the project or any points of contact. She replied that she was unaware of this project until this morning and that Shilvosky is the one that deals with Habitat for Humanity. I visited the site and took photos. I Googled "Habitat for Humanity in York PA" and called the number. Extension 102 was for the construction coordinator. He did not answer so i left a message detailing who i was, what project site i was at, and what was wrong. I left my name and phone number and told him that he needs to get a sweeper to come out and sweep the dirt off the street, and we will have to come up with a plan to ensure the rest of the dirt remains on the lot and does not run off into the street. Awaiting a callback and/or further information/instructions. Monday morning i received a call from the construction coordinator for Habitat for Humanity and he stated that he and his crew went out on Saturday to shore up the area and installed silt fencing and other erosion prevention techniques. He stated he rode by the site this morning while it was raining and stated that no sediment was coming from the site, however, there is another construction site down the hill from his, on Sheridan Rd that has no stabilization and there is a big truck unloading blocks on the dirt. And he thinks i should check them out. I stated i would go ride by and see if i could speak to someone there. He also stated i could call him on his cell if there were any other issues or questions.

10/9/2017 - While speaking with a client about another property on the phone, he notified me of the construction area at 370 Sheridan St. He told me that there were not silt fences or any sediment controls at the site. He was worried the sediment was flowing off of the construction site. I went out to take a few photos. I sent my team (Nicole Gallup, Shilvosky, and Chaz) an email updating them about the original clients' site and mentioned to them about the site on Sheridan. Nicole and Shilvosky responded that they both know about the site on Sheridan and they have already contacted the proper personnel to investigate. I thanked them and asked to be kept in the loop. Received an investigation form from CS Davidson who have already conducted their investigation and had noted areas that needed immediate attention.

10/11/2017 - Received a call from the security guy at SUSCOM center letting me know there is something coming out of CC48 again. I told him that i would be out to take a few photos and that we are having a big meeting on this issue this morning. I responded and took a few photos. I also filled out the documentation. A meeting was held this morning about the recurring illicit discharge from CC48.

Attendees: Michael Shanabrook (Emergency Services), Steven Buffington (Permits, Planning, Zoning), Jeff Shue (CS Davidson - City Engineer), Chaz Green (Public Works Director), Tom Landis (Highway Superintendent), and Cody Santiago (Emergency Manager)

\*Discussed what we know - That some kind of automotive oil, fluids etc are coming from CC48. Talked about the multiple reports dating back to 2012-2013.

\*Brought to the attention two ALS samples that were taken in 2013 and 2014. The result is Oil/Grease Hexane Extractable. So we are assuming it is some type of automotive fluid.

\*Discussion of the drainage area ensued. There were several maps floating around that showed the pipes and draining areas



\*It was decided that since booms are placed at Park Street and Hartley, that we should put in new ones there and ones just upstream from that manhole on West Street and Lincoln St, preferably today. Then monitor and see whether the oil is coming in between the manholes to try to narrow down the problem area.

\*Tom suggested that Albert (Highway) should tag along as we change out the booms so he is familiar with the process and can see what we are seeing. Also suggested that Veronica show us how its done and should be present when placing the booms this time around.

\*The idea of dye testing came up and would be the next step if the first idea does not help. After that, and as a last resort, we could try smoke testing.

\*Buffington mentioned to ask Veronica about the ice melt place, if it was ever investigated and what the outcome was

\*We all took a look at page 38 in the mapbook and verified to place the new booms into the manhole on West and Lincoln Street.

\*This is where we will start and go from there.

10/15/2017 – Received a call on Facebook from James H (Sewer Maint) about the fire department pumping sewage from basements at 425 and 427 E Boundary Ave into the street. This led right into a storm inlet, then out into Poorhouse Run. Photos were taken. Police, fire, Parks and Rec, Sewer Maint responded initially. MIPP responded but didn't find anything, and MS4 Responded after MIPP and didn't see anything. Timelines of phone calls and reports from Fire and Police are all available for this incident. This investigation is ongoing.

10/17/2017 - Gas leak was reported at 200 blk of E Jackson Street. James H got a call to mark the Stormwater and Sanitary Sewer pipes. I saw the post on SPIN and asked James to assess. He said that i should come out to the scene. I arrived to find the firemen there, along with Kinsley, and Columbia Gas. James showed me the broken pipe that was hit while Kinsley was digging a trench in the middle of the 200 Blk of E Jackson St. The broken pipe was "hissing" as gas vapor was escaping the pipe. There was also a strong odor of gas in the area. As i surveyed the rest of the area, i noticed an excessive amount of dried concrete slurry all over the roads and sidewalks. It was tracked down E Jackson to Edgar and up and down S Pine St. The storm drains at the intersection of E Jackson and S Pine were covered with the white slurry powder. There were not stormwater pollution prevention measures available on site. Kinsley is doing the work at the site. Later that day, i phoned Steven Buffington to ask his opinion on the Kinsley situation. He suggested that i speak with Chaz about this since this was brought up during the previous PW director but didn't go anywhere. He said to ask Chaz how we should proceed with telling Kinsley again they need to be taking measures to ensure the storm drains are not polluted. A phone call or meeting with Chaz will be set up.

10/23/2017 - While making routine rounds, I came across this area that caught by attention by the amount of trash left at the area after collection had occurred. I took photos.



Back at the office, i sent an email to Cindy Utz and Craig Wolf, who are with the Housing Authority to see if they could remind residents to ensure their trash is secure and to pick up dropped litter. Or if they have a maintenance crew if they could clean the area up. I also mentioned if this is a collection issue to let me know who the collector is and i will hold them responsible. Sent photos as well.

Received an email from Cindy Utz, and she forwarded my information to Sandra Harrison who is the manager of Parkway Homes, provided her email and phone number. She also put her on the email chain so she can see the original message. Sent Sandra an email, the same email I sent to Cindy and Craig, awaiting for a reply.

10/23/2017 - Stopped by this trouble spot this morning to check on it and there was a light gray oily sheen coming from the outfall. I took photos. This frequent illicit discharge is being investigated.

10/23/2017 - Received a text message from Steve Buffington about behind Mission BBQ, looks to be grease flowing or being washed back behind the restaurant. Says there is a foul odor of grease. Met Buffington out there. Took photos. Buffington called in the Health Inspector, Tamika Rascoe. We examined the white puddle and photographed it. It was just "there" like someone dropped something at that spot. Other area has foul odor (either grease or the dumpsters). The ground near the door was sticky, and grey puddles in the area. Tamika arrives and we knocked (pounded) on the back door but no one answered. We walked around front and asked for the managers. They took us back to the kitchen and we noticed that the floor near the door was very wet and slippery. The manager says that the restaurant itself is on a slant and all the water runs to the door. He says he but a stopper on the bottom of the door to catch the water but some still escapes. He says most of the water comes from the dishwashing sink right next to the door. Buffington and Tamika suggested the only thing they could do is put in a floor drain right at the door and have it drain into their underground grease trap. Buffington asked me what he should do in terms of remediation. We both said kitty litter on the area in the back and sweep up. It is a large area but we have to contain it. He said he would do that right away. We then asked him about the white puddle and he said that the trash collector dropped the Ranch dressing all over. He said he was angry about that. He said that trash was laying everywhere and they put the dumpsters on top of empty boxes so he cannot get them from out underneath the dumpsters to throw them away. We all suggested he would complain to Penn Waste because it was their fault and they should have been more careful. He said that was on his list of things to do today. Manager's name is Chris McCullough and he is the store manager. Tamika wrote up orders for the floor drain and the kitty litter remediation and read through it with him. We noted that if they needed more than 30 days to install the floor drain, to get in contact with Tamika and she will give them an extension.

10/23/2017 - Received a call from a fire chief at 12:11pm telling me they were called to the W. King Street bridge due to a piece of machinery lost some hydraulic fluid onto the bridge. He explained the bridge has holes in it, and the fluid got into one of the holes and into the Codorus. He said the company (a contractor for Kinsley) had put absorbent towels into the hole to try to sop up what went in and to ensure more didn't flow in. He said a few drops got into the creek and the company put absorbent booms on the creek as well. He said the fluid was dripping into the creek once every 5 mins or so. He said they were called as a precaution but they did not assist with the cleanup. He said the company



called a professional clean up company who were enroute to clean up the mess properly. I thanked him for the call and responded later in the day. When I arrived at the bridge, the cleanup company Environmental Products and Services, were also arriving to clean up the mess. I asked a gentleman standing by if he could show me where the spill was. He took me over and they had put oil dry down on the ground and blocked the area off with large wooden blocks. He explained that a hose broke on a piece of machinery they were using. He told me about 3 Qts had leaked onto the road. He showed me where the absorbent towels were placed inside the hole to prevent any other leakage into the creek. He then took me across the street and we looked over the bridge and there were 3 large booms hooked together and draped from the bridge into the water that has caught the fluid from flowing down stream. He also pointed out they put another boom flat under the W Market St. Bridge as a secondary containment. I asked how they got the boom in the water over there, he said they have a boat under the King St Bridge in case anyone fell in accidentally. I asked if i could take photos before the environmental guys had cleaned it up and he said sure. I walked over and a guy from EPS explained to me what they plan to do. He said they will clean up the oil dry that was put down earlier, and put their own down. He said they would grind it into the spill and then sweep it up. He explained there will be a stain left on the street/sidewalk but all of the fluid will be gone. He said they will also do boom maintenance on the Codorus Creek for the next week to ensure it all is clean from the creek. I thanked him and asked to take photos before they begin clean up. He said sure. I took some photos of the old oil dry, the location and of the towel put in the hole. I then took photos of the boom on the W King St Bridge and under the Market St Bridge. I then started on the paperwork and watched as EPS started their clean up. I photographed various parts of their cleanup process to document it. The supervisor of the company who owned the piece of machinery gave me a card and asked for a copy of my report, i said certainly. He then told me that the fire department was out, a supervisor with Kinsley, and his boss had been there. He also said that Sheena Ripple from DEP was also on scene and gave the thumbs up. I said great that she was called. He said they are very careful about the environment. I told them they did an amazing job with their immediate reactions and protocols for who needed to be notified. I told them that i didn't really need anything from them, just to document. DEP was already notified and she had already responded and if that she needed anything from me, she has my email and phone number. He said great! After EPS was pretty much done with their clean up, i asked if any of the gentlemen had any further questions for me. They all said no and i again thanked them for their quick response. I leave the scene.

10/31/2017 - As i was riding through the area, i noticed they were concrete saw cutting the road. As i drove by, i noticed they did not have any storm inlet protection in the area where they were cutting. I turned around and walked into the work zone to photograph the area. I documented the incident and knew i was going to make a phone call to "Lisa" from Kinsley later on this afternoon and will be sure to bring up this situation.

10/31/2017 - Received a call from Steven Buffington about construction being performed on E Jackson street near McKenzie street - Arlington Street - S Queen Street area. He stated that they did not have any stormwater inlet protection in place at the site. I said i would go out, write it up and give Lisa from Kinsley a call later this afternoon. I responded to the scene. I walked to the intersection of E Jackson and McKenzie Streets and noticed no stormwater protection in place. A few of the inlets at the intersection had construction debris in it, what looked like asphalt. As i was taking photos, someone from the team came over and asked if they were to be doing any work to the storm inlets? I told him no but i am concerned about the inlets not having any protection around them. He stated he will make



sure they are cleaned out when they are done here. Just to ensure i heard him correctly, i asked him that they plan to clean the inlets out? He said yes. He said they are getting ready to black top. I said ok thanks and started taking more photos. I will call Lisa from Kinsley to find out what exactly their procedures are and see if we can either change or put others in place.

10/31/2017 - First saw the incident on Southern Pennsylvania Incident Network (SPIN) on Facebook. Received a call from Chaz Green (Public Works Director) at 9:35pm. He asked for Nancy's (Sewer Maint Secretary) phone number and he was going to call her and call me back. He called me back a few minutes later and said he would meet me out at the scene, because he did not want me going alone. Also said there was an officer waiting as well. He told me Nancy is calling the phone list to get Sewer Maint out there asap. I arrive on scene and Chaz and Officer Smith were already on scene. Officer Smith showed me where the hose was coming from under the porch at 611 W Princess St. He said when he arrived the resident was pumping the sewage out of his basement onto the street. He said he notified the resident that it was illegal and he needed to cease and desist. Resident complied. Officer Smith said there was a language barrier but he thinks the resident understood what he was doing was wrong. I took photos of the area. I asked Office Smith who reported the incident to him? He stated that the fire department called the police in after they were called, came to the scene, and couldn't do anything about the spill. Officer Smith thinks that the neighbor at 603 (possibly) called it into 911 because the resident could smell the sewage and saw what was going on. He says he thinks the resident didn't want to get involved and wouldn't leave their name. Chaz stated that James Hoffnagle and Joe Yeatts were on their way from Sewer Maintenance. I explained the procedure to Officer Smith that Sewer Maint will come out and flush the main line. If there is no clog, then the issue is on the resident to get a plumber and a company with a vacuum truck to suck out his/her basement. While waiting for Sewer Maint to arrive, i notified DEP at 10:16pm. Left a message and my call was returned at 10:20pm. I explained the situation and she asked if lime was going to be used to clean up the residual mess. I stated that i could speak with the resident and see if they could, and if not our highway department will put oil dry down first thing in the morning. She then requested that i send my report to Sheena at DEP. I said I would. Sewer Maint shows up with the "camel" and begin to work on the main line. Another officer pulled up and asked Officer Smith what was going on and they spoke for a little while. Then they both walked over to the camel to watch what James and Joe did. I relayed to Chaz that DEP requested the resident put lime on the residual and i told him that kitty litter would suffice. He then directed me to go to the nearest convenience store to buy kitty litter but then we resulted to have highway department come out first thing in the morning at 6am to put oil dry down and sweep it up. He said he would see to it. The main line appeared clear and James and Joe then agreed to vacuum out the inlet where the sewage flowed into. They lifted the grates and i took photos of the water in the bottom of the inlet box. They vacuumed out the inlet and flushed with water. Once they were finished and all photos were taken, the scene was cleared. 11/1/2017 - Received an email from Captain Miller with the Fire Department who had responded to the incident before we were called. He was letting me know of the incident. I emailed back that Chaz, myself, Officers, and Sewer Maint responded last evening as well and explained what we did. I then addressed Steve Buffington in the email (who was already CCed) and said that the resident should be cited. Buffington replied that he will issue the citation and list me as the witness. He then asked the Fire Captain who the duty officer was and their incident report for our records.

11/1/2017 - Routinely went to check on this outfall and noticed a sheen coming from the outfall into the Codorus. Took photos and documented the time. Called Albert from highway and made an



appointment at 1pm to put the second sock into the manhole at the intersection of Lincoln St and West St, above PCC to see if any oil is coming from above the facility. We will also check on the booms in the manhole at Hartley and Park Sts to try to pinpoint the source of this ongoing illicit discharge. 11/3/2017 - In the morning i checked on the outfall. There wasn't any substances being discharged, however, there was an accumulation of oil behind the boom that had not yet absorbed. I left the boom in place. I went back in the afternoon around 2pm and collected the booms. There was very little residual oil left behind the booms. I closed this investigation.

11/3/2017 - Recieved a call and voicemail from Steve Buffington saying he was out at 419 Walnut street and there is a guy working on a car and there is stuff on the road. He told me to call him back if i got the message in the next few minutes. I tried calling him back multiple times and was unable to reach him. I rode by the area around 12:37pm and no one was around except for a man sitting on a chair with his dog. I approached and i asked him if there were cars being worked on here. He said that "they" were already out here and told the guy he is not allowed to do that etc. He pointed to the bright pink CONDEMED sign and said that they walked through here and put the sign up. I said was anything said about the oil on the street? He said the man who was here told the owner he was not allowed to work on cars out on the street and that he had to go purchase kitty litter to lay on the liquid material on the road. I said ok, and after the kitty litter stays and soaks it up, that he has to sweep it up and put it into the trash before it rains. He said yes they told him that as well. I said ok, and told him i was the stormwater person and i just wanted to make sure the stuff was cleaned up before it rained and got into the drains. He said he understood. I told him i would snap a few photos and that would be it. I took photos of the sign and the road then left.

11/6/2017 - Received a phone call from Ricardo (highway) stating that they are at the corner of Walnut and N Queen Streets and there is a van leaking paint from their car onto the street. He said they were able to stop them but they are threatening to leave. He insisted i arrive immediately. I told them i was on my way, then stopped to call Steve Buffington and he stated he was not in the office yet but once he gets in the office he would call me and stop by the area if he is needed. I arrive a few minutes later and Albert and Ricardo told me they saw them get out of the van at the light and then leave, while paint was coming from their vehicle. They would not stop and asked an officer to pull the van over for them. The officer stated he was not on duty yet but offered to turn on his lights to get the van to stop. The officer was gone by the time i arrived. We walked over to the van and i introduced myself. Albert and Ricardo explained that the men said it was only paint washwater from a can that had tipped over in the back of their van. The two men showed me the bucket and told me where the water was before the can tipped over. They explained they hit the brakes and the bucket tipped over and spilled into the back of their van, which is why they were seen getting out of the van to try to contain the bucket. One man said the bucket is mostly water with latex paint with their paint bushes they had used. He showed me the water in the back of their van and said that it must have gotten into the frame of the van and found its way out. There was a white spot near the front passenger door where the paint was still dripping from the frame of the van. They had a rag under the drips to try to contain the spill. I asked the men if they had any oil-dry or kitty litter they could put on the spill, both shook their heads no. I asked Ricardo and Albert if they had any, and they said no but Albert offered to run back to the shop to get some. I obtained the mens' information and the owners' information (phone number and name). I took photos of the spill, the inside of the van, the bucket, and the back of the van with the license plate. I explained to the men that there would be no fine since it was an accident but it could be if they had done it on purpose. One man explained they don't have anything like this in Hanover so they were unaware of



what was going in. I explained that DEP is coming down on cities with MS4 Permits which is why i had to respond. They said no problem and understand. I told them i got everything i needed, shook their hands and allowed them on their way. Buffington called and i updated him on the situation and told him we would not be citing since it was an accident, a small amount, it was cleaned up and that it was mostly water. He said ok and did not respond. Albert arrived back with some oil dry and we placed it on the small area. I thanked them and we left the scene.

Company: Todd A. Hess Painting

Employees involved: Raymond McWilliams and Justin Harlacher

Owner: Todd A. Hess - (717) 881-5807

11/6/2017 - During a routine check on the outfall, I noticed a grey substance coming from the outfall into the creek. This is an ongoing issue. It had just rained for about an hour before i went to check the outfall. I took photos and documented the times. Later that afternoon, around 1pm, Albert, Ricardo, and I went to check on the manholes upstream for IDDE evidence. The manhole at Lincoln St and West St was dry, a photo was taken. We then checked the manhole at Park St and Hartley. There was flow and the grayish water was flowing from the direction of the other manhole. We surmised that the substance is coming from somewhere between the two manholes. Which could either be Precision Components or another connection somewhere within the building or under it from another part of the city. Our next step would be to tour the facility and possibly do some dye testing to determine exactly where this substance is coming from. An email update was sent to all parties that attended the initial CC48 meeting.

11/27/2017 - Received a notification from James Hoffnagle about Kinsley street concrete cutting at this intersection and sent me a photo. He said there were no stormwater inlet protection in the area of their work zone and that the washwater was flowing directly into the storm drain at the intersection. I responded to the location and took more photos of the incident. I also photographed a worker actively saw cutting the concrete with no inlet protection. I have sent 2 letters to Kinsley about not using stormwater inlet protection in their work zones. Nothing else has been done about it.

12/4/2017 - Ongoing issue with CSR - Drove by to see if the area had improved, but it had not. Sediment was tracked out onto E Princess Street leading away from CSRs property. I took photographs, typed up an investigation form, and wrote a request letter to CSR asking for a written mitigation plan be sent to me by January 4th 2018. Our team will review the plan to ensure efficiency and effectiveness. We will then either request revisions, or take alternate measures.

12/9/2017 - Received a phone voicemail from the security guard at the SUSCOM center at 745am that morning. I didn't get the message until about 830am, in which i was heading to a training class until 130 when i was able to check out the outfall. I took photos, noted the date, time, and weather conditions. I will follow up on Monday morning. Monday morning i wrote up a report and revisited the area.

12/11/2017 - Received a call from James Hoffnagle about the sewer over flow at the corner of S Duke St and E South Street. He said that he got a call from Joe Yeatts with Sewer Maintenance Department saying that he and the crew were out on a overflow call and they realized that the overflow went into the storm drain on the corner of E South Street and S. Duke Street. I told James to call Joe back and tell them not to vactor out the inlet until i got there and was able to take photos. He said ok. I arrived on



scene and the sewer maintenance guys were all there and had finished clearing the main line. They showed me the inlet and i asked if they would be able to vactor out the inlet for me. Eric H said they would and they all got to work. I snapped photos of the inlet, inside the inlet after the grate was taken off, and while they were vactoring. As Eric was pulling the water hose out of the truck to wash off the sidewalk, he noticed a pipe coming from 402 S Duke Street and motioned for me to come take a look. I walked over and also saw the pipe coming from the basement window of the residence. I took a photo and documented the discovery. I then snapped photos of them washing down the sidewalk and street while vactoring the wastewater into the truck. A man walked up and was looking into the drain and watching the guys work. He then asked where the water was going and i told him into the inlet. I asked if he was the homeowner and he said yes. He was of Spanish descent and i wasn't sure he understood me when i told him that he cannot pump any sewage out onto the street. I told him he needed to get a plumber and a vactor truck to pump your basement out. He said the water was up to his boot, as he showed me on his leg. I told him i was sorry it happened but he would have to get a vactor company to pump out the sewage from his basement and that it should NEVER be pumped out onto the street. He said ok and shook his head "yes" as if he understood me. He then walked back into the house. The guys were finishing up and i snapped another photo of the clean inlet and thanked them for their work. An hour later i asked the sewer maintenance guys, just to confirm, that the main was blocked. Kevin said yes the main was blocked.

12/18/2017 - Received a phone call from Chief Collins about a truck that had spilled cooking grease all over the road and some of it got into the storm drain at the corner of E King Street an S. Duke Street. He explained that a company was removing a grease drum, he said looked to be a 55 gal drum, and it had spilled onto the street. He said his firemen had come back from filling up their truck and saw what was going on. He said they put all the oil dry they had onto the substance but did not want to put any into the drain and decided to call me. I thanked him and told him i will be out to take a look. I called Tom Landis and left him a voicemail about the incident and asked for a call back. I received none. So i called Chaz Green and told him the situation. He said he would call Tom Landis and check out the situation. I headed to the scene and saw that there was oil dry on the substance that looked dark in color. There was a strong odor of grease in the area. I took photos of the spill on the road and in the inlet. The truck loading the grease had already left. I found a fireman and asked if anyone had gotten the man's name or seen the name of the company on the truck? He called up to Chief Collins and he told me to go up to his office. I went up and Chief Collins told me that the man had rolled the grease bin out to the curb and hooked up the hose to suck out the grease and the drum rolled off of the curb and dumped onto the street near the truck. The Chief said he told him that next time make sure the wheels are parallel to the curb so it will not roll anywhere. The man said this never happened before. The Chief said the man's name is Michael but he did not get his last name. He also got a photo of the truck, which he sent to my cell phone. The name of the company is Valley Proteins Inc. US DOT 036807. Fire Department used oil dry and an absorbent towel. After speaking with the Chief, i waited outside for a while to see if the Highway Department was going to show up and they did not. I phoned Chaz again and we decided to have Highway go out the next morning and that we both feel we weren't going to get any rain. However, overnight we did get a very small amount of rain, but it shouldn't have made a difference. Received an email from Tom Landis at Highway and he notified me that Albert and Bill vactored out the inlet and cleaned up the oil dry in the area.

12/29/2017 - Received a call from Albert from Highway Department notifying me that there is a sewage leak at 1200 E King Street. He said sewage was coming from the side of the house and that the roadway



is an ice rink. He said he went back to the Highway garage to get the salt truck because he slid through the intersection, which is how he notice something was wrong. I asked him if it reached a storm drain and he said he didn't think so. He said there are 3 drains at the intersection but the water flowed the other way. I told him i will respond out and he said he would meet me there. I arrived to find a large pool of frozen water at the intersection and Albert waiting there. He had already put salt on the spot. I started taking photos of the house, address, and of the intersection. I also walked West on King Street to see where the flow stopped. The sewage water froze up a few 10s of feet from the intersection, near a white van parked there. Albert and i tried to notify the residents of the home. 1st floor resident was not home. Second floor residents shared with us that they did not know anything was wrong, so we notified them of the incident. Meanwhile i talked to James Hoffnagle from Sewer Maintenance and he said that Eric Harris was on his way to the scene to check things out and that he would tell the guys if they needed the camel. I said that would be fine. Eric showed up and pulled the manhole in the intersection and we all determined that water was flowing freely and that the backup was not the main line. Eric then left. I notified James H. that we did not need the camel. I then called Kelli Hill in PPZ and she said that Sheldon was out doing an inspection but she could call him and ask him to come by when he was finished. I said that would be great. The lady from the second floor apartment came out with a bag of rock salt and offered to help. Albert said he had already put salt down and will put more when we are done, she said ok. He asked her if there is a way to get into the basement. She said that each tenant has a key to the basement and she offered to allow us down to check things out. Albert went in with the resident, just to the door and determined there wasn't any flooding or sewage in the basement and that the overflow pipe must go directly out to the side of the house. We thanked her for allowing us to check things out. She also told us the building is managed by Elite Property Rentals. There was an Elite sign next door so i used the number on the sign to try to call someone to come fix the problem. I called about 5 times and no one answered. I tried calling the existent tenant line, and the utility line, no avail. Albert laid more salt down and then left. I decided to go to Elite's office on N George Street when Sheldon and his partner showed up. I explained the situation and they knocked on the 1st floor apartment. No one answered. He then took some photos for himself and told me they were going to go down to Elite and see if they can get things taken care of. I asked that they could update me when they get things squared away. I told them that the ice is beginning to melt and run west on King Street towards the next storm drain. I said i will check back this afternoon to ensure the sewage doesn't get to the inlet before it all can be cleaned up.

12/29/2017 - Received a call from Shelton at PPZ and he notified me that there is sewage leaking out of a manhole on Brooklyn Avenue and has flown downwind to a storm drain. He said he had already called Sewer Maintenance emergency number and they were enroute. I alerted James H with Sewer Maintenance and he said they were heading out as well. I tried to call Chaz Green and Tom Landis to get a Highway truck to salt the area as it was extremely icy. I arrived at the scene and assessed the situation. I started taking photos of the area and inspecting the nearest storm drain. It did look that the sewage got into the drain at the corner of Brooklyn Avenue and Stone Avenue. There was a sheet of ice running from the clogged manhole to the drain. I walked across the field to the Codorus creek to see if any had made it to the creek. I could not tell from the banks as it was too snowy and icy to trek down the bank. I walked across the bridge to see if i could get a view of the outfall. I could see that it didn't look like anything was coming from the outfall. I walked back and took a few more photos. I started to write some notes down. I then called the DEP Emergency Number. I left a voicemail at 3:26pm and i spoke with Summer at 3:34pm about the incident. She jotted down information and told me to call back



if i found it had reached the Codorus Creek, and to send my report directly to Sheena. I told her i would do so. She asked if the pipes were still blocked as of our conversation and i told her yes, the sewer maintenance guys are still working on it, and we had been there for about 15 mins at that time. She did not have any other questions at the time and we hung up. I then walked over to the 300blk of S Penn Street (where the guys were trying to unclog the pipes) and James H shakes his head with a concerned look on his face. He tells me he has not seen a blockage this bad in a while. He said they may run out of water before they get it unclogged. He said they have seen mostly grease coming from the direction of the clogged manhole. He also informed me that Jack Longstreet had a heck of a time trying to mitigate grease in this area when he was still working for the City. He said it was an ongoing issue. After about another 10 mins, we noticed that the clog had finally come out. I snapped a few photos of the rush of greasy, smelly water coming from the Brooklyn Ave direction. So much that the manhole we were in started to back up. James H and Eric H were both confident that the blockage had been resolved and that because of the influx of water, it would take a few minutes for the water to find its way out of the pipes. James H and Eric H both agreed that they should pull the manhole downstream just to ensure everything is working properly. As they moved their equipment, i walked back to my car and met them at the intersection of Stone Ave and Brooklyn Ave. I pointed out to them that we need to see if any of the water had gotten into the storm drain there as there was a sheet of ice leading to it, but there were leaves at the mouth of the inlet so we were not sure whether it got into it or not. Eric H pulled the manhole cover for the metal inlet and we could see a good amount of leaves and some icy water in the inlet. I asked if the guys could vactor out the inlet to ensure none would get to the creek during next rainfall or rapid snow melt. Both James Eric looked around and were concerned about the large tree that was overhanging the inlet. They talked about a few tactics to get the vactor truck into position to be able to suck out the contents of the inlet. However, after a few minutes of contemplation, we decided that it was not possible for the truck to safely get close enough to the inlet to vactor it out. The limbs of the tree were overhanging so low, that the truck would not have been able to get to the inlet without damaging the equipment. The inlet is on Housing Authority property, and i will be sending them a letter containing information about the grease backup, their responsibilities to educate their residents about not putting grease, wipes, and rags down their drains, and in that letter i will advise them to bring in a vactor company to vactor that inlet out. There will be a move to hit this area hard with educational materials and warnings about the items found in the clog. I will also be suggesting to Housing Authority that they begin to include a clause in their rental agreements that states if a resident is found to damage pipes within the residence, from the home to the curb, and/or from the curb to the main, then that resident will be held responsible for the cost. This will also be suggested to landlords across York City.

FYI - There was another call out in that same area the next evening Saturday December 30th at 7:36pm. Nancy and James H both notified me of another backup near 347 N Penn Street. There is a separate incident report for this call out, however, the sewage did not reach any storm drains. Please see the December 30th report for more detail.

12/30/2017 - Received information from James H in Sewer Maintenance that we have another sewage backup call out in the same area as the day before, near the 300 blk of S Penn Street. I asked him if any of the sewage had gotten onto the street or drains? He said he did not know but would let me know when he got out there. While they were heading to the scene, Nancy calls me and says that the guys are



going out to the scene and that she got a call from the resident at 347 S Penn Street. She said they had a long conversation and he told her that he was pumping the sewage from his basement to the street. She said she immediately told him he cannot do that and to stop immediately. She said he did but was not happy about it and asked what he is supposed to do with the sewage in his basement. She told him that he has to get a private contractor company with a truck to pump out the sewage and haul it away. She told him the guys were enroute to clear the main. She said that she wanted to let me know about it since he told her he pumped it to the street. I told her thank you and that i would respond to the scene to check it out with the guys. I then responded around 8:22pm and met John B and James H at the scene. They were vactoring at the manhole near Stone Ave and S Penn St. James H told me that there wasn't any sewage coming from the manhole this time. I walked over to 347 S Penn but did not see any evidence of sewage on the sidewalk or gutter. I did notice a garden hose wrapped up in the back yard of the residence that i could see from the alley between the homes. I took photos of the sidewalk and the ice in the gutter leading towards the inlet at the corner. I could not distinguish whether the sewage was indeed frozen in the gutter or if it was just snow melt that refroze. I did not see any particles of any kind, and the substance froze before it got to the storm drain. The guys got the main flowing again and pulled out several pieces of rags or wipes from the pipes. We then cleaned up the area and left the scene. The homeowner may be cited for pumping the sewage to the street.



**ILLICIT DISCHARGE QUARTERLY SUMMARY REPORT – CITY OF YORK**

Reporting Period: \_\_\_\_\_

**I. Outfall Screening Activities Summary**

Number of outfalls screened: \_\_\_\_\_  
Number of priority outfalls screened: \_\_\_\_\_  
Total number of outfall inspections: \_\_\_\_\_  
Number of outfalls with flow: \_\_\_\_\_  
Outfalls with illicit discharge: \_\_\_\_\_

**II. Illicit Discharge Investigation Summary**

**A. Summary**

Investigations with Illicit Discharges: \_\_\_\_\_  
Investigations without Illicit Discharge: \_\_\_\_\_  
Total Illicit Discharge Investigations: \_\_\_\_\_

**Reported to the City of York by...**

Maintenance Crews: \_\_\_\_\_ Public: \_\_\_\_\_ Non-Profit: \_\_\_\_\_  
IDDE Inspector: \_\_\_\_\_ Government – Non City: \_\_\_\_\_ Other: \_\_\_\_\_  
City Employee: \_\_\_\_\_

**B. Type of Pollutant or Potential Pollutant**

Automotive Liquids/Oil: \_\_\_\_\_ Ground Water-Sump Drain: \_\_\_\_\_  
Building/Sidewalk Washwater: \_\_\_\_\_ Industrial Wastes: \_\_\_\_\_  
Concrete, Cutting Slurry/Washwater: \_\_\_\_\_ Medical Wastes: \_\_\_\_\_  
Debris – Construction: \_\_\_\_\_ Minor Auto Accident: \_\_\_\_\_  
Debris-Other: \_\_\_\_\_ None: \_\_\_\_\_  
Food Wastes: \_\_\_\_\_ Other Washwater: \_\_\_\_\_  
Glue, Pastes, Adhesives: \_\_\_\_\_ Paint: \_\_\_\_\_  
Grass Clippings, etc: \_\_\_\_\_ Pet Wastes: \_\_\_\_\_  
Sediment: \_\_\_\_\_ Sewage: \_\_\_\_\_  
Swimming Pool: \_\_\_\_\_ Unknown: \_\_\_\_\_  
Vehicle Cleaning Washwater: \_\_\_\_\_

**C. Pollutant Source**

Unknown: \_\_\_\_\_ Residential: \_\_\_\_\_ Municipality: \_\_\_\_\_  
Industrial: \_\_\_\_\_ Construction Site: \_\_\_\_\_ Minor Auto Accident: \_\_\_\_\_  
Commercial: \_\_\_\_\_ Transportation/Major: \_\_\_\_\_ Other: \_\_\_\_\_ Utility: \_\_\_\_\_

**D. Discharge Abatement Status**

Yes: \_\_\_\_\_ Abatement Not Required: \_\_\_\_\_  
No: \_\_\_\_\_ Unknown: \_\_\_\_\_  
Ongoing: \_\_\_\_\_ Percent of Bateable Events Abated: \_\_\_\_\_

**E. Enforcement Activity**

None: \_\_\_\_\_ Verbal Notice: \_\_\_\_\_  
Warning Notice: \_\_\_\_\_ Administrative Action: \_\_\_\_\_  
Administrative Action with Cost Recovery: \_\_\_\_\_ Legal Action: \_\_\_\_\_  
Unknown: \_\_\_\_\_

**F. Responsible Party Found?**

Yes: \_\_\_\_\_ No: \_\_\_\_\_  
N/A: \_\_\_\_\_



#### MCM 3, BMP 5, #4

7/10/2017 Received an email from Shelton at PPZ and he sent two photos and asked for me to give him a call. I called Shelton and he stated that he was at 500 W Market St and there is a plumber pumping out sewage from a basement onto the street. He said it is flowing down W Market Street and into the inlet in the intersection of W Market and Penn St. He also told me that the plumber said it was ok because they were "de-sanitizing" it with bleach. He said that Buffington was on his way out there already. I told him that i was on my way. I got there and Buffington was speaking with the plumber and the owner of the building. Shelton met me and let me know what he found when he got here. Buffington and the owner walked over and said that the plumber is going to get kitty litter to put down the gutters all the way to the inlet on Penn St and W Market. Buffington is sure that the wastewater got into the inlet there but not sure how far it may have gotten past that point. I called Tom Landis and left him a voicemail. I then called Chaz Green and spoke to him about what was going on. He said he would give Tom a call and have him call me. Buffington asked me whether we should both cite them and recoup costs for the vactoring? I told him i did not know and Buffington stated he is going to do both because that's what he had told the owner in the first place. I told him that is fine with me. As Buffington was about to leave the scene, Frankie from WWTP calls me and I told him the situation and he said he will work on getting some guys in and to the scene. I then checked out the inlet on Penn and W Market and took photos. I then went down the street to the Codorus and checked the outfall there. I realized that the outfall i had flagged for running water from UNDER the outfall concrete swale earlier in the day. I then went back to Penn and W Market to wait for the Sanitary Sewer guys. When they arrived, I told them which drain it was. As they were vactoring out the drain, the plumber came with a bag of kitty litter and started placing it along the curb in the street to sop up the remaining sewage. Tomorrow, the street sweeper will sweep up the kitty litter.

Plumber - Kirk Kendall

Owner of the building - Brandon Hershey

7/11/2017 Received an email from Chaz who received an email from the Mayor about small Styrofoam pellets all over the place near Voni Grimes Gym that is being restored. I go out and check on the conditions and find that there are mounds of these tiny Styrofoam pellets everywhere, in the street, gutters, on the sidewalk, and in two storm drains. I walked around inside the fence as there was materials out there as if someone was working on the building but didn't see anyone around. I snapped a few more photos of the surrounding areas. I wrote up the report and went back to the office. Once there, I emailed the chain back including Tom Landis and Steve Buffington. Tom wrote back and said he had also checked out the area and agreed with what I had seen. He notified me that the vactor truck is down for maintenance and would not be repaired until the following week. During the rest of the day, we threw around ideas in how it should be cleaned up. Karl with Parks heard from one of his workers that the vac used to do the sidewalks will not work because it sucks up the pieces and since they are so small, they get sucked into the fan, chopped up even smaller and spit out the back making a large problem. Karl then called and told me that he and Chaz were about to meet and that they will stop by to talk to someone at the site afterwards.



7/18/2017 Since we had an unprecedented rain event on 7/17/2017 – I decided to go out and check on our problem outfall CC48. Sure enough there was a rainbow sheen with cloudy water coming out of the outfall. I snapped a few photos and gathered some materials together. I placed one large sock and 1 small sock across the front of the outfall to catch the materials coming out of it. I anchored them with clips and rocks. I then took a few more photos after the booms were in place. 7/19/2017 - 1:29pm - Took photos of the outfall from above. Turned the booms so that the clean side is down, soaking up more of the substance. Took more photos. 7/20/2017 - 2:19pm - Took more photos of the pile of substance below being caught by the socks. Switched out the two socks for two new fresh socks. The "pool" was covered in a greasy, oily, material that was thick and starting to clump. Lots of trash. Also it was grey, brown, and black in some areas of the "pool". Veronica will check on the booms while i am out on Friday 7/21/2017. 7/24/2017 - 1pm - The weekend heavy rain swept away the smaller sock and the larger one was anchored to the concrete outfall but was hanging in the strong current in the creek. I gathered the large sock and disposed of it. It appears that no other illicit material is coming from the outfall, the creek water was too murky/muddy to tell. I will continue to check on the outfall in the coming days and put socks there if more begins to come out. Case closed.

8/14/2017 – James Hoffnagle notified me that there is grease in a storm drain at the corner of N George St and Hamilton Ave near Central Family Restaurant. He also sent photos. I emailed Tom Landis with Highway and asked if he could send his guys out to vactor out the inlet. He stated that Albert was currently working on repairing a collapsed storm pipe on Lindburg Ave but will send the guys over after they are done. I also emailed Steve Buffington and Kelli Hill with PPZ to see if someone could go out and determine if a violation had occurred. Steve sent out Tamika Rascoe to the restaurant to investigate. 8/15/2017 - 830am - Went out and photographed the inlet, which was cleaned out. The area behind the restaurant had a white substance on the ground near the rear door. Not sure what that substance is. Also noticed a jug full of a substance on the ground with no lid, but turned out to be water for the employees to put their cigarettes in. Checked on the outfall and some of the grease did make it onto the rocks below CC14, which is on the Codorus Creek. Tamika said she went out this morning and did not see anything that make her suspect that the restaurant had done anything fraudulent. Tom Landis also mentioned the rags that were found on the grate as well as suspicious. I sent them my findings as well as photos and told them since we are unsure where the grease came from, we will have to close the case. Tom also asked if I could email the original photos to Tamika in case she can make a better determination about where the grease came from and if it is a violation. 8/15/2017 – 11am - We all happened to meet out at the site with Tom Landis and Tamika with the owners' mother. We found that the grease bin was half full and had not been emptied in quite some time, however, there is evidence of a prior leak or spillage from that container at some point in the past. It could have been buildup of grease on top of the bin that may have washed away when we had the heavy rains, but Tamika did make note of that. She is also going to request that the wooden pallet that the bin is on be replaced as it is broken and falling apart. Tom noticed a few "white" gooey areas on the crease of the curb leading to the inlet. I called Veronica to come out and sample the white substance and she took it to ALS to be tested. The rags that were now on the sidewalk were picked up by the owners' wife as we were out speaking with her, and she threw them away. There was a white residue under the rags as well, I got a photo of that as well as the white residue on the curb. Some splatter was still on the grate. There is a strong odor of old grease throughout that area. I spoke with the owner Karl on the phone but it was very hard to hear with the construction going on. He told me that there was a company power washing the hoods to the kitchen on Sunday evening. We found that they did this in the parking lot. We are



assuming this is where the grease came from. He did not know the name of the company but would find out and get back to me tomorrow morning; I left him with my name, number and email. \*\*While I was waiting for Veronica to show up to take the sample, the owner, Karl, arrived. I told him what we think happened and showed him the stains on the ground and the inlet. He said that they did the power washing way up in the middle of the parking lot. I told him that the water is going to find the nearest storm drain regardless of where they do it in his parking lot. He did see what I was saying and did notice the odor of grease, Veronica did as well when she arrived. I showed him the photos that James took yesterday on my cell phone. He then gave me a name, Candice that he talks to from the hood washing company. He remembered the name which is Quality Restaurant Services and her phone number. (302) 737-0337. Looks like Quality Restaurant Services operates out of Newark Delaware, according to Google.

8/15/2017 - 145pm - Phone call from Tamika Rascoe stating she did call Candice at Quality Restaurant Services and she gave her to her boss Randy. Randy did verify that they did power washing at 9pm on Sunday 8/13/2017. They power washed the fans on the roof, and the hoods plus other areas from the roof down. He said that since he is not from this area he waits for the township or city to notify him that they cannot do this practice in their area. He said now that he knows, he will take extra precautions by laying down grease absorbing blankets during and after the cleanings. Randy stated that they are contracted to power wash every 6 months and the next cleaning will be in February. He said he would notify Tamika the next time they come out so someone may come out to inspect or ensure they are doing what they are supposed to be doing. She also said that he did say the grease came from them cleaning most likely. I asked Tamika if it would be reasonable to send an official letter with the simplified ordinance to the company just to make it an official notification and in hopes that they will take this more seriously. She stated she would support that decision and making it official is the best way to go. This case is now closed.

8/30/2017 - Received an email from Fire Chief Collins Jr at 309am. He stated that there was an auto accident at this intersection. He stated that it was a West Manchester call but City personnel responded. He said they applied oil dry to the area but some of the fluids got down into the storm drain and he just wanted to make me aware. The drain is located on the fairgrounds side of Carlisle Ave. Oil dry was placed around the area at the accident scene, however, some did make it into the drain before personnel had gotten there. Lettice went out to inspect the area and photographed where the accident happened. I had to clear some of the debris off of the drain in order to see down in. Once clear, I was able to see some reddish liquid in the drain (probably transmission fluid). The fluid was just sitting at the bottom and it does not appear to have flowed into the outlet pipe. There were two possibilities of outfalls where this pipe could have gone to. As I was there and saw the outlet pipe, it looks to travel under the fairgrounds towards HM1. I checked HM1 on Richland Avenue and found no evidence of any illicit discharges into the creek or outfall. I called Albert in Highway and told him what was up. He told me to write down what he needed to check out and bring it to him because he is working on rebuilding a collapsing inlet over by Kiwanis Lake. I took the note to him and he said he would take care of it when he was finished rebuilding the drain. He told me he would call me when the job was done so I could re-inspect.

9/6/2017 - At 12:13pm I received a call from Michael Shanabrook stating that there is a blue substance on the road at Hawthorne at W. King streets. He said they believe it is paint but he fears it has made it to the Codorus Creek. He stated that Hazmat was notified. He said they placed a boom at the



intersection with W King and Hawthorne. He called back and said that Chaz and Tom Landis were out there and going to send some guys with the vactor truck and stuff to put on the pavement to dry it up. I told Mike that i would be there shortly.

When I arrived, i noticed a blue hue to the stormwater running down an alley. Stopped to take photos and proceeded to where Shanabrook and the fire police were. They told me they think they found the source, a spot right in the middle of Hawthorn Street. They believe that either someone dumped it there or the garbage man dropped it and didn't tell anyone. The substance was bright blue and had pooled where the rainwater pools. Shortly after, the first vactor truck arrived. They sucked out the contents where the boom had accumulated a lot of the rainwater and blue paint. They then moved up Hawthorne towards the source. Once that truck was full, another truck arrived that had water on it so they were able to spray off the road. They began spraying and sucking up what they were spraying off the road. They got both sides. I asked them to again suck up the accumulation by the boom since some of the sprayed paint had accumulated there again. As they were backing the truck up out onto W King Street, the truck ran over the boom. This allowed the accumulated water to spill out and flow freely down the street. The paint was drastically diluted and they sucked up whatever they could get. I then stopped at the outfall to ensure there were no abnormalities in the Codorus. HM1 on Richland Avenue had a high flow coming out of it. There were no signs of any blue paint or hues. There was a small oily sheen downstream from the outfall but nothing unusual after a hard/long rain.

9/7/2017 - Received a call from security at the SUSCOM center saying there was oil or grease coming from the outfall and there is a lot of it. He also said he could see it in the creek. Consulted with Veronica (MIPP) since this is an ongoing issue. We decided that it was too dangerous to climb down the embankment due to the wet rocks and height of the creek from all the rain we have had. We also decided that since the outfall's volume is high, putting the boom there would only wash away with the high water flowing out and near it. I took photos of the discharge and filled out an investigation form. I also reached out via email to Mike Shanabrook to see if we could start an investigation to find the source of this constant illicit discharge.

9/15/2017 - Received an Earth Disturbance Inspection Report for this property from YCCD AGAIN! The same problems exist since March of 2016. Read through the report. Sent Buffington and Kelli Hill and email stating that this has been going on since March of 2016 and if a financial "push" would be appropriate to get this lot taken care of, then that's what we need to do. It has gone on long enough. Received an email from Buffington explaining their hands are tied. They had filed a citation before and the responsible person was found not guilty. Replied to the email asking can we refile a citation or is a one and done thing? Buffington replied that they can only file a citation once unless Jason says we could refile. I asked Buffington who Jason is and how could i get a hold of him, or if i could have his last name I could look him up in our directory. I emailed Jason Sabol for further clarification and direction. Jason's response was that Buffington is partially correct that because Mr. Williams was found not guilty, we cannot cite him for that again. However, he does not recall him being cited for Article 942, the stormwater illicit discharge ordinance. He would suggest starting with a warning letter noted in 942.10



and proceed from there. I forwarded that email to Buffington asking if he thinks this notice should come from me or from him and which would be more effective.

9/17/2017 - Received a phone call from the security man at the SUSCOM center, stating there is a lot of "junk" coming out of the outfall again. Visited the site, and took photographs. Note: Codorus Creek had a lot of suds coming from the Bascule Dam area and flowing down the creek, not sure what is creating the suds and not sure if it is affecting the creek or not. Followed the storm drain system back as far as i could. The pipes run through a private company's property (Precision Components) so the system cannot be accurately checked. May make an appointment with Precision Components to be able to go onto their property to check the system. Also, sent an email to my MS4 team to see if there are any ideas and/or if the team could help me in any way to find out where this illicit discharge is coming from. This is an ongoing issue unless we find the source.

9/26/2017 - Received a phone call from Buffingtons' office stating that he had gotten a complaint that someone was dumping grease from Penn Market in the back parking lot. She said Buffington is on his way over. I responded immediately. When i arrived, Buffington, Dave R. and Chaz were all present. Buffington explained that Deb (the dumper/Employee) told him that she was instructed specifically by the owner of the business to dump the grease from the trap in the back of the parking lot, then dump hot water on it. She was also seen dumping the grease by Chaz and Dave R.

Dumper - Deborah Kay Harvey

Owner of business - Mark Simpson. (717) 873-1211 - Went straight to VM, I left an urgent message that we needed to speak with him.

No response. Tamika Rascoe showed up and we received another number from Deb for Mark. Called (717) 873-0190. She called and it rang and went to VM. She then received a call back from him and she explained the situation and that he needed to come to his business now. He said he would be over. I then went out to take photos. Buffington and I spoke about who to fine and how much. We both agreed that normally the fine would go to the dumper, but since she was specifically instructed to dump it back there, it is a business issue and the business should be fined. Buffington then called his bosses and explained the situation. In the meantime the owner Mark Simpson arrived. When Buffington got off the phone he came inside with Mark and Buffington explained what was going to happen now. He explained the fining process and told him that the Mayor agreed to reduce the fine from \$1000 to \$500. He explained that he will defer to Lettice (MS4 Coordinator) for cleanup instructions. I walked with him outside and showed him the areas in question. I told him that if he uses kitty litter to absorb the moisture and the smell, then scrape what he can with a rake and/or shovel and dispose of it in the trash, it should suffice. Buffington explained he would be back later in the day to check on the cleanup process then he would work on processing the fine and send it to him in the mail. Mark said he was going to get the kitty litter now and take care of it. Went back out at 230pm to check on the situation and there is evidence of kitty litter in the areas of the grease. However, there is some residual kitty litter left on site. I will email Buffington to notify the owner that he should bring a shovel and try to get as much kitty litter as he can off the ground. Otherwise the area looked ok.



## ILLICIT DISCHARGE QUARTERLY SUMMARY REPORT – CITY OF YORK

Reporting Period: \_\_\_\_\_

### **I. Outfall Screening Activities Summary**

Number of outfalls screened: \_\_\_\_\_  
Number of priority outfalls screened: \_\_\_\_\_  
Total number of outfall inspections: \_\_\_\_\_  
Number of outfalls with flow: \_\_\_\_\_  
Outfalls with illicit discharge: \_\_\_\_\_

### **II. Illicit Discharge Investigation Summary**

#### **A. Summary**

Investigations with Illicit Discharges: \_\_\_\_\_  
Investigations without Illicit Discharge: \_\_\_\_\_  
Total Illicit Discharge Investigations: \_\_\_\_\_

#### **Reported to the City of York by...**

Maintenance Crews: \_\_\_\_\_ Public: \_\_\_\_\_ Non-Profit: \_\_\_\_\_  
IDDE Inspector: \_\_\_\_\_ Government – Non City: \_\_\_\_\_ Other: \_\_\_\_\_  
City Employee: \_\_\_\_\_

#### **B. Type of Pollutant or Potential Pollutant**

Automotive Liquids/Oil: \_\_\_\_\_ Ground Water-Sump Drain: \_\_\_\_\_  
Building/Sidewalk Washwater: \_\_\_\_\_ Industrial Wastes: \_\_\_\_\_  
Concrete, Cutting Slurry/Washwater: \_\_\_\_\_ Medical Wastes: \_\_\_\_\_  
Debris – Construction: \_\_\_\_\_ Minor Auto Accident: \_\_\_\_\_  
Debris-Other: \_\_\_\_\_ None: \_\_\_\_\_  
Food Wastes: \_\_\_\_\_ Other Washwater: \_\_\_\_\_  
Glue, Pastes, Adhesives: \_\_\_\_\_ Paint: \_\_\_\_\_  
Grass Clippings, etc: \_\_\_\_\_ Pet Wastes: \_\_\_\_\_  
Sediment: \_\_\_\_\_ Sewage: \_\_\_\_\_  
Swimming Pool: \_\_\_\_\_ Unknown: \_\_\_\_\_  
Vehicle Cleaning Washwater: \_\_\_\_\_

#### **C. Pollutant Source**

Unknown: \_\_\_\_\_ Residential: \_\_\_\_\_ Municipality: \_\_\_\_\_  
Industrial: \_\_\_\_\_ Construction Site: \_\_\_\_\_ Minor Auto Accident: \_\_\_\_\_  
Commercial: \_\_\_\_\_ Transportation/Major: \_\_\_\_\_ Other: \_\_\_\_\_ Utility: \_\_\_\_\_

#### **D. Discharge Abatement Status**

Yes: \_\_\_\_\_ Abatement Not Required: \_\_\_\_\_  
No: \_\_\_\_\_ Unknown: \_\_\_\_\_  
Ongoing: \_\_\_\_\_ Percent of Bateable Events Abated: \_\_\_\_\_

#### **E. Enforcement Activity**

None: \_\_\_\_\_ Verbal Notice: \_\_\_\_\_  
Warning Notice: \_\_\_\_\_ Administrative Action: \_\_\_\_\_  
Administrative Action with Cost Recovery: \_\_\_\_\_ Legal Action: \_\_\_\_\_  
Unknown: \_\_\_\_\_

#### **F. Responsible Party Found?**

Yes: \_\_\_\_\_ No: \_\_\_\_\_  
N/A: \_\_\_\_\_



MCM 3, BMP 5, #4

4/3/2017 Resident from 916 E Boundary Ave called in about the Turpentine smell is back in her basement. Lettice (MS4 Coordinator) emailed Mike Shannabrook and others about the report and offered anyone to meet me out there at 10am. Chief and Assist Chief Altland met me out there and reported they did not get any readings on their meters in the basement. Altland suggested the resident pour about a gallon of water into her floor drain in the basement to ensure the pipes remain wet. He explained that dry pipes allow fumes to flow freely into her home. He said it will help with the fumes while we try to figure out where its coming from. He then suggested MS4 Coordinator get with SG township for them to help us out with this investigation since it seems to be coming from their township and to work with us to find a solution. MS4 Coordinator told the resident she can email me from now on of any future incidents but to call 911 if the fumes are extreme and can be smelled on the main floor as they could reach lower explosion levels.

4/13/2017 A member of the public called and notified Lettice (MS4 Coordinator) of a rainbow sheen coming out of outfall CC48 and into the Codorus Creek. Lettice and Sally Hoh (MIPP) responded and saw the rainbow sheen coming out of the outfall. Photos were taken of the sheen and outfall. Booms were placed in front of the outfall to catch the substance from going into the Codorus. Photos of the booms were also taken. Sally and Lettice drove down an alley and saw that construction work was going on but did not see anything leaking or looked like the substance that is coming out of the outfall. Drove back towards PCC and drove around their parking lot and behind the building looking for possible leaks. But could not find anything.

4/18/2017 Received a call from Sheldon (PPZ) notifying MS4 that there is a sewage leak at 553 W Clarke Avenue. He said he doesn't believe the matter got into the storm drains. Lettice responds on 4/19/2017 and the area seemed to have been abated by the time I got there. Photos were taken. Lettice also drove by the nearest inlet and made sure it had not gotten into the storm drain, which it had not. Lettice noticed that on Clarke Ave and N Hartley Streets, there were a considerable amount of debris on the storm drains and contacted Highway to see if they could clean them out. They were able to get to the drains a few days later. Lettice then went to the outfall and checked to see if any of the sewage had made it to the creek which it looked like it had not.

5/1/2017 Received a call from Albert from Highway and he told me that two men are buffering out a garage floor or painting it or something and the washwater was flowing right out into the alley and around the bend. He said he told them he couldn't do that but they brushed him off. Lettice responded and met with the gentlemen who were eating lunch. Lettice told them she received a call that some kind of washing in the garage was going on. She then asked the men what they were doing. They said just washing out the garage and will paint it tomorrow. Lettice asked if there are any chemicals in the water they are using and they said no, just water. Lettice told them that they cannot allow their washwater to run down the street like this and that it violates city ordinances. They said they did not know and that most of the sediment stayed right at the mouth of the garage. They said they planned on allowing it to dry then clean it up tomorrow. Lettice told them it is supposed to rain heavily this evening and asked them if they could clean it up today so it doesn't flow into the drains. She also told them that in the future, if they are doing this kind of work, to use a boom or sandbags to collect the washwater then use a ShopVac to clean it up. They said ok and I told them next time they could be fined. I then went down the alley and took more photos of how far the substance made it. Some of it accumulated



into a pool and into a storm drain, but it did not reach the creek. The company was R.A. Willey & Son – 318 Mohawk Dr Red Lion PA 17356 (717) 246-1986

5/11/2017 Lettice went to randomly check on CC48 and found a slight rainbow sheen on the water in the creek and coming from the outfall. Lettice returned to the office to change into her boots and gather paperwork. By the time she returned to the outfall, the substance had cleared. No more rainbow sheen was coming out of the outfall and most of what was in the creek dissipated. Lettice decided not to use the booms because the substance was no longer flowing. Photos were taken when the substance was flowing and after she had returned.

5/17/2017 John Bean from Highway called Lettice and notified her that someone was illegally dumping something that looked like drywall or plaster liquid down the storm drain at the intersection of N Queen and Arch Streets. He said he did not see a truck or anyone in the act but found it that way. Lettice immediately responded and found gray water in the storm drain but it was not deep enough to flow through the underground pipes. There was some plaster-like matter on top of the storm drain as well as in the gutter leading up to the drain. Lettice took photos and called Tom Landis. Lettice left him a message explaining the situation and asked if someone could come take the grate off so I could put absorbent pillows down there. Lettice then realized that the drain could just be vactored out. She calls Cass at Highway and left her a message as well to see if there was a vactor crew that could come out and vactor the drain. She returned my call within 5 minutes and said that everyone was out on an assignment right now but when she could get a hold of John Bean, he would get back to me. The storm drain was cleaned out the next morning on 5/18/2017. Photos were taken. No further action.

5/31/2017 Steve Buffington notified Lettice that there is sediment and dirt being tracked out onto the road (E. Princess St) by the trucks leaving Darrah's Automotive Recycling. Steve wanted to see if Lettice thought any enforcement should be conducted with the site for the illicit discharge? Lettice drove by and took photos and wrote up the report. Lettice then emailed Steve Buffington and Chaz Green to notify them that she would write a letter to Darrah's, on letterhead, to educate them as to why they are being looked at by the City and to notify them that they have 3 days to clean up the sediment and to find a way to keep the surface road clean. Lettice will continue to monitor the area to ensure the road remains clean. If it happens again or continues to recur, enforcement action will be taken.

\*Update\* June 7 2017 around 3pm I was out at a follow up investigation about a block away and a street sweeper started to sweep the area and roads around CSR. It went up both sides of the street and even the sidewalk near the exit where the sediment is. This, however, made the area muddy, unless the truck goes around a few more times. I took photos of the truck sweeping. This is good if this is part of their plan to keep the sediment runoff to a minimum, but we must figure out how to keep the soil onto their site and not into the street altogether. I sent Buffington and Chaz an email stating we should ask for their plan and review it together or request that they make one to ensure this doesn't happen again.

\*Update\* 6/9/2017 I received a call from a resident about another illicit discharge and at the end he asked if I was doing anything about CSR up the street from him. I told him that we are also working on getting the dirt from CSR mitigated by requiring the company to provide us with a written plan to mitigate the dirt and if they don't have one to produce one. He then said talk to Neil Tucker at Kool Air down the street and he would stand with me in protest of CSR. The man said the dirt problem has been there for years and he and other residents are tired of it. I assured him that we are doing what we can to mitigate the sediment issue. He was very pleased.



6/7/2017 As Lettice was riding by the 600 blk of E Princess Street, she noticed an oil slick on the side of the road and pulled over. She inspected the area and took a couple photos. She determined that a car must have leaked this oil and it was then driven away or towed away, seeing that there are tire marks in the oil that was tracked onto the roadway. There was no one around to ask what happened so Lettice drew up a notice/letter notifying the residents about the spill and to contact Lettice if anyone has any information as to who is responsible or how it happened. Lettice also emailed Highway department and asked them if they would put some oil dry or sand onto the oil to sop it up, and street sweep it up later in the day.

\*Update\* June 7 2017 3pm, handed out some flyers about the spill and found that the Highway dept had put some sand on the spill for me. A lady was sitting on her porch across the street from the spill and asked what I was doing. I explained to her about the spill and she said she had no noticed anything until I pointed it out. She said she didn't see any cars parked there. A crossing guard also asked what I was handing out and I told her also about the spill. She said she noted to herself as she was walking up that she hadn't noticed the spill this morning when she left at 9am. Whether the oil or the sand was not there at 9am I am not sure. But she says that no one usually parks there because its on the yellow line and near the corner. She also said she didn't see anything suspicious but complained about the corner neighbor sometimes putting trash out into the street and it accumulating at the storm drain she usually stands in front of. I told her if he happened again to let me know and gave her one of the flyers with me information on it.

\*Update\* June 9 2017 - Received a call from a resident that says the people from the bank had some kind of contractor at the vacant house in front of the spill and they are responsible. He did not know the name of the company but said there are a few numbers on the windows that maybe i can track down someone. He said he didn't know how they didn't realize they did it because they were parking there for over a week. He also stated that he asked the one guy about it and they brushed it off like they didn't do it and said it was already there. The man says no one else parks there, they were the only ones. The man believed it was oil from an air conditioning unit. While i stopped out to retrieve the numbers from the windows of the home, a couple walked up to me and told me that no one lives there at the house. They also said that some people show up on Saturdays and work on the house. I asked about the oil on the ground and he stated that they did it. He said there were two guys, with a white pick up truck, with no writing or anything, and had rims on it. They were taking a drum of oil out of the house on a dolly, and went to load it onto the back of the pick up truck but one of the men lost grip and it dumped everywhere! He said both men were covered in oil, the truck was covered in oil and thats what fell on the ground. The man said he watched it happen. He didn't think they were with any company, but the kids of the lady who passed are fixing up the house and they were doing it themselves. He said they are there on Saturdays. I thanked them for the information.

6/9/2017 Tom Landis (Highway Dept) told MS4 Coordinator that she needs to take a ride by the 700 Blk of E. Prospect Street where they are concrete cutting and the slurry is flowing into the storm drains and they do not have any filter socks around the inlets. MS4 Coordinator rode by and saw a white substance on the road, sidewalks, and in the inlet. I pulled over and walked over to one of the inlets and took a photo of the white washwater that was dried up on the sides of the inlet. I walked over to the flagger and asked if the site manager was there and she told me that he had just left. I explained why i was there and she said i could speak to the man in the white hard hat there on the other side of the CAT machine. I walked over and introduced myself and told him why i was there and asked if they could put



filter socks around the inlets so their washwater doesn't enter the storm drains. He asked would the silt socks work? I told him yes and if he could place them around all the inlets in their work area to prevent their washwater from going into them. He said he surely will and thinks he has some there at the site or will go get a few and put them there. I thanked him and left.

**\*Update\* 6/23/2017** – Received a call from Rick at CSR stating he had gotten the two letter I sent, one at the end of May and the one sent about a week later. He stated that the latest letter said that we wanted him to send us their written plan to mitigate the sediment from coming onto E Princess Street, he explained that they use their street sweeper twice daily to keep the dirt down. I told him that was not enough and we need to come to a solution that keeps the sediment on the property then he wouldn't have to street sweep. He asked what exactly am I looking for. I told him that we would like to see a written document for their mitigation plan for keeping the dirt off of E Princess street. That way our PPZ and I can look it over and ensure it complies with our City Stormwater Ordinance, and if not then suggest things they need to change. He said ok and that he would get back in touch with me. I told him I will notify PPZ that we will wait for your call before fining, he said ok.

**\*Update\* 6/27/2017** –Received another call from Rick Hare from CSR and he said he spoke to upper management and they are going to do better with the street sweeping and will be bringing in another person to focus on sweeping so they can keep their sediment deposits down. He also said that they are bringing in a consultant to try to figure out something to do with the lot and to keep the sediment at a minimum or keep it on the lot itself. I asked that once they have a solution that would PPZ and I be able to check it out to ensure it complies with our stormwater ordinance and he said he would pass the request onto upper management. I said ok. I jotted his name and phone number down in case I need to get in touch with him or have any questions.

**6/11/2017** Received a call from Council President Michael Helfrich and he notified me that there is a man spraying off food screens into the street. I went over and told the man that he could not do this and he showed me a bottle of Palmolive dish soap and said he was told it was ok to have the water in the street if he used the soap. I told him even the soap cannot go onto the street because it runs directly into the Codorus. He told me to go speak with the owner. I eventually spoke with her and she seemed annoyed and also told me that the man is using dish soap and the water is ok. I told her the soap itself cannot be discharged onto the street. We walked outside and she told the man to stop. She asked me what are they supposed to do with the water, I told her I did not know but it cannot go directly into the street like this, and told her it has to go into the sanitary sewer system. She stormed off and another guy from in the store came out. He said that his boss told him what they are doing is fine. I told him it violates our city ordinance. I offered to show him the ordinance and he said ok. I told him I didn't have it with me but I could bring one tomorrow or mail one. He said they are from Lancaster and his boss is a fire chief, or fireman and that he told them this is fine. I said that may be the case in Lancaster but here in York City, it violates the ordinance and this is a warning. I wrote down the ordinance number 942 and gave it to the man to give to his boss. If they are caught again, it would be a fine. He said a fine for what, I said for the cleanup. The guy spraying was finished and started to push the water towards the storm drain with a broom. I told him to stop and the guy standing with me told the guy not to do that and to let it go. He asked me should they just let the water go for now and allow it to evaporate? I said that was fine for this time but next time they will be fined. He said ok and walked off. I returned to my car and checked CC48 and the creek for any kind of sheen or suds. I did not see any. I went down under the bridge to the outfall to see if anything was coming out and I assumed none



was because there was a man lying in front of the outfall, I assumed was sleeping. There were beer cans everywhere and it smelled really bad down there, so I left before the person awoke.

6/27/2017 – The fire department notified our Highway Department that there was a diesel fuel spill on N George Street from Jefferson Avenue to the Travel Lodge. Highway department went out and used the salt spreader truck to spread sand over the lane that had the fuel on it. Afterwards, the street sweeper came out and swept up the sand and remnants of the fuel. They will sweep again tomorrow sometime to ensure all of the fuel and sand were picked up. The diesel fuel came from a Rabbit Transit bus that was disabled along N George Street and had to be towed back to their lot. Rabbit Transit personnel were at the scene. None of the diesel fuel got into the storm drains.

6/28/2017 – Ducklings were discovered in CC48A storm drain. Called Highway department and they sent out two guys to help lift the grate off and retrieve the ducklings. Fire Captain was there and offered to call his guys to come help out. Firemen came and took the grate off and one climbed down in. The ducklings went into the pipe in which Albert from Highway and another fireman went down below to the outfall of the pipe and the ducklings ran back towards the drain where the first fireman handed them out one by one and put them into a cardboard box. The ducklings were then given to Albert who was closer to the edge of the water and released them back into the Codorus where momma duck was waiting. They all swam off together.

6/29/2017 – Received a call from PPZ that there is sewage or something with a rusty color coming from a pipe in front of 201 N Sherman Street. The substance dried up by the time this person saw it and was not sure whether it got into the drain on E Phila and N Sherman. Also received an email from Veronica Chavez with photos. MS4 Coordinator was on vacation this day, so she was able to go out around 520pm that same day to investigate. More photos were taken then, she then knocked on the door with no response. I walked around to the side where two men were sitting on the porch. I asked them if they knew there was a blowout of some kind of pipe in front of their place? I asked them what the substance is? They responded its dirty water (I did not believe this response), but they are fixing it right now. I said ok and they asked if I was from the City, I responded yes. I sent an email to Steve Buffington and asked them to check up on this call since I was on vacation.

6/30/2017 – Veronica Chavez emailed Lettice Brown (MS4 Coordinator) and Steven Buffington (PPZ) about a contractor power washing the side of a building and the paint chips are accumulating on the ground below. When the next rainstorm comes along, the paint chips will end up in the storm drain and will be considered an illicit discharge. Buffington called Veronica and she explained her concerns in more detail. Buffington decided to cite the contractor and called Tom Landis (Highway) to have the sweeper come to clean up the debris.



## OUTFALL RECONNAISSANCE INVENTORY/ SAMPLE COLLECTION FIELD SHEET

### Section 1: Background Data

Subwatershed:		Outfall ID: CC36	
Today's date: 04/10/17		Time (Military): 1:20PM	
Investigators: Lettice Brown		Form completed by: Lettice Brown	
Temperature (°F): 75		Rainfall (in.): Last 24 hours: 0 Last 48 hours: 0	
Latitude: 39.9659717	Longitude: -76.7328539	GPS Unit:	GPS LMK #:
Camera:		Photo #'s:	
Land Use in Drainage Area (Check all that apply): <input type="checkbox"/> Industrial <input type="checkbox"/> Ultra-Urban Residential <input type="checkbox"/> Suburban Residential <input type="checkbox"/> Commercial		<input type="checkbox"/> Open Space <input type="checkbox"/> Institutional Other: Known Industries:	
Notes (e.g., origin of outfall, if known): York City			

### Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE	DIMENSIONS (IN.)	SUBMERGED
<input checked="" type="checkbox"/> Closed Pipe	<input type="checkbox"/> RCP <input type="checkbox"/> CMP <input type="checkbox"/> PVC <input type="checkbox"/> HDPE <input type="checkbox"/> Steel <input checked="" type="checkbox"/> Other: TCP	<input checked="" type="checkbox"/> Circular <input type="checkbox"/> Elliptical <input type="checkbox"/> Box <input type="checkbox"/> Other:	<input checked="" type="checkbox"/> Single <input type="checkbox"/> Double <input type="checkbox"/> Triple <input type="checkbox"/> Other:	Diameter/Dimensions: 18  In Water: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully With Sediment: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully
<input type="checkbox"/> Open drainage	<input type="checkbox"/> Concrete <input type="checkbox"/> Earthen <input type="checkbox"/> rip-rap <input type="checkbox"/> Other:	<input type="checkbox"/> Trapezoid <input type="checkbox"/> Parabolic <input type="checkbox"/> Other:	Depth:  Top Width:  Bottom Width:	
<input type="checkbox"/> In-Stream	(applicable when collecting samples)			
Flow Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <i>If No, Skip to Section 5</i>			
Flow Description (If present)	<input type="checkbox"/> Trickle <input type="checkbox"/> Moderate <input type="checkbox"/> Substantial			

### Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER	RESULT	UNIT	EQUIPMENT	
<input type="checkbox"/> Flow #1	Volume		Liter	Bottle
	Time to fill		Seconds	
<input type="checkbox"/> Flow #2	Flow depth		Inches	Tape measure
	Flow width		Inches	Tape measure
	Measured length		Inches	Tape measure
	Time of travel		Seconds	Stop watch
Temperature			°F	Thermometer
pH			pH Units	Test strip/Probe
Ammonia			mg/L	Test strip



Outfall Reconnaissance Inventory Field Sheet

Section 4: Physical Indicators for Flowing Outfalls Only

Are Any Physical Indicators Present in the flow? ☐ Yes ☐ No *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	<input type="checkbox"/>	<input type="checkbox"/> Sewage <input type="checkbox"/> Rancid/sour <input type="checkbox"/> Petroleum/gas <input type="checkbox"/> Sulfide <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint	<input type="checkbox"/> 2 - Easily detected	<input type="checkbox"/> 3 - Noticeable from a distance
Color	<input type="checkbox"/>	<input type="checkbox"/> Clear <input type="checkbox"/> Brown <input type="checkbox"/> Gray <input type="checkbox"/> Yellow <input type="checkbox"/> Green <input type="checkbox"/> Orange <input type="checkbox"/> Red <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint colors in sample bottle	<input type="checkbox"/> 2 - Clearly visible in sample bottle	<input type="checkbox"/> 3 - Clearly visible in outfall flow
Turbidity	<input type="checkbox"/>	See severity	<input type="checkbox"/> 1 - Slight cloudiness	<input type="checkbox"/> 2 - Cloudy	<input type="checkbox"/> 3 - Opaque
Floatables -Does Not Include Trash!!	<input type="checkbox"/>	<input type="checkbox"/> Sewage (Toilet Paper, etc.) <input type="checkbox"/> Suds <input type="checkbox"/> Petroleum (oil sheen) <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Few/slight; origin not obvious	<input type="checkbox"/> 2 - Some; indications of origin (e.g., possible suds or oil sheen)	<input type="checkbox"/> 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☐ Yes ☒ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	<input type="checkbox"/>	<input type="checkbox"/> Spalling, Cracking or Chipping <input type="checkbox"/> Peeling Paint <input type="checkbox"/> Corrosion	
Deposits/Stains	<input type="checkbox"/>	<input type="checkbox"/> Oily <input type="checkbox"/> Flow Line <input type="checkbox"/> Paint <input type="checkbox"/> Other:	
Abnormal Vegetation	<input type="checkbox"/>	<input type="checkbox"/> Excessive <input type="checkbox"/> Inhibited	
Poor pool quality	<input type="checkbox"/>	<input type="checkbox"/> Odors <input type="checkbox"/> Colors <input type="checkbox"/> Floatables <input type="checkbox"/> Oil Sheen <input type="checkbox"/> Suds <input type="checkbox"/> Excessive Algae <input type="checkbox"/> Other:	
Pipe benthic growth	<input type="checkbox"/>	<input type="checkbox"/> Brown <input type="checkbox"/> Orange <input type="checkbox"/> Green <input type="checkbox"/> Other:	

Section 6: Overall Outfall Characterization

<input checked="" type="checkbox"/> Unlikely	<input type="checkbox"/> Potential (presence of two or more indicators)	<input type="checkbox"/> Suspect (one or more indicators with a severity of 3)	<input type="checkbox"/> Obvious
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Section 7: Data Collection

1. Sample for the lab?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
2. If yes, collected from:	<input type="checkbox"/> Flow <input type="checkbox"/> Pool
3. Intermittent flow trap set?	<input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, type: <input type="checkbox"/> OBM <input type="checkbox"/> Caulk dam

Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?



## Photo Log

Photo No. 1: CC36.JPG





## OUTFALL RECONNAISSANCE INVENTORY/ SAMPLE COLLECTION FIELD SHEET

### Section 1: Background Data

Subwatershed:		Outfall ID: CC43	
Today's date: 04/10/17		Time (Military): 1:35PM	
Investigators: Lettice Brown		Form completed by: Lettice Brown	
Temperature (°F): 80		Rainfall (in.): Last 24 hours: 0 Last 48 hours: 0	
Latitude: 39.9639491	Longitude: -76.7333339	GPS Unit:	GPS LMK #:
Camera:		Photo #'s:	
Land Use in Drainage Area (Check all that apply): <input type="checkbox"/> Industrial <input type="checkbox"/> Ultra-Urban Residential <input type="checkbox"/> Suburban Residential <input type="checkbox"/> Commercial		<input type="checkbox"/> Open Space <input type="checkbox"/> Institutional Other: Known Industries:	
Notes (e.g., origin of outfall, if known): York City			

### Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE	DIMENSIONS (IN.)	SUBMERGED
<input checked="" type="checkbox"/> Closed Pipe	<input type="checkbox"/> RCP <input type="checkbox"/> CMP <input type="checkbox"/> PVC <input type="checkbox"/> HDPE <input type="checkbox"/> Steel <input checked="" type="checkbox"/> Other: TCP	<input checked="" type="checkbox"/> Circular <input type="checkbox"/> Elliptical <input type="checkbox"/> Box <input type="checkbox"/> Other:	<input checked="" type="checkbox"/> Single <input type="checkbox"/> Double <input type="checkbox"/> Triple <input type="checkbox"/> Other:	Diameter/Dimensions: 15  In Water: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully With Sediment: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully
<input type="checkbox"/> Open drainage	<input type="checkbox"/> Concrete <input type="checkbox"/> Earthen <input type="checkbox"/> rip-rap <input type="checkbox"/> Other:	<input type="checkbox"/> Trapezoid <input type="checkbox"/> Parabolic <input type="checkbox"/> Other:	Depth:  Top Width:  Bottom Width:	
<input type="checkbox"/> In-Stream	(applicable when collecting samples)			
Flow Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <i>If No, Skip to Section 5</i>			
Flow Description (If present)	<input type="checkbox"/> Trickle <input type="checkbox"/> Moderate <input type="checkbox"/> Substantial			

### Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER	RESULT	UNIT	EQUIPMENT	
<input type="checkbox"/> Flow #1	Volume		Liter	Bottle
	Time to fill		Seconds	
<input type="checkbox"/> Flow #2	Flow depth		Inches	Tape measure
	Flow width		Inches	Tape measure
	Measured length		Inches	Tape measure
	Time of travel		Seconds	Stop watch
Temperature			°F	Thermometer
pH			pH Units	Test strip/Probe
Ammonia			mg/L	Test strip



Outfall Reconnaissance Inventory Field Sheet

Section 4: Physical Indicators for Flowing Outfalls Only

Are Any Physical Indicators Present in the flow? ☐ Yes ☐ No *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	<input type="checkbox"/>	<input type="checkbox"/> Sewage <input type="checkbox"/> Rancid/sour <input type="checkbox"/> Petroleum/gas <input type="checkbox"/> Sulfide <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint	<input type="checkbox"/> 2 - Easily detected	<input type="checkbox"/> 3 - Noticeable from a distance
Color	<input type="checkbox"/>	<input type="checkbox"/> Clear <input type="checkbox"/> Brown <input type="checkbox"/> Gray <input type="checkbox"/> Yellow <input type="checkbox"/> Green <input type="checkbox"/> Orange <input type="checkbox"/> Red <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint colors in sample bottle	<input type="checkbox"/> 2 - Clearly visible in sample bottle	<input type="checkbox"/> 3 - Clearly visible in outfall flow
Turbidity	<input type="checkbox"/>	See severity	<input type="checkbox"/> 1 - Slight cloudiness	<input type="checkbox"/> 2 - Cloudy	<input type="checkbox"/> 3 - Opaque
Floatables -Does Not Include Trash!!	<input type="checkbox"/>	<input type="checkbox"/> Sewage (Toilet Paper, etc.) <input type="checkbox"/> Suds <input type="checkbox"/> Petroleum (oil sheen) <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Few/slight; origin not obvious	<input type="checkbox"/> 2 - Some; indications of origin (e.g., possible suds or oil sheen)	<input type="checkbox"/> 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☐ Yes ☒ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	<input type="checkbox"/>	<input type="checkbox"/> Spalling, Cracking or Chipping <input type="checkbox"/> Peeling Paint <input type="checkbox"/> Corrosion	
Deposits/Stains	<input type="checkbox"/>	<input type="checkbox"/> Oily <input type="checkbox"/> Flow Line <input type="checkbox"/> Paint <input type="checkbox"/> Other:	
Abnormal Vegetation	<input type="checkbox"/>	<input type="checkbox"/> Excessive <input type="checkbox"/> Inhibited	
Poor pool quality	<input type="checkbox"/>	<input type="checkbox"/> Odors <input type="checkbox"/> Colors <input type="checkbox"/> Floatables <input type="checkbox"/> Oil Sheen <input type="checkbox"/> Suds <input type="checkbox"/> Excessive Algae <input type="checkbox"/> Other:	
Pipe benthic growth	<input type="checkbox"/>	<input type="checkbox"/> Brown <input type="checkbox"/> Orange <input type="checkbox"/> Green <input type="checkbox"/> Other:	

Section 6: Overall Outfall Characterization

<input checked="" type="checkbox"/> Unlikely	<input type="checkbox"/> Potential (presence of two or more indicators)	<input type="checkbox"/> Suspect (one or more indicators with a severity of 3)	<input type="checkbox"/> Obvious
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Section 7: Data Collection

1. Sample for the lab?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
2. If yes, collected from:	<input type="checkbox"/> Flow <input type="checkbox"/> Pool
3. Intermittent flow trap set?	<input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, type: <input type="checkbox"/> OBM <input type="checkbox"/> Caulk dam

Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?



## Photo Log

Photo No. 1: image.jpg





## OUTFALL RECONNAISSANCE INVENTORY/ SAMPLE COLLECTION FIELD SHEET

### Section 1: Background Data

Subwatershed:		Outfall ID: CC45	
Today's date: 04/10/17		Time (Military): 1:45PM	
Investigators: Lettice Brown		Form completed by: Lettice Brown	
Temperature (°F): 80		Rainfall (in.): Last 24 hours: 0 Last 48 hours: 0	
Latitude: 39.9636807	Longitude: -76.7332286	GPS Unit:	GPS LMK #:
Camera:		Photo #'s:	
Land Use in Drainage Area (Check all that apply): <input type="checkbox"/> Industrial <input type="checkbox"/> Ultra-Urban Residential <input type="checkbox"/> Suburban Residential <input type="checkbox"/> Commercial		<input type="checkbox"/> Open Space <input type="checkbox"/> Institutional Other: Known Industries:	
Notes (e.g., origin of outfall, if known): York City			

### Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE	DIMENSIONS (IN.)	SUBMERGED
<input checked="" type="checkbox"/> Closed Pipe	<input type="checkbox"/> RCP <input type="checkbox"/> PVC <input type="checkbox"/> Steel <input type="checkbox"/> Other:	<input checked="" type="checkbox"/> Circular <input type="checkbox"/> Elliptical <input type="checkbox"/> Box <input type="checkbox"/> Other:	<input checked="" type="checkbox"/> Single <input type="checkbox"/> Double <input type="checkbox"/> Triple <input type="checkbox"/> Other:	Diameter/Dimensions: 18  In Water: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully With Sediment: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully
	<input type="checkbox"/> Concrete <input type="checkbox"/> Earthen <input type="checkbox"/> rip-rap <input type="checkbox"/> Other:	<input type="checkbox"/> Trapezoid <input type="checkbox"/> Parabolic <input type="checkbox"/> Other:	Depth:  Top Width:  Bottom Width:	
<input type="checkbox"/> Open drainage				
<input type="checkbox"/> In-Stream	(applicable when collecting samples)			
Flow Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <i>If No, Skip to Section 5</i>			
Flow Description (If present)	<input type="checkbox"/> Trickle <input type="checkbox"/> Moderate <input type="checkbox"/> Substantial			

### Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER	RESULT	UNIT	EQUIPMENT	
<input type="checkbox"/> Flow #1	Volume	Liter	Bottle	
	Time to fill	Seconds		
<input type="checkbox"/> Flow #2	Flow depth	Inches	Tape measure	
	Flow width	Inches	Tape measure	
	Measured length	Inches	Tape measure	
	Time of travel	Seconds	Stop watch	
Temperature		°F	Thermometer	
pH		pH Units	Test strip/Probe	
Ammonia		mg/L	Test strip	



Outfall Reconnaissance Inventory Field Sheet

Section 4: Physical Indicators for Flowing Outfalls Only

Are Any Physical Indicators Present in the flow? ☐ Yes ☐ No (If No, Skip to Section 5)

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	<input type="checkbox"/>	<input type="checkbox"/> Sewage <input type="checkbox"/> Rancid/sour <input type="checkbox"/> Petroleum/gas <input type="checkbox"/> Sulfide <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint	<input type="checkbox"/> 2 - Easily detected	<input type="checkbox"/> 3 - Noticeable from a distance
Color	<input type="checkbox"/>	<input type="checkbox"/> Clear <input type="checkbox"/> Brown <input type="checkbox"/> Gray <input type="checkbox"/> Yellow <input type="checkbox"/> Green <input type="checkbox"/> Orange <input type="checkbox"/> Red <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint colors in sample bottle	<input type="checkbox"/> 2 - Clearly visible in sample bottle	<input type="checkbox"/> 3 - Clearly visible in outfall flow
Turbidity	<input type="checkbox"/>	See severity	<input type="checkbox"/> 1 - Slight cloudiness	<input type="checkbox"/> 2 - Cloudy	<input type="checkbox"/> 3 - Opaque
Floatables -Does Not Include Trash!!	<input type="checkbox"/>	<input type="checkbox"/> Sewage (Toilet Paper, etc.) <input type="checkbox"/> Suds <input type="checkbox"/> Petroleum (oil sheen) <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Few/slight; origin not obvious	<input type="checkbox"/> 2 - Some; indications of origin (e.g., possible suds or oil sheen)	<input type="checkbox"/> 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☐ Yes ☒ No (If No, Skip to Section 6)

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	<input type="checkbox"/>	<input type="checkbox"/> Spalling, Cracking or Chipping <input type="checkbox"/> Peeling Paint <input type="checkbox"/> Corrosion	
Deposits/Stains	<input type="checkbox"/>	<input type="checkbox"/> Oily <input type="checkbox"/> Flow Line <input type="checkbox"/> Paint <input type="checkbox"/> Other:	
Abnormal Vegetation	<input type="checkbox"/>	<input type="checkbox"/> Excessive <input type="checkbox"/> Inhibited	
Poor pool quality	<input type="checkbox"/>	<input type="checkbox"/> Odors <input type="checkbox"/> Colors <input type="checkbox"/> Floatables <input type="checkbox"/> Oil Sheen <input type="checkbox"/> Suds <input type="checkbox"/> Excessive Algae <input type="checkbox"/> Other:	
Pipe benthic growth	<input type="checkbox"/>	<input type="checkbox"/> Brown <input type="checkbox"/> Orange <input type="checkbox"/> Green <input type="checkbox"/> Other:	

Section 6: Overall Outfall Characterization

<input checked="" type="checkbox"/> Unlikely	<input type="checkbox"/> Potential (presence of two or more indicators)	<input type="checkbox"/> Suspect (one or more indicators with a severity of 3)	<input type="checkbox"/> Obvious
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Section 7: Data Collection

1. Sample for the lab?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
2. If yes, collected from:	<input type="checkbox"/> Flow <input type="checkbox"/> Pool
3. Intermittent flow trap set?	<input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, type: <input type="checkbox"/> OBM <input type="checkbox"/> Caulk dam

Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?



## Photo Log

Photo No. 1: image.jpg





## OUTFALL RECONNAISSANCE INVENTORY/ SAMPLE COLLECTION FIELD SHEET

### Section 1: Background Data

Subwatershed:		Outfall ID: CC46	
Today's date: 04/10/17		Time (Military): 1:45PM	
Investigators: Lettice Brown		Form completed by: Lettice Brown	
Temperature (°F): 80		Rainfall (in.): Last 24 hours: 0 Last 48 hours: 0	
Latitude: 39.9632573	Longitude: -76.7330805	GPS Unit:	GPS LMK #:
Camera:		Photo #'s:	
Land Use in Drainage Area (Check all that apply): <input type="checkbox"/> Industrial <input type="checkbox"/> Ultra-Urban Residential <input type="checkbox"/> Suburban Residential <input type="checkbox"/> Commercial		<input type="checkbox"/> Open Space <input type="checkbox"/> Institutional Other: Known Industries:	
Notes (e.g., origin of outfall, if known): York City			

### Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE	DIMENSIONS (IN.)	SUBMERGED
<input checked="" type="checkbox"/> Closed Pipe	<input type="checkbox"/> RCP <input type="checkbox"/> CMP <input type="checkbox"/> PVC <input type="checkbox"/> HDPE <input type="checkbox"/> Steel <input checked="" type="checkbox"/> Other: TCP	<input checked="" type="checkbox"/> Circular <input type="checkbox"/> Elliptical <input type="checkbox"/> Box <input type="checkbox"/> Other:	<input checked="" type="checkbox"/> Single <input type="checkbox"/> Double <input type="checkbox"/> Triple <input type="checkbox"/> Other:	Diameter/Dimensions: 12  In Water: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully With Sediment: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully
<input type="checkbox"/> Open drainage	<input type="checkbox"/> Concrete <input type="checkbox"/> Earthen <input type="checkbox"/> rip-rap <input type="checkbox"/> Other:	<input type="checkbox"/> Trapezoid <input type="checkbox"/> Parabolic <input type="checkbox"/> Other:	Depth:  Top Width:  Bottom Width:	
<input type="checkbox"/> In-Stream	(applicable when collecting samples)			
Flow Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <i>If No, Skip to Section 5</i>			
Flow Description (If present)	<input type="checkbox"/> Trickle <input type="checkbox"/> Moderate <input type="checkbox"/> Substantial			

### Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER		RESULT	UNIT	EQUIPMENT
<input type="checkbox"/> Flow #1	Volume		Liter	Bottle
	Time to fill		Seconds	
<input type="checkbox"/> Flow #2	Flow depth		Inches	Tape measure
	Flow width		Inches	Tape measure
	Measured length		Inches	Tape measure
	Time of travel		Seconds	Stop watch
Temperature			°F	Thermometer
pH			pH Units	Test strip/Probe
Ammonia			mg/L	Test strip



Outfall Reconnaissance Inventory Field Sheet

Section 4: Physical Indicators for Flowing Outfalls Only

Are Any Physical Indicators Present in the flow? ☐ Yes ☐ No (If No, Skip to Section 5)

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	<input type="checkbox"/>	<input type="checkbox"/> Sewage <input type="checkbox"/> Rancid/sour <input type="checkbox"/> Petroleum/gas <input type="checkbox"/> Sulfide <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint	<input type="checkbox"/> 2 - Easily detected	<input type="checkbox"/> 3 - Noticeable from a distance
Color	<input type="checkbox"/>	<input type="checkbox"/> Clear <input type="checkbox"/> Brown <input type="checkbox"/> Gray <input type="checkbox"/> Yellow <input type="checkbox"/> Green <input type="checkbox"/> Orange <input type="checkbox"/> Red <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint colors in sample bottle	<input type="checkbox"/> 2 - Clearly visible in sample bottle	<input type="checkbox"/> 3 - Clearly visible in outfall flow
Turbidity	<input type="checkbox"/>	See severity	<input type="checkbox"/> 1 - Slight cloudiness	<input type="checkbox"/> 2 - Cloudy	<input type="checkbox"/> 3 - Opaque
Floatables -Does Not Include Trash!!	<input type="checkbox"/>	<input type="checkbox"/> Sewage (Toilet Paper, etc.) <input type="checkbox"/> Suds <input type="checkbox"/> Petroleum (oil sheen) <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Few/slight; origin not obvious	<input type="checkbox"/> 2 - Some; indications of origin (e.g., possible suds or oil sheen)	<input type="checkbox"/> 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☐ Yes ☒ No (If No, Skip to Section 6)

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	<input type="checkbox"/>	<input type="checkbox"/> Spalling, Cracking or Chipping <input type="checkbox"/> Peeling Paint <input type="checkbox"/> Corrosion	
Deposits/Stains	<input type="checkbox"/>	<input type="checkbox"/> Oily <input type="checkbox"/> Flow Line <input type="checkbox"/> Paint <input type="checkbox"/> Other:	
Abnormal Vegetation	<input type="checkbox"/>	<input type="checkbox"/> Excessive <input type="checkbox"/> Inhibited	
Poor pool quality	<input type="checkbox"/>	<input type="checkbox"/> Odors <input type="checkbox"/> Colors <input type="checkbox"/> Floatables <input type="checkbox"/> Oil Sheen <input type="checkbox"/> Suds <input type="checkbox"/> Excessive Algae <input type="checkbox"/> Other:	
Pipe benthic growth	<input type="checkbox"/>	<input type="checkbox"/> Brown <input type="checkbox"/> Orange <input type="checkbox"/> Green <input type="checkbox"/> Other:	

Section 6: Overall Outfall Characterization

<input checked="" type="checkbox"/> Unlikely <input type="checkbox"/> Potential (presence of two or more indicators) <input type="checkbox"/> Suspect (one or more indicators with a severity of 3) <input type="checkbox"/> Obvious
--

Section 7: Data Collection

1. Sample for the lab? <input type="checkbox"/> Yes <input type="checkbox"/> No
2. If yes, collected from: <input type="checkbox"/> Flow <input type="checkbox"/> Pool
3. Intermittent flow trap set? <input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, type: <input type="checkbox"/> OBM <input type="checkbox"/> Caulk dam

Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?



## Photo Log

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## OUTFALL RECONNAISSANCE INVENTORY/ SAMPLE COLLECTION FIELD SHEET

### Section 1: Background Data

Subwatershed:		Outfall ID: CC47	
Today's date: 04/10/17		Time (Military): 1:50PM	
Investigators: Lettice Brown		Form completed by: Lettice Brown	
Temperature (°F): 80		Rainfall (in.): Last 24 hours: 0 Last 48 hours: 0	
Latitude: 39.9632071	Longitude: -76.7330501	GPS Unit:	GPS LMK #:
Camera:		Photo #'s:	
Land Use in Drainage Area (Check all that apply): <input type="checkbox"/> Industrial <input type="checkbox"/> Ultra-Urban Residential <input type="checkbox"/> Suburban Residential <input type="checkbox"/> Commercial		<input type="checkbox"/> Open Space <input type="checkbox"/> Institutional Other: Known Industries:	
Notes (e.g., origin of outfall, if known): York City			

### Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE	DIMENSIONS (IN.)	SUBMERGED
<input checked="" type="checkbox"/> Closed Pipe	<input type="checkbox"/> RCP <input checked="" type="checkbox"/> CMP <input type="checkbox"/> PVC <input type="checkbox"/> HDPE <input type="checkbox"/> Steel <input type="checkbox"/> Other:	<input checked="" type="checkbox"/> Circular <input type="checkbox"/> Elliptical <input type="checkbox"/> Box <input type="checkbox"/> Other:	<input checked="" type="checkbox"/> Single <input type="checkbox"/> Double <input type="checkbox"/> Triple <input type="checkbox"/> Other:	Diameter/Dimensions: 18  In Water: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully With Sediment: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully
<input type="checkbox"/> Open drainage	<input type="checkbox"/> Concrete <input type="checkbox"/> Earthen <input type="checkbox"/> rip-rap <input type="checkbox"/> Other:	<input type="checkbox"/> Trapezoid <input type="checkbox"/> Parabolic <input type="checkbox"/> Other:	Depth:  Top Width:  Bottom Width:	
<input type="checkbox"/> In-Stream	(applicable when collecting samples)			
Flow Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <i>If No, Skip to Section 5</i>			
Flow Description (If present)	<input type="checkbox"/> Trickle <input type="checkbox"/> Moderate <input type="checkbox"/> Substantial			

### Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER	RESULT	UNIT	EQUIPMENT	
<input type="checkbox"/> Flow #1	Volume		Liter	Bottle
	Time to fill		Seconds	
<input type="checkbox"/> Flow #2	Flow depth		Inches	Tape measure
	Flow width		Inches	Tape measure
	Measured length		Inches	Tape measure
	Time of travel		Seconds	Stop watch
Temperature			°F	Thermometer
pH			pH Units	Test strip/Probe
Ammonia			mg/L	Test strip



Outfall Reconnaissance Inventory Field Sheet

Section 4: Physical Indicators for Flowing Outfalls Only

Are Any Physical Indicators Present in the flow? ☐ Yes ☐ No *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	<input type="checkbox"/>	<input type="checkbox"/> Sewage <input type="checkbox"/> Rancid/sour <input type="checkbox"/> Petroleum/gas <input type="checkbox"/> Sulfide <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint	<input type="checkbox"/> 2 - Easily detected	<input type="checkbox"/> 3 - Noticeable from a distance
Color	<input type="checkbox"/>	<input type="checkbox"/> Clear <input type="checkbox"/> Brown <input type="checkbox"/> Gray <input type="checkbox"/> Yellow <input type="checkbox"/> Green <input type="checkbox"/> Orange <input type="checkbox"/> Red <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint colors in sample bottle	<input type="checkbox"/> 2 - Clearly visible in sample bottle	<input type="checkbox"/> 3 - Clearly visible in outfall flow
Turbidity	<input type="checkbox"/>	See severity	<input type="checkbox"/> 1 - Slight cloudiness	<input type="checkbox"/> 2 - Cloudy	<input type="checkbox"/> 3 - Opaque
Floatables -Does Not Include Trash!!	<input type="checkbox"/>	<input type="checkbox"/> Sewage (Toilet Paper, etc.) <input type="checkbox"/> Suds <input type="checkbox"/> Petroleum (oil sheen) <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Few/slight; origin not obvious	<input type="checkbox"/> 2 - Some; indications of origin (e.g., possible suds or oil sheen)	<input type="checkbox"/> 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☐ Yes ☒ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	<input type="checkbox"/>	<input type="checkbox"/> Spalling, Cracking or Chipping <input type="checkbox"/> Peeling Paint <input type="checkbox"/> Corrosion	
Deposits/Stains	<input type="checkbox"/>	<input type="checkbox"/> Oily <input type="checkbox"/> Flow Line <input type="checkbox"/> Paint <input type="checkbox"/> Other:	
Abnormal Vegetation	<input type="checkbox"/>	<input type="checkbox"/> Excessive <input type="checkbox"/> Inhibited	
Poor pool quality	<input type="checkbox"/>	<input type="checkbox"/> Odors <input type="checkbox"/> Colors <input type="checkbox"/> Floatables <input type="checkbox"/> Oil Sheen <input type="checkbox"/> Suds <input type="checkbox"/> Excessive Algae <input type="checkbox"/> Other:	
Pipe benthic growth	<input type="checkbox"/>	<input type="checkbox"/> Brown <input type="checkbox"/> Orange <input type="checkbox"/> Green <input type="checkbox"/> Other:	

Section 6: Overall Outfall Characterization

<input checked="" type="checkbox"/> Unlikely	<input type="checkbox"/> Potential (presence of two or more indicators)	<input type="checkbox"/> Suspect (one or more indicators with a severity of 3)	<input type="checkbox"/> Obvious
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Section 7: Data Collection

1. Sample for the lab?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
2. If yes, collected from:	<input type="checkbox"/> Flow <input type="checkbox"/> Pool
3. Intermittent flow trap set?	<input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, type: <input type="checkbox"/> OBM <input type="checkbox"/> Caulk dam

Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?



## Photo Log

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## OUTFALL RECONNAISSANCE INVENTORY/ SAMPLE COLLECTION FIELD SHEET

### Section 1: Background Data

Subwatershed:		Outfall ID: CC49	
Today's date: 04/10/17		Time (Military): 1:50PM	
Investigators: Lettice Brown		Form completed by: Lettice Brown	
Temperature (°F): 79		Rainfall (in.): Last 24 hours: 0 Last 48 hours: 0	
Latitude: 39.9630345	Longitude: -76.7329985	GPS Unit:	GPS LMK #:
Camera:		Photo #'s:	
Land Use in Drainage Area (Check all that apply): <input type="checkbox"/> Industrial <input type="checkbox"/> Ultra-Urban Residential <input type="checkbox"/> Suburban Residential <input type="checkbox"/> Commercial		<input type="checkbox"/> Open Space <input type="checkbox"/> Institutional Other: Known Industries:	
Notes (e.g., origin of outfall, if known): York City			

### Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE	DIMENSIONS (IN.)	SUBMERGED
<input checked="" type="checkbox"/> Closed Pipe	<input type="checkbox"/> RCP <input checked="" type="checkbox"/> CMP <input type="checkbox"/> PVC <input type="checkbox"/> HDPE <input type="checkbox"/> Steel <input type="checkbox"/> Other:	<input checked="" type="checkbox"/> Circular <input type="checkbox"/> Elliptical <input type="checkbox"/> Box <input type="checkbox"/> Other:	<input checked="" type="checkbox"/> Single <input type="checkbox"/> Double <input type="checkbox"/> Triple <input type="checkbox"/> Other:	Diameter/Dimensions: 18  In Water: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully With Sediment: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully
<input type="checkbox"/> Open drainage	<input type="checkbox"/> Concrete <input type="checkbox"/> Earthen <input type="checkbox"/> rip-rap <input type="checkbox"/> Other:	<input type="checkbox"/> Trapezoid <input type="checkbox"/> Parabolic <input type="checkbox"/> Other:	Depth:  Top Width:  Bottom Width:	
<input type="checkbox"/> In-Stream	(applicable when collecting samples)			
Flow Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <i>If No, Skip to Section 5</i>			
Flow Description (If present)	<input type="checkbox"/> Trickle <input type="checkbox"/> Moderate <input type="checkbox"/> Substantial			

### Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER	RESULT	UNIT	EQUIPMENT	
<input type="checkbox"/> Flow #1	Volume		Liter	Bottle
	Time to fill		Seconds	
<input type="checkbox"/> Flow #2	Flow depth		Inches	Tape measure
	Flow width		Inches	Tape measure
	Measured length		Inches	Tape measure
	Time of travel		Seconds	Stop watch
Temperature			°F	Thermometer
pH			pH Units	Test strip/Probe
Ammonia			mg/L	Test strip



Outfall Reconnaissance Inventory Field Sheet

Section 4: Physical Indicators for Flowing Outfalls Only

Are Any Physical Indicators Present in the flow? ☐ Yes ☐ No (If No, Skip to Section 5)

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	<input type="checkbox"/>	<input type="checkbox"/> Sewage <input type="checkbox"/> Rancid/sour <input type="checkbox"/> Petroleum/gas <input type="checkbox"/> Sulfide <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint	<input type="checkbox"/> 2 - Easily detected	<input type="checkbox"/> 3 - Noticeable from a distance
Color	<input type="checkbox"/>	<input type="checkbox"/> Clear <input type="checkbox"/> Brown <input type="checkbox"/> Gray <input type="checkbox"/> Yellow <input type="checkbox"/> Green <input type="checkbox"/> Orange <input type="checkbox"/> Red <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint colors in sample bottle	<input type="checkbox"/> 2 - Clearly visible in sample bottle	<input type="checkbox"/> 3 - Clearly visible in outfall flow
Turbidity	<input type="checkbox"/>	See severity	<input type="checkbox"/> 1 - Slight cloudiness	<input type="checkbox"/> 2 - Cloudy	<input type="checkbox"/> 3 - Opaque
Floatables -Does Not Include Trash!!	<input type="checkbox"/>	<input type="checkbox"/> Sewage (Toilet Paper, etc.) <input type="checkbox"/> Suds <input type="checkbox"/> Petroleum (oil sheen) <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Few/slight; origin not obvious	<input type="checkbox"/> 2 - Some; indications of origin (e.g., possible suds or oil sheen)	<input type="checkbox"/> 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☐ Yes ☒ No (If No, Skip to Section 6)

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	<input type="checkbox"/>	<input type="checkbox"/> Spalling, Cracking or Chipping <input type="checkbox"/> Peeling Paint <input type="checkbox"/> Corrosion	
Deposits/Stains	<input type="checkbox"/>	<input type="checkbox"/> Oily <input type="checkbox"/> Flow Line <input type="checkbox"/> Paint <input type="checkbox"/> Other:	
Abnormal Vegetation	<input type="checkbox"/>	<input type="checkbox"/> Excessive <input type="checkbox"/> Inhibited	
Poor pool quality	<input type="checkbox"/>	<input type="checkbox"/> Odors <input type="checkbox"/> Colors <input type="checkbox"/> Floatables <input type="checkbox"/> Oil Sheen <input type="checkbox"/> Suds <input type="checkbox"/> Excessive Algae <input type="checkbox"/> Other:	
Pipe benthic growth	<input type="checkbox"/>	<input type="checkbox"/> Brown <input type="checkbox"/> Orange <input type="checkbox"/> Green <input type="checkbox"/> Other:	

Section 6: Overall Outfall Characterization

<input checked="" type="checkbox"/> Unlikely <input type="checkbox"/> Potential (presence of two or more indicators) <input type="checkbox"/> Suspect (one or more indicators with a severity of 3) <input type="checkbox"/> Obvious
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Section 7: Data Collection

1. Sample for the lab? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
2. If yes, collected from: <input type="checkbox"/> Flow <input type="checkbox"/> Pool
3. Intermittent flow trap set? <input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, type: <input type="checkbox"/> OBM <input type="checkbox"/> Caulk dam

Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?



## Photo Log

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## OUTFALL RECONNAISSANCE INVENTORY/ SAMPLE COLLECTION FIELD SHEET

### Section 1: Background Data

Subwatershed:		Outfall ID: CC49A	
Today's date: 04/10/17		Time (Military): 1:55PM	
Investigators: Lettice Brown		Form completed by: Lettice Brown	
Temperature (°F): 79		Rainfall (in.): Last 24 hours: 0 Last 48 hours: 0	
Latitude: 39.9628733	Longitude: -76.7329411	GPS Unit:	GPS LMK #:
Camera:		Photo #'s:	
Land Use in Drainage Area (Check all that apply): <input type="checkbox"/> Industrial <input type="checkbox"/> Ultra-Urban Residential <input type="checkbox"/> Suburban Residential <input type="checkbox"/> Commercial		<input type="checkbox"/> Open Space <input type="checkbox"/> Institutional Other: Known Industries:	
Notes (e.g., origin of outfall, if known): York City			

### Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE	DIMENSIONS (IN.)	SUBMERGED
<input checked="" type="checkbox"/> Closed Pipe	<input type="checkbox"/> RCP <input checked="" type="checkbox"/> CMP <input type="checkbox"/> PVC <input type="checkbox"/> HDPE <input type="checkbox"/> Steel <input type="checkbox"/> Other:	<input checked="" type="checkbox"/> Circular <input type="checkbox"/> Elliptical <input type="checkbox"/> Box <input type="checkbox"/> Other:	<input checked="" type="checkbox"/> Single <input type="checkbox"/> Double <input type="checkbox"/> Triple <input type="checkbox"/> Other:	Diameter/Dimensions: 10  In Water: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully With Sediment: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully
<input type="checkbox"/> Open drainage	<input type="checkbox"/> Concrete <input type="checkbox"/> Earthen <input type="checkbox"/> rip-rap <input type="checkbox"/> Other:	<input type="checkbox"/> Trapezoid <input type="checkbox"/> Parabolic <input type="checkbox"/> Other:	Depth:  Top Width:  Bottom Width:	
<input type="checkbox"/> In-Stream	(applicable when collecting samples)			
Flow Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <i>If No, Skip to Section 5</i>			
Flow Description (If present)	<input type="checkbox"/> Trickle <input type="checkbox"/> Moderate <input type="checkbox"/> Substantial			

### Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER	RESULT	UNIT	EQUIPMENT	
<input type="checkbox"/> Flow #1	Volume		Liter	Bottle
	Time to fill		Seconds	
<input type="checkbox"/> Flow #2	Flow depth		Inches	Tape measure
	Flow width		Inches	Tape measure
	Measured length		Inches	Tape measure
	Time of travel		Seconds	Stop watch
Temperature			°F	Thermometer
pH			pH Units	Test strip/Probe
Ammonia			mg/L	Test strip



Outfall Reconnaissance Inventory Field Sheet

Section 4: Physical Indicators for Flowing Outfalls Only

Are Any Physical Indicators Present in the flow? ☐ Yes ☐ No *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	<input type="checkbox"/>	<input type="checkbox"/> Sewage <input type="checkbox"/> Rancid/sour <input type="checkbox"/> Petroleum/gas <input type="checkbox"/> Sulfide <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint	<input type="checkbox"/> 2 - Easily detected	<input type="checkbox"/> 3 - Noticeable from a distance
Color	<input type="checkbox"/>	<input type="checkbox"/> Clear <input type="checkbox"/> Brown <input type="checkbox"/> Gray <input type="checkbox"/> Yellow <input type="checkbox"/> Green <input type="checkbox"/> Orange <input type="checkbox"/> Red <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint colors in sample bottle	<input type="checkbox"/> 2 - Clearly visible in sample bottle	<input type="checkbox"/> 3 - Clearly visible in outfall flow
Turbidity	<input type="checkbox"/>	See severity	<input type="checkbox"/> 1 - Slight cloudiness	<input type="checkbox"/> 2 - Cloudy	<input type="checkbox"/> 3 - Opaque
Floatables -Does Not Include Trash!!	<input type="checkbox"/>	<input type="checkbox"/> Sewage (Toilet Paper, etc.) <input type="checkbox"/> Suds <input type="checkbox"/> Petroleum (oil sheen) <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Few/slight; origin not obvious	<input type="checkbox"/> 2 - Some; indications of origin (e.g., possible suds or oil sheen)	<input type="checkbox"/> 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☐ Yes ☒ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	<input type="checkbox"/>	<input type="checkbox"/> Spalling, Cracking or Chipping <input type="checkbox"/> Peeling Paint <input type="checkbox"/> Corrosion	
Deposits/Stains	<input type="checkbox"/>	<input type="checkbox"/> Oily <input type="checkbox"/> Flow Line <input type="checkbox"/> Paint <input type="checkbox"/> Other:	
Abnormal Vegetation	<input type="checkbox"/>	<input type="checkbox"/> Excessive <input type="checkbox"/> Inhibited	
Poor pool quality	<input type="checkbox"/>	<input type="checkbox"/> Odors <input type="checkbox"/> Colors <input type="checkbox"/> Floatables <input type="checkbox"/> Oil Sheen <input type="checkbox"/> Suds <input type="checkbox"/> Excessive Algae <input type="checkbox"/> Other:	
Pipe benthic growth	<input type="checkbox"/>	<input type="checkbox"/> Brown <input type="checkbox"/> Orange <input type="checkbox"/> Green <input type="checkbox"/> Other:	

Section 6: Overall Outfall Characterization

<input checked="" type="checkbox"/> Unlikely	<input type="checkbox"/> Potential (presence of two or more indicators)	<input type="checkbox"/> Suspect (one or more indicators with a severity of 3)	<input type="checkbox"/> Obvious
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Section 7: Data Collection

1. Sample for the lab?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
2. If yes, collected from:	<input type="checkbox"/> Flow <input type="checkbox"/> Pool
3. Intermittent flow trap set?	<input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, type: <input type="checkbox"/> OBM <input type="checkbox"/> Caulk dam

Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?



## Photo Log

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## OUTFALL RECONNAISSANCE INVENTORY/ SAMPLE COLLECTION FIELD SHEET

### Section 1: Background Data

Subwatershed:		Outfall ID: CC49B	
Today's date: 04/10/17		Time (Military): 1:55PM	
Investigators: Lettice Brown		Form completed by: Lettice Brown	
Temperature (°F): 79		Rainfall (in.): Last 24 hours: 0 Last 48 hours: 0	
Latitude: 39.9628550	Longitude: -76.7329424	GPS Unit:	GPS LMK #:
Camera:		Photo #'s:	
Land Use in Drainage Area (Check all that apply): <input type="checkbox"/> Industrial <input type="checkbox"/> Ultra-Urban Residential <input type="checkbox"/> Suburban Residential <input type="checkbox"/> Commercial		<input type="checkbox"/> Open Space <input type="checkbox"/> Institutional Other: Known Industries:	
Notes (e.g., origin of outfall, if known): York City			

### Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE	DIMENSIONS (IN.)	SUBMERGED
<input checked="" type="checkbox"/> Closed Pipe	<input type="checkbox"/> RCP <input type="checkbox"/> PVC <input type="checkbox"/> Steel <input type="checkbox"/> Other:	<input checked="" type="checkbox"/> Circular <input type="checkbox"/> Elliptical <input type="checkbox"/> Box <input type="checkbox"/> Other:	<input checked="" type="checkbox"/> Single <input type="checkbox"/> Double <input type="checkbox"/> Triple <input type="checkbox"/> Other:	Diameter/Dimensions: 8
	<input checked="" type="checkbox"/> CMP <input type="checkbox"/> HDPE			In Water: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully With Sediment: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully
<input type="checkbox"/> Open drainage	<input type="checkbox"/> Concrete <input type="checkbox"/> Earthen <input type="checkbox"/> rip-rap <input type="checkbox"/> Other:	<input type="checkbox"/> Trapezoid <input type="checkbox"/> Parabolic <input type="checkbox"/> Other:	Depth:  Top Width:  Bottom Width:	
<input type="checkbox"/> In-Stream	(applicable when collecting samples)			
Flow Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <i>If No, Skip to Section 5</i>			
Flow Description (If present)	<input type="checkbox"/> Trickle <input type="checkbox"/> Moderate <input type="checkbox"/> Substantial			

### Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER	RESULT	UNIT	EQUIPMENT	
<input type="checkbox"/> Flow #1	Volume		Liter	Bottle
	Time to fill		Seconds	
<input type="checkbox"/> Flow #2	Flow depth		Inches	Tape measure
	Flow width		Inches	Tape measure
	Measured length		Inches	Tape measure
	Time of travel		Seconds	Stop watch
Temperature			°F	Thermometer
pH			pH Units	Test strip/Probe
Ammonia			mg/L	Test strip



Outfall Reconnaissance Inventory Field Sheet

Section 4: Physical Indicators for Flowing Outfalls Only

Are Any Physical Indicators Present in the flow? ☐ Yes ☐ No (If No, Skip to Section 5)

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	<input type="checkbox"/>	<input type="checkbox"/> Sewage <input type="checkbox"/> Rancid/sour <input type="checkbox"/> Petroleum/gas <input type="checkbox"/> Sulfide <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint	<input type="checkbox"/> 2 - Easily detected	<input type="checkbox"/> 3 - Noticeable from a distance
Color	<input type="checkbox"/>	<input type="checkbox"/> Clear <input type="checkbox"/> Brown <input type="checkbox"/> Gray <input type="checkbox"/> Yellow <input type="checkbox"/> Green <input type="checkbox"/> Orange <input type="checkbox"/> Red <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint colors in sample bottle	<input type="checkbox"/> 2 - Clearly visible in sample bottle	<input type="checkbox"/> 3 - Clearly visible in outfall flow
Turbidity	<input type="checkbox"/>	See severity	<input type="checkbox"/> 1 - Slight cloudiness	<input type="checkbox"/> 2 - Cloudy	<input type="checkbox"/> 3 - Opaque
Floatables -Does Not Include Trash!!	<input type="checkbox"/>	<input type="checkbox"/> Sewage (Toilet Paper, etc.) <input type="checkbox"/> Suds <input type="checkbox"/> Petroleum (oil sheen) <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Few/slight; origin not obvious	<input type="checkbox"/> 2 - Some; indications of origin (e.g., possible suds or oil sheen)	<input type="checkbox"/> 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☒ Yes ☐ No (If No, Skip to Section 6)

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	<input type="checkbox"/>	<input type="checkbox"/> Spalling, Cracking or Chipping <input type="checkbox"/> Peeling Paint <input type="checkbox"/> Corrosion	
Deposits/Stains	<input checked="" type="checkbox"/>	<input type="checkbox"/> Oily <input type="checkbox"/> Flow Line <input type="checkbox"/> Paint <input checked="" type="checkbox"/> Other:	Sediment
Abnormal Vegetation	<input type="checkbox"/>	<input type="checkbox"/> Excessive <input type="checkbox"/> Inhibited	
Poor pool quality	<input type="checkbox"/>	<input type="checkbox"/> Odors <input type="checkbox"/> Colors <input type="checkbox"/> Floatables <input type="checkbox"/> Oil Sheen <input type="checkbox"/> Suds <input type="checkbox"/> Excessive Algae <input type="checkbox"/> Other:	
Pipe benthic growth	<input type="checkbox"/>	<input type="checkbox"/> Brown <input type="checkbox"/> Orange <input type="checkbox"/> Green <input type="checkbox"/> Other:	

Section 6: Overall Outfall Characterization

<input checked="" type="checkbox"/> Unlikely	<input type="checkbox"/> Potential (presence of two or more indicators)	<input type="checkbox"/> Suspect (one or more indicators with a severity of 3)	<input type="checkbox"/> Obvious
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Section 7: Data Collection

1. Sample for the lab?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
2. If yes, collected from:	<input type="checkbox"/> Flow <input type="checkbox"/> Pool
3. Intermittent flow trap set?	<input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, type: <input type="checkbox"/> OBM <input type="checkbox"/> Caulk dam

Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

Sediment in outfall, doesn't look like much water comes through. About half full



## Photo Log

Photo No. 1: image.jpg





## OUTFALL RECONNAISSANCE INVENTORY/ SAMPLE COLLECTION FIELD SHEET

### Section 1: Background Data

Subwatershed:		Outfall ID: CC50	
Today's date: 04/10/17		Time (Military): 2:00PM	
Investigators: Lettice Brown		Form completed by: Lettice Brown	
Temperature (°F): 79		Rainfall (in.): Last 24 hours: 0 Last 48 hours: 0	
Latitude: 39.9625600	Longitude: -76.7328551	GPS Unit:	GPS LMK #:
Camera:		Photo #'s:	
Land Use in Drainage Area (Check all that apply): <input type="checkbox"/> Industrial <input type="checkbox"/> Ultra-Urban Residential <input type="checkbox"/> Suburban Residential <input type="checkbox"/> Commercial		<input type="checkbox"/> Open Space <input type="checkbox"/> Institutional Other: Known Industries:	
Notes (e.g., origin of outfall, if known): York City			

### Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE	DIMENSIONS (IN.)	SUBMERGED
<input checked="" type="checkbox"/> Closed Pipe	<input type="checkbox"/> RCP <input type="checkbox"/> CMP <input type="checkbox"/> PVC <input type="checkbox"/> HDPE <input type="checkbox"/> Steel <input checked="" type="checkbox"/> Other: Stone	<input type="checkbox"/> Circular <input type="checkbox"/> Elliptical <input checked="" type="checkbox"/> Box <input type="checkbox"/> Other:	<input checked="" type="checkbox"/> Single <input type="checkbox"/> Double <input type="checkbox"/> Triple <input type="checkbox"/> Other:	Diameter/Dimensions: 36 x 36  In Water: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully With Sediment: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully
<input type="checkbox"/> Open drainage	<input type="checkbox"/> Concrete <input type="checkbox"/> Earthen <input type="checkbox"/> rip-rap <input type="checkbox"/> Other:	<input type="checkbox"/> Trapezoid <input type="checkbox"/> Parabolic <input type="checkbox"/> Other:	Depth:  Top Width:  Bottom Width:	
<input type="checkbox"/> In-Stream	(applicable when collecting samples)			
Flow Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <i>If No, Skip to Section 5</i>			
Flow Description (If present)	<input type="checkbox"/> Trickle <input type="checkbox"/> Moderate <input type="checkbox"/> Substantial			

### Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER	RESULT	UNIT	EQUIPMENT	
<input type="checkbox"/> Flow #1	Volume		Liter	Bottle
	Time to fill		Seconds	
<input type="checkbox"/> Flow #2	Flow depth		Inches	Tape measure
	Flow width		Inches	Tape measure
	Measured length		Inches	Tape measure
	Time of travel		Seconds	Stop watch
Temperature			°F	Thermometer
pH			pH Units	Test strip/Probe
Ammonia			mg/L	Test strip



Outfall Reconnaissance Inventory Field Sheet

Section 4: Physical Indicators for Flowing Outfalls Only

Are Any Physical Indicators Present in the flow? ☐ Yes ☐ No (If No, Skip to Section 5)

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	<input type="checkbox"/>	<input type="checkbox"/> Sewage <input type="checkbox"/> Rancid/sour <input type="checkbox"/> Petroleum/gas <input type="checkbox"/> Sulfide <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint	<input type="checkbox"/> 2 - Easily detected	<input type="checkbox"/> 3 - Noticeable from a distance
Color	<input type="checkbox"/>	<input type="checkbox"/> Clear <input type="checkbox"/> Brown <input type="checkbox"/> Gray <input type="checkbox"/> Yellow <input type="checkbox"/> Green <input type="checkbox"/> Orange <input type="checkbox"/> Red <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint colors in sample bottle	<input type="checkbox"/> 2 - Clearly visible in sample bottle	<input type="checkbox"/> 3 - Clearly visible in outfall flow
Turbidity	<input type="checkbox"/>	See severity	<input type="checkbox"/> 1 - Slight cloudiness	<input type="checkbox"/> 2 - Cloudy	<input type="checkbox"/> 3 - Opaque
Floatables -Does Not Include Trash!!	<input type="checkbox"/>	<input type="checkbox"/> Sewage (Toilet Paper, etc.) <input type="checkbox"/> Suds <input type="checkbox"/> Petroleum (oil sheen) <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Few/slight; origin not obvious	<input type="checkbox"/> 2 - Some; indications of origin (e.g., possible suds or oil sheen)	<input type="checkbox"/> 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☐ Yes ☒ No (If No, Skip to Section 6)

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	<input type="checkbox"/>	<input type="checkbox"/> Spalling, Cracking or Chipping <input type="checkbox"/> Peeling Paint <input type="checkbox"/> Corrosion	
Deposits/Stains	<input type="checkbox"/>	<input type="checkbox"/> Oily <input type="checkbox"/> Flow Line <input type="checkbox"/> Paint <input type="checkbox"/> Other:	
Abnormal Vegetation	<input type="checkbox"/>	<input type="checkbox"/> Excessive <input type="checkbox"/> Inhibited	
Poor pool quality	<input type="checkbox"/>	<input type="checkbox"/> Odors <input type="checkbox"/> Colors <input type="checkbox"/> Floatables <input type="checkbox"/> Oil Sheen <input type="checkbox"/> Suds <input type="checkbox"/> Excessive Algae <input type="checkbox"/> Other:	
Pipe benthic growth	<input type="checkbox"/>	<input type="checkbox"/> Brown <input type="checkbox"/> Orange <input type="checkbox"/> Green <input type="checkbox"/> Other:	

Section 6: Overall Outfall Characterization

<input checked="" type="checkbox"/> Unlikely	<input type="checkbox"/> Potential (presence of two or more indicators)	<input type="checkbox"/> Suspect (one or more indicators with a severity of 3)	<input type="checkbox"/> Obvious
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Section 7: Data Collection

1. Sample for the lab?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
2. If yes, collected from:	<input type="checkbox"/> Flow <input type="checkbox"/> Pool
3. Intermittent flow trap set?	<input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, type: <input type="checkbox"/> OBM <input type="checkbox"/> Caulk dam

Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?



## Photo Log

Photo No. 1: image.jpg





## OUTFALL RECONNAISSANCE INVENTORY/ SAMPLE COLLECTION FIELD SHEET

### Section 1: Background Data

Subwatershed:		Outfall ID: CC52	
Today's date: 04/10/17		Time (Military): 2:00PM	
Investigators: Lettice Brown		Form completed by: Lettice Brown	
Temperature (°F): 79		Rainfall (in.): Last 24 hours: 0 Last 48 hours: 0	
Latitude: 39.9624664	Longitude: -76.7328352	GPS Unit:	GPS LMK #:
Camera:		Photo #'s:	
Land Use in Drainage Area (Check all that apply): <input type="checkbox"/> Industrial <input type="checkbox"/> Ultra-Urban Residential <input type="checkbox"/> Suburban Residential <input type="checkbox"/> Commercial		<input type="checkbox"/> Open Space <input type="checkbox"/> Institutional Other: Known Industries:	
Notes (e.g., origin of outfall, if known): York City			

### Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE	DIMENSIONS (IN.)	SUBMERGED
<input checked="" type="checkbox"/> Closed Pipe	<input type="checkbox"/> RCP <input type="checkbox"/> CMP <input type="checkbox"/> PVC <input type="checkbox"/> HDPE <input type="checkbox"/> Steel <input checked="" type="checkbox"/> Other: Stone	<input type="checkbox"/> Circular <input type="checkbox"/> Elliptical <input checked="" type="checkbox"/> Box <input type="checkbox"/> Other:	<input checked="" type="checkbox"/> Single <input type="checkbox"/> Double <input type="checkbox"/> Triple <input type="checkbox"/> Other:	Diameter/Dimensions: 36 x 36  In Water: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully With Sediment: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully
<input type="checkbox"/> Open drainage	<input type="checkbox"/> Concrete <input type="checkbox"/> Earthen <input type="checkbox"/> rip-rap <input type="checkbox"/> Other:	<input type="checkbox"/> Trapezoid <input type="checkbox"/> Parabolic <input type="checkbox"/> Other:	Depth:  Top Width:  Bottom Width:	
<input type="checkbox"/> In-Stream	(applicable when collecting samples)			
Flow Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <i>If No, Skip to Section 5</i>			
Flow Description (If present)	<input type="checkbox"/> Trickle <input type="checkbox"/> Moderate <input type="checkbox"/> Substantial			

### Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER	RESULT	UNIT	EQUIPMENT	
<input type="checkbox"/> Flow #1	Volume		Liter	Bottle
	Time to fill		Seconds	
<input type="checkbox"/> Flow #2	Flow depth		Inches	Tape measure
	Flow width		Inches	Tape measure
	Measured length		Inches	Tape measure
	Time of travel		Seconds	Stop watch
Temperature			°F	Thermometer
pH			pH Units	Test strip/Probe
Ammonia			mg/L	Test strip



Outfall Reconnaissance Inventory Field Sheet

Section 4: Physical Indicators for Flowing Outfalls Only

Are Any Physical Indicators Present in the flow? ☐ Yes ☐ No *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	<input type="checkbox"/>	<input type="checkbox"/> Sewage <input type="checkbox"/> Rancid/sour <input type="checkbox"/> Petroleum/gas <input type="checkbox"/> Sulfide <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint	<input type="checkbox"/> 2 - Easily detected	<input type="checkbox"/> 3 - Noticeable from a distance
Color	<input type="checkbox"/>	<input type="checkbox"/> Clear <input type="checkbox"/> Brown <input type="checkbox"/> Gray <input type="checkbox"/> Yellow <input type="checkbox"/> Green <input type="checkbox"/> Orange <input type="checkbox"/> Red <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint colors in sample bottle	<input type="checkbox"/> 2 - Clearly visible in sample bottle	<input type="checkbox"/> 3 - Clearly visible in outfall flow
Turbidity	<input type="checkbox"/>	See severity	<input type="checkbox"/> 1 - Slight cloudiness	<input type="checkbox"/> 2 - Cloudy	<input type="checkbox"/> 3 - Opaque
Floatables -Does Not Include Trash!!	<input type="checkbox"/>	<input type="checkbox"/> Sewage (Toilet Paper, etc.) <input type="checkbox"/> Suds <input type="checkbox"/> Petroleum (oil sheen) <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Few/slight; origin not obvious	<input type="checkbox"/> 2 - Some; indications of origin (e.g., possible suds or oil sheen)	<input type="checkbox"/> 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☐ Yes ☒ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	<input type="checkbox"/>	<input type="checkbox"/> Spalling, Cracking or Chipping <input type="checkbox"/> Peeling Paint <input type="checkbox"/> Corrosion	
Deposits/Stains	<input type="checkbox"/>	<input type="checkbox"/> Oily <input type="checkbox"/> Flow Line <input type="checkbox"/> Paint <input type="checkbox"/> Other:	
Abnormal Vegetation	<input type="checkbox"/>	<input type="checkbox"/> Excessive <input type="checkbox"/> Inhibited	
Poor pool quality	<input type="checkbox"/>	<input type="checkbox"/> Odors <input type="checkbox"/> Colors <input type="checkbox"/> Floatables <input type="checkbox"/> Oil Sheen <input type="checkbox"/> Suds <input type="checkbox"/> Excessive Algae <input type="checkbox"/> Other:	
Pipe benthic growth	<input type="checkbox"/>	<input type="checkbox"/> Brown <input type="checkbox"/> Orange <input type="checkbox"/> Green <input type="checkbox"/> Other:	

Section 6: Overall Outfall Characterization

<input checked="" type="checkbox"/> Unlikely	<input type="checkbox"/> Potential (presence of two or more indicators)	<input type="checkbox"/> Suspect (one or more indicators with a severity of 3)	<input type="checkbox"/> Obvious
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Section 7: Data Collection

1. Sample for the lab?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
2. If yes, collected from:	<input type="checkbox"/> Flow <input type="checkbox"/> Pool
3. Intermittent flow trap set?	<input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, type: <input type="checkbox"/> OBM <input type="checkbox"/> Caulk dam

Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?



## Photo Log

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## OUTFALL RECONNAISSANCE INVENTORY/ SAMPLE COLLECTION FIELD SHEET

### Section 1: Background Data

Subwatershed:		Outfall ID: CC56	
Today's date: 04/10/17		Time (Military): 2:10PM	
Investigators: Lettice Brown		Form completed by: Lettice Brown	
Temperature (°F): 79		Rainfall (in.): Last 24 hours: 0 Last 48 hours: 0	
Latitude: 39.9622579	Longitude: -76.7327537	GPS Unit:	GPS LMK #:
Camera:		Photo #'s:	
Land Use in Drainage Area (Check all that apply): <input type="checkbox"/> Industrial <input type="checkbox"/> Ultra-Urban Residential <input type="checkbox"/> Suburban Residential <input type="checkbox"/> Commercial		<input type="checkbox"/> Open Space <input type="checkbox"/> Institutional Other: Known Industries:	
Notes (e.g., origin of outfall, if known): York City			

### Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE	DIMENSIONS (IN.)	SUBMERGED
<input checked="" type="checkbox"/> Closed Pipe	<input type="checkbox"/> RCP <input checked="" type="checkbox"/> CMP <input type="checkbox"/> PVC <input type="checkbox"/> HDPE <input type="checkbox"/> Steel <input type="checkbox"/> Other:	<input checked="" type="checkbox"/> Circular <input type="checkbox"/> Elliptical <input type="checkbox"/> Box <input type="checkbox"/> Other:	<input checked="" type="checkbox"/> Single <input type="checkbox"/> Double <input type="checkbox"/> Triple <input type="checkbox"/> Other:	Diameter/Dimensions: 12  In Water: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully With Sediment: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully
<input type="checkbox"/> Open drainage	<input type="checkbox"/> Concrete <input type="checkbox"/> Earthen <input type="checkbox"/> rip-rap <input type="checkbox"/> Other:	<input type="checkbox"/> Trapezoid <input type="checkbox"/> Parabolic <input type="checkbox"/> Other:	Depth:  Top Width:  Bottom Width:	
<input type="checkbox"/> In-Stream	(applicable when collecting samples)			
Flow Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <i>If No, Skip to Section 5</i>			
Flow Description (If present)	<input type="checkbox"/> Trickle <input type="checkbox"/> Moderate <input type="checkbox"/> Substantial			

### Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER	RESULT	UNIT	EQUIPMENT	
<input type="checkbox"/> Flow #1	Volume	Liter	Bottle	
	Time to fill	Seconds		
<input type="checkbox"/> Flow #2	Flow depth	Inches	Tape measure	
	Flow width	Inches	Tape measure	
	Measured length	Inches	Tape measure	
	Time of travel	Seconds	Stop watch	
Temperature		°F	Thermometer	
pH		pH Units	Test strip/Probe	
Ammonia		mg/L	Test strip	



Outfall Reconnaissance Inventory Field Sheet

Section 4: Physical Indicators for Flowing Outfalls Only

Are Any Physical Indicators Present in the flow? ☐ Yes ☐ No *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	<input type="checkbox"/>	<input type="checkbox"/> Sewage <input type="checkbox"/> Rancid/sour <input type="checkbox"/> Petroleum/gas <input type="checkbox"/> Sulfide <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint	<input type="checkbox"/> 2 - Easily detected	<input type="checkbox"/> 3 - Noticeable from a distance
Color	<input type="checkbox"/>	<input type="checkbox"/> Clear <input type="checkbox"/> Brown <input type="checkbox"/> Gray <input type="checkbox"/> Yellow <input type="checkbox"/> Green <input type="checkbox"/> Orange <input type="checkbox"/> Red <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint colors in sample bottle	<input type="checkbox"/> 2 - Clearly visible in sample bottle	<input type="checkbox"/> 3 - Clearly visible in outfall flow
Turbidity	<input type="checkbox"/>	See severity	<input type="checkbox"/> 1 - Slight cloudiness	<input type="checkbox"/> 2 - Cloudy	<input type="checkbox"/> 3 - Opaque
Floatables -Does Not Include Trash!!	<input type="checkbox"/>	<input type="checkbox"/> Sewage (Toilet Paper, etc.) <input type="checkbox"/> Suds <input type="checkbox"/> Petroleum (oil sheen) <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Few/slight; origin not obvious	<input type="checkbox"/> 2 - Some; indications of origin (e.g., possible suds or oil sheen)	<input type="checkbox"/> 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☐ Yes ☒ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	<input type="checkbox"/>	<input type="checkbox"/> Spalling, Cracking or Chipping <input type="checkbox"/> Peeling Paint <input type="checkbox"/> Corrosion	
Deposits/Stains	<input type="checkbox"/>	<input type="checkbox"/> Oily <input type="checkbox"/> Flow Line <input type="checkbox"/> Paint <input type="checkbox"/> Other:	
Abnormal Vegetation	<input type="checkbox"/>	<input type="checkbox"/> Excessive <input type="checkbox"/> Inhibited	
Poor pool quality	<input type="checkbox"/>	<input type="checkbox"/> Odors <input type="checkbox"/> Colors <input type="checkbox"/> Floatables <input type="checkbox"/> Oil Sheen <input type="checkbox"/> Suds <input type="checkbox"/> Excessive Algae <input type="checkbox"/> Other:	
Pipe benthic growth	<input type="checkbox"/>	<input type="checkbox"/> Brown <input type="checkbox"/> Orange <input type="checkbox"/> Green <input type="checkbox"/> Other:	

Section 6: Overall Outfall Characterization

<input checked="" type="checkbox"/> Unlikely	<input type="checkbox"/> Potential (presence of two or more indicators)	<input type="checkbox"/> Suspect (one or more indicators with a severity of 3)	<input type="checkbox"/> Obvious
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Section 7: Data Collection

1. Sample for the lab?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
2. If yes, collected from:	<input type="checkbox"/> Flow <input type="checkbox"/> Pool
3. Intermittent flow trap set?	<input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, type: <input type="checkbox"/> OBM <input type="checkbox"/> Caulk dam

Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?



## Photo Log

Photo No. 1: image.jpg





## OUTFALL RECONNAISSANCE INVENTORY/ SAMPLE COLLECTION FIELD SHEET

### Section 1: Background Data

Subwatershed:		Outfall ID: CC57	
Today's date: 04/10/17		Time (Military): 2:10PM	
Investigators: Lettice Brown		Form completed by: Lettice Brown	
Temperature (°F): 80		Rainfall (in.): Last 24 hours: 0 Last 48 hours: 0	
Latitude: 39.9621177	Longitude: -76.7327058	GPS Unit:	GPS LMK #:
Camera:		Photo #'s:	
Land Use in Drainage Area (Check all that apply): <input type="checkbox"/> Industrial <input type="checkbox"/> Ultra-Urban Residential <input type="checkbox"/> Suburban Residential <input type="checkbox"/> Commercial		<input type="checkbox"/> Open Space <input type="checkbox"/> Institutional Other: Known Industries:	
Notes (e.g., origin of outfall, if known): York City			

### Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE	DIMENSIONS (IN.)	SUBMERGED
<input checked="" type="checkbox"/> Closed Pipe	<input type="checkbox"/> RCP <input type="checkbox"/> PVC <input type="checkbox"/> Steel <input type="checkbox"/> Other:	<input checked="" type="checkbox"/> Circular <input type="checkbox"/> Elliptical <input type="checkbox"/> Box <input type="checkbox"/> Other:	<input checked="" type="checkbox"/> Single <input type="checkbox"/> Double <input type="checkbox"/> Triple <input type="checkbox"/> Other:	Diameter/Dimensions: 8
	<input checked="" type="checkbox"/> CMP <input type="checkbox"/> HDPE			In Water: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully With Sediment: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully
<input type="checkbox"/> Open drainage	<input type="checkbox"/> Concrete <input type="checkbox"/> Earthen <input type="checkbox"/> rip-rap <input type="checkbox"/> Other:	<input type="checkbox"/> Trapezoid <input type="checkbox"/> Parabolic <input type="checkbox"/> Other:	Depth:  Top Width:  Bottom Width:	
<input type="checkbox"/> In-Stream	(applicable when collecting samples)			
Flow Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <i>If No, Skip to Section 5</i>			
Flow Description (If present)	<input type="checkbox"/> Trickle <input type="checkbox"/> Moderate <input type="checkbox"/> Substantial			

### Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER	RESULT	UNIT	EQUIPMENT	
<input type="checkbox"/> Flow #1	Volume		Liter	Bottle
	Time to fill		Seconds	
<input type="checkbox"/> Flow #2	Flow depth		Inches	Tape measure
	Flow width		Inches	Tape measure
	Measured length		Inches	Tape measure
	Time of travel		Seconds	Stop watch
Temperature			°F	Thermometer
pH			pH Units	Test strip/Probe
Ammonia			mg/L	Test strip



Outfall Reconnaissance Inventory Field Sheet

Section 4: Physical Indicators for Flowing Outfalls Only

Are Any Physical Indicators Present in the flow? ☐ Yes ☐ No (If No, Skip to Section 5)

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	<input type="checkbox"/>	<input type="checkbox"/> Sewage <input type="checkbox"/> Rancid/sour <input type="checkbox"/> Petroleum/gas <input type="checkbox"/> Sulfide <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint	<input type="checkbox"/> 2 - Easily detected	<input type="checkbox"/> 3 - Noticeable from a distance
Color	<input type="checkbox"/>	<input type="checkbox"/> Clear <input type="checkbox"/> Brown <input type="checkbox"/> Gray <input type="checkbox"/> Yellow <input type="checkbox"/> Green <input type="checkbox"/> Orange <input type="checkbox"/> Red <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint colors in sample bottle	<input type="checkbox"/> 2 - Clearly visible in sample bottle	<input type="checkbox"/> 3 - Clearly visible in outfall flow
Turbidity	<input type="checkbox"/>	See severity	<input type="checkbox"/> 1 - Slight cloudiness	<input type="checkbox"/> 2 - Cloudy	<input type="checkbox"/> 3 - Opaque
Floatables -Does Not Include Trash!!	<input type="checkbox"/>	<input type="checkbox"/> Sewage (Toilet Paper, etc.) <input type="checkbox"/> Suds <input type="checkbox"/> Petroleum (oil sheen) <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Few/slight; origin not obvious	<input type="checkbox"/> 2 - Some; indications of origin (e.g., possible suds or oil sheen)	<input type="checkbox"/> 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☐ Yes ☒ No (If No, Skip to Section 6)

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	<input type="checkbox"/>	<input type="checkbox"/> Spalling, Cracking or Chipping <input type="checkbox"/> Peeling Paint <input type="checkbox"/> Corrosion	
Deposits/Stains	<input type="checkbox"/>	<input type="checkbox"/> Oily <input type="checkbox"/> Flow Line <input type="checkbox"/> Paint <input type="checkbox"/> Other:	
Abnormal Vegetation	<input type="checkbox"/>	<input type="checkbox"/> Excessive <input type="checkbox"/> Inhibited	
Poor pool quality	<input type="checkbox"/>	<input type="checkbox"/> Odors <input type="checkbox"/> Colors <input type="checkbox"/> Floatables <input type="checkbox"/> Oil Sheen <input type="checkbox"/> Suds <input type="checkbox"/> Excessive Algae <input type="checkbox"/> Other:	
Pipe benthic growth	<input type="checkbox"/>	<input type="checkbox"/> Brown <input type="checkbox"/> Orange <input type="checkbox"/> Green <input type="checkbox"/> Other:	

Section 6: Overall Outfall Characterization

<input checked="" type="checkbox"/> Unlikely <input type="checkbox"/> Potential (presence of two or more indicators) <input type="checkbox"/> Suspect (one or more indicators with a severity of 3) <input type="checkbox"/> Obvious
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Section 7: Data Collection

1. Sample for the lab? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
2. If yes, collected from: <input type="checkbox"/> Flow <input type="checkbox"/> Pool
3. Intermittent flow trap set? <input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, type: <input type="checkbox"/> OBM <input type="checkbox"/> Caulk dam

Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?



## Photo Log

Photo No. 1: image.jpg





## OUTFALL RECONNAISSANCE INVENTORY/ SAMPLE COLLECTION FIELD SHEET

### Section 1: Background Data

Subwatershed:		Outfall ID: CC58	
Today's date: 04/10/17		Time (Military): 2:15PM	
Investigators: Lettice Brown		Form completed by: Lettice Brown	
Temperature (°F): 80		Rainfall (in.): Last 24 hours: 0 Last 48 hours: 0	
Latitude: 39.9618261	Longitude: -76.7326079	GPS Unit:	GPS LMK #:
Camera:		Photo #'s:	
Land Use in Drainage Area (Check all that apply): <input type="checkbox"/> Industrial <input type="checkbox"/> Ultra-Urban Residential <input type="checkbox"/> Suburban Residential <input type="checkbox"/> Commercial		<input type="checkbox"/> Open Space <input type="checkbox"/> Institutional Other: Known Industries:	
Notes (e.g., origin of outfall, if known): York City			

### Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE	DIMENSIONS (IN.)	SUBMERGED
<input checked="" type="checkbox"/> Closed Pipe	<input type="checkbox"/> RCP <input checked="" type="checkbox"/> CMP <input type="checkbox"/> PVC <input type="checkbox"/> HDPE <input type="checkbox"/> Steel <input type="checkbox"/> Other:	<input checked="" type="checkbox"/> Circular <input type="checkbox"/> Elliptical <input type="checkbox"/> Box <input type="checkbox"/> Other:	<input checked="" type="checkbox"/> Single <input type="checkbox"/> Double <input type="checkbox"/> Triple <input type="checkbox"/> Other:	Diameter/Dimensions: 15  In Water: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully With Sediment: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully
<input type="checkbox"/> Open drainage	<input type="checkbox"/> Concrete <input type="checkbox"/> Earthen <input type="checkbox"/> rip-rap <input type="checkbox"/> Other:	<input type="checkbox"/> Trapezoid <input type="checkbox"/> Parabolic <input type="checkbox"/> Other:	Depth:  Top Width:  Bottom Width:	
<input type="checkbox"/> In-Stream	(applicable when collecting samples)			
Flow Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <i>If No, Skip to Section 5</i>			
Flow Description (If present)	<input type="checkbox"/> Trickle <input type="checkbox"/> Moderate <input type="checkbox"/> Substantial			

### Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER	RESULT	UNIT	EQUIPMENT	
<input type="checkbox"/> Flow #1	Volume		Liter	Bottle
	Time to fill		Seconds	
<input type="checkbox"/> Flow #2	Flow depth		Inches	Tape measure
	Flow width		Inches	Tape measure
	Measured length		Inches	Tape measure
	Time of travel		Seconds	Stop watch
Temperature			°F	Thermometer
pH			pH Units	Test strip/Probe
Ammonia			mg/L	Test strip



Outfall Reconnaissance Inventory Field Sheet

Section 4: Physical Indicators for Flowing Outfalls Only

Are Any Physical Indicators Present in the flow? ☐ Yes ☐ No (If No, Skip to Section 5)

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	<input type="checkbox"/>	<input type="checkbox"/> Sewage <input type="checkbox"/> Rancid/sour <input type="checkbox"/> Petroleum/gas <input type="checkbox"/> Sulfide <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint	<input type="checkbox"/> 2 - Easily detected	<input type="checkbox"/> 3 - Noticeable from a distance
Color	<input type="checkbox"/>	<input type="checkbox"/> Clear <input type="checkbox"/> Brown <input type="checkbox"/> Gray <input type="checkbox"/> Yellow <input type="checkbox"/> Green <input type="checkbox"/> Orange <input type="checkbox"/> Red <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint colors in sample bottle	<input type="checkbox"/> 2 - Clearly visible in sample bottle	<input type="checkbox"/> 3 - Clearly visible in outfall flow
Turbidity	<input type="checkbox"/>	See severity	<input type="checkbox"/> 1 - Slight cloudiness	<input type="checkbox"/> 2 - Cloudy	<input type="checkbox"/> 3 - Opaque
Floatables -Does Not Include Trash!!	<input type="checkbox"/>	<input type="checkbox"/> Sewage (Toilet Paper, etc.) <input type="checkbox"/> Suds <input type="checkbox"/> Petroleum (oil sheen) <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Few/slight; origin not obvious	<input type="checkbox"/> 2 - Some; indications of origin (e.g., possible suds or oil sheen)	<input type="checkbox"/> 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☐ Yes ☒ No (If No, Skip to Section 6)

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	<input type="checkbox"/>	<input type="checkbox"/> Spalling, Cracking or Chipping <input type="checkbox"/> Peeling Paint <input type="checkbox"/> Corrosion	
Deposits/Stains	<input type="checkbox"/>	<input type="checkbox"/> Oily <input type="checkbox"/> Flow Line <input type="checkbox"/> Paint <input type="checkbox"/> Other:	
Abnormal Vegetation	<input type="checkbox"/>	<input type="checkbox"/> Excessive <input type="checkbox"/> Inhibited	
Poor pool quality	<input type="checkbox"/>	<input type="checkbox"/> Odors <input type="checkbox"/> Colors <input type="checkbox"/> Floatables <input type="checkbox"/> Oil Sheen <input type="checkbox"/> Suds <input type="checkbox"/> Excessive Algae <input type="checkbox"/> Other:	
Pipe benthic growth	<input type="checkbox"/>	<input type="checkbox"/> Brown <input type="checkbox"/> Orange <input type="checkbox"/> Green <input type="checkbox"/> Other:	

Section 6: Overall Outfall Characterization

<input checked="" type="checkbox"/> Unlikely	<input type="checkbox"/> Potential (presence of two or more indicators)	<input type="checkbox"/> Suspect (one or more indicators with a severity of 3)	<input type="checkbox"/> Obvious
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Section 7: Data Collection

1. Sample for the lab?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
2. If yes, collected from:	<input type="checkbox"/> Flow <input type="checkbox"/> Pool
3. Intermittent flow trap set?	<input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, type: <input type="checkbox"/> OBM <input type="checkbox"/> Caulk dam

Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?



## Photo Log

Photo No. 1: image.jpg





## OUTFALL RECONNAISSANCE INVENTORY/ SAMPLE COLLECTION FIELD SHEET

### Section 1: Background Data

Subwatershed:		Outfall ID: CC60	
Today's date: 04/10/17		Time (Military): 2:20PM	
Investigators: Lettice Brown		Form completed by: Lettice Brown	
Temperature (°F): 80		Rainfall (in.): Last 24 hours: 0 Last 48 hours: 0	
Latitude: 39.9617804	Longitude: -76.7326045	GPS Unit:	GPS LMK #:
Camera:		Photo #'s:	
Land Use in Drainage Area (Check all that apply): <input type="checkbox"/> Industrial <input type="checkbox"/> Ultra-Urban Residential <input type="checkbox"/> Suburban Residential <input type="checkbox"/> Commercial		<input type="checkbox"/> Open Space <input type="checkbox"/> Institutional Other: Known Industries:	
Notes (e.g., origin of outfall, if known): York City			

### Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE	DIMENSIONS (IN.)	SUBMERGED
<input checked="" type="checkbox"/> Closed Pipe	<input type="checkbox"/> RCP <input type="checkbox"/> CMP <input type="checkbox"/> PVC <input type="checkbox"/> HDPE <input type="checkbox"/> Steel <input checked="" type="checkbox"/> Other: TCP	<input checked="" type="checkbox"/> Circular <input type="checkbox"/> Elliptical <input type="checkbox"/> Box <input type="checkbox"/> Other:	<input checked="" type="checkbox"/> Single <input type="checkbox"/> Double <input type="checkbox"/> Triple <input type="checkbox"/> Other:	Diameter/Dimensions: 15  In Water: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully With Sediment: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully
<input type="checkbox"/> Open drainage	<input type="checkbox"/> Concrete <input type="checkbox"/> Earthen <input type="checkbox"/> rip-rap <input type="checkbox"/> Other:	<input type="checkbox"/> Trapezoid <input type="checkbox"/> Parabolic <input type="checkbox"/> Other:	Depth:  Top Width:  Bottom Width:	
<input type="checkbox"/> In-Stream	(applicable when collecting samples)			
Flow Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <i>If No, Skip to Section 5</i>			
Flow Description (If present)	<input type="checkbox"/> Trickle <input type="checkbox"/> Moderate <input type="checkbox"/> Substantial			

### Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER	RESULT	UNIT	EQUIPMENT	
<input type="checkbox"/> Flow #1	Volume		Liter	Bottle
	Time to fill		Seconds	
<input type="checkbox"/> Flow #2	Flow depth		Inches	Tape measure
	Flow width		Inches	Tape measure
	Measured length		Inches	Tape measure
	Time of travel		Seconds	Stop watch
Temperature			°F	Thermometer
pH			pH Units	Test strip/Probe
Ammonia			mg/L	Test strip



Outfall Reconnaissance Inventory Field Sheet

Section 4: Physical Indicators for Flowing Outfalls Only

Are Any Physical Indicators Present in the flow? ☐ Yes ☐ No *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	<input type="checkbox"/>	<input type="checkbox"/> Sewage <input type="checkbox"/> Rancid/sour <input type="checkbox"/> Petroleum/gas <input type="checkbox"/> Sulfide <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint	<input type="checkbox"/> 2 - Easily detected	<input type="checkbox"/> 3 - Noticeable from a distance
Color	<input type="checkbox"/>	<input type="checkbox"/> Clear <input type="checkbox"/> Brown <input type="checkbox"/> Gray <input type="checkbox"/> Yellow <input type="checkbox"/> Green <input type="checkbox"/> Orange <input type="checkbox"/> Red <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint colors in sample bottle	<input type="checkbox"/> 2 - Clearly visible in sample bottle	<input type="checkbox"/> 3 - Clearly visible in outfall flow
Turbidity	<input type="checkbox"/>	See severity	<input type="checkbox"/> 1 - Slight cloudiness	<input type="checkbox"/> 2 - Cloudy	<input type="checkbox"/> 3 - Opaque
Floatables -Does Not Include Trash!!	<input type="checkbox"/>	<input type="checkbox"/> Sewage (Toilet Paper, etc.) <input type="checkbox"/> Suds <input type="checkbox"/> Petroleum (oil sheen) <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Few/slight; origin not obvious	<input type="checkbox"/> 2 - Some; indications of origin (e.g., possible suds or oil sheen)	<input type="checkbox"/> 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☐ Yes ☒ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	<input type="checkbox"/>	<input type="checkbox"/> Spalling, Cracking or Chipping <input type="checkbox"/> Peeling Paint <input type="checkbox"/> Corrosion	
Deposits/Stains	<input type="checkbox"/>	<input type="checkbox"/> Oily <input type="checkbox"/> Flow Line <input type="checkbox"/> Paint <input type="checkbox"/> Other:	
Abnormal Vegetation	<input type="checkbox"/>	<input type="checkbox"/> Excessive <input type="checkbox"/> Inhibited	
Poor pool quality	<input type="checkbox"/>	<input type="checkbox"/> Odors <input type="checkbox"/> Colors <input type="checkbox"/> Floatables <input type="checkbox"/> Oil Sheen <input type="checkbox"/> Suds <input type="checkbox"/> Excessive Algae <input type="checkbox"/> Other:	
Pipe benthic growth	<input type="checkbox"/>	<input type="checkbox"/> Brown <input type="checkbox"/> Orange <input type="checkbox"/> Green <input type="checkbox"/> Other:	

Section 6: Overall Outfall Characterization

<input checked="" type="checkbox"/> Unlikely	<input type="checkbox"/> Potential (presence of two or more indicators)	<input type="checkbox"/> Suspect (one or more indicators with a severity of 3)	<input type="checkbox"/> Obvious
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Section 7: Data Collection

1. Sample for the lab?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
2. If yes, collected from:	<input type="checkbox"/> Flow <input type="checkbox"/> Pool
3. Intermittent flow trap set?	<input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, type: <input type="checkbox"/> OBM <input type="checkbox"/> Caulk dam

Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?



## Photo Log

Photo No. 1: image.jpg





## OUTFALL RECONNAISSANCE INVENTORY/ SAMPLE COLLECTION FIELD SHEET

### Section 1: Background Data

Subwatershed:		Outfall ID: CC61	
Today's date: 04/10/17		Time (Military): 2:30PM	
Investigators: Lettice Brown		Form completed by: Lettice Brown	
Temperature (°F): 82		Rainfall (in.): Last 24 hours: 0 Last 48 hours: 0	
Latitude: 39.9617724	Longitude: -76.7325986	GPS Unit:	GPS LMK #:
Camera:		Photo #'s:	
Land Use in Drainage Area (Check all that apply): <input type="checkbox"/> Industrial <input type="checkbox"/> Ultra-Urban Residential <input type="checkbox"/> Suburban Residential <input type="checkbox"/> Commercial		<input type="checkbox"/> Open Space <input type="checkbox"/> Institutional Other: Known Industries:	
Notes (e.g., origin of outfall, if known): York City			

### Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE	DIMENSIONS (IN.)	SUBMERGED
<input checked="" type="checkbox"/> Closed Pipe	<input type="checkbox"/> RCP <input type="checkbox"/> CMP <input type="checkbox"/> PVC <input type="checkbox"/> HDPE <input type="checkbox"/> Steel <input checked="" type="checkbox"/> Other: TCP	<input checked="" type="checkbox"/> Circular <input type="checkbox"/> Elliptical <input type="checkbox"/> Box <input type="checkbox"/> Other:	<input checked="" type="checkbox"/> Single <input type="checkbox"/> Double <input type="checkbox"/> Triple <input type="checkbox"/> Other:	Diameter/Dimensions: 36  In Water: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully With Sediment: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully
<input type="checkbox"/> Open drainage	<input type="checkbox"/> Concrete <input type="checkbox"/> Earthen <input type="checkbox"/> rip-rap <input type="checkbox"/> Other:	<input type="checkbox"/> Trapezoid <input type="checkbox"/> Parabolic <input type="checkbox"/> Other:	Depth:  Top Width:  Bottom Width:	
<input type="checkbox"/> In-Stream	(applicable when collecting samples)			
Flow Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <i>If No, Skip to Section 5</i>			
Flow Description (If present)	<input type="checkbox"/> Trickle <input type="checkbox"/> Moderate <input type="checkbox"/> Substantial			

### Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER		RESULT	UNIT	EQUIPMENT
<input type="checkbox"/> Flow #1	Volume		Liter	Bottle
	Time to fill		Seconds	
<input type="checkbox"/> Flow #2	Flow depth		Inches	Tape measure
	Flow width		Inches	Tape measure
	Measured length		Inches	Tape measure
	Time of travel		Seconds	Stop watch
Temperature			°F	Thermometer
pH			pH Units	Test strip/Probe
Ammonia			mg/L	Test strip



Outfall Reconnaissance Inventory Field Sheet

Section 4: Physical Indicators for Flowing Outfalls Only

Are Any Physical Indicators Present in the flow? ☐ Yes ☐ No *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	<input type="checkbox"/>	<input type="checkbox"/> Sewage <input type="checkbox"/> Rancid/sour <input type="checkbox"/> Petroleum/gas <input type="checkbox"/> Sulfide <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint	<input type="checkbox"/> 2 - Easily detected	<input type="checkbox"/> 3 - Noticeable from a distance
Color	<input type="checkbox"/>	<input type="checkbox"/> Clear <input type="checkbox"/> Brown <input type="checkbox"/> Gray <input type="checkbox"/> Yellow <input type="checkbox"/> Green <input type="checkbox"/> Orange <input type="checkbox"/> Red <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint colors in sample bottle	<input type="checkbox"/> 2 - Clearly visible in sample bottle	<input type="checkbox"/> 3 - Clearly visible in outfall flow
Turbidity	<input type="checkbox"/>	See severity	<input type="checkbox"/> 1 - Slight cloudiness	<input type="checkbox"/> 2 - Cloudy	<input type="checkbox"/> 3 - Opaque
Floatables -Does Not Include Trash!!	<input type="checkbox"/>	<input type="checkbox"/> Sewage (Toilet Paper, etc.) <input type="checkbox"/> Suds <input type="checkbox"/> Petroleum (oil sheen) <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Few/slight; origin not obvious	<input type="checkbox"/> 2 - Some; indications of origin (e.g., possible suds or oil sheen)	<input type="checkbox"/> 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☐ Yes ☒ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	<input type="checkbox"/>	<input type="checkbox"/> Spalling, Cracking or Chipping <input type="checkbox"/> Peeling Paint <input type="checkbox"/> Corrosion	
Deposits/Stains	<input type="checkbox"/>	<input type="checkbox"/> Oily <input type="checkbox"/> Flow Line <input type="checkbox"/> Paint <input type="checkbox"/> Other:	
Abnormal Vegetation	<input type="checkbox"/>	<input type="checkbox"/> Excessive <input type="checkbox"/> Inhibited	
Poor pool quality	<input type="checkbox"/>	<input type="checkbox"/> Odors <input type="checkbox"/> Colors <input type="checkbox"/> Floatables <input type="checkbox"/> Oil Sheen <input type="checkbox"/> Suds <input type="checkbox"/> Excessive Algae <input type="checkbox"/> Other:	
Pipe benthic growth	<input type="checkbox"/>	<input type="checkbox"/> Brown <input type="checkbox"/> Orange <input type="checkbox"/> Green <input type="checkbox"/> Other:	

Section 6: Overall Outfall Characterization

<input checked="" type="checkbox"/> Unlikely	<input type="checkbox"/> Potential (presence of two or more indicators)	<input type="checkbox"/> Suspect (one or more indicators with a severity of 3)	<input type="checkbox"/> Obvious
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Section 7: Data Collection

1. Sample for the lab?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
2. If yes, collected from:	<input type="checkbox"/> Flow <input type="checkbox"/> Pool
3. Intermittent flow trap set?	<input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, type: <input type="checkbox"/> OBM <input type="checkbox"/> Caulk dam

Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?



## Photo Log

Photo No. 1: image.jpg





## OUTFALL RECONNAISSANCE INVENTORY/ SAMPLE COLLECTION FIELD SHEET

### Section 1: Background Data

Subwatershed:		Outfall ID: CC61A	
Today's date: 04/10/17		Time (Military):	
Investigators: Lettice Brown		Form completed by: Lettice Brown	
Temperature (°F):	Rainfall (in.): Last 24 hours:      Last 48 hours:		
Latitude: 39.9617748	Longitude: -76.7326012	GPS Unit:	GPS LMK #:
Camera:		Photo #'s:	
Land Use in Drainage Area (Check all that apply):			
<input type="checkbox"/> Industrial <input type="checkbox"/> Ultra-Urban Residential <input type="checkbox"/> Suburban Residential <input type="checkbox"/> Commercial		<input type="checkbox"/> Open Space <input type="checkbox"/> Institutional Other: Known Industries:	
Notes (e.g., origin of outfall, if known): York City			

### Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE	DIMENSIONS (IN.)	SUBMERGED
<input checked="" type="checkbox"/> Closed Pipe	<input type="checkbox"/> RCP <input type="checkbox"/> CMP <input type="checkbox"/> PVC <input type="checkbox"/> HDPE <input type="checkbox"/> Steel <input checked="" type="checkbox"/> Other: TCP	<input checked="" type="checkbox"/> Circular <input type="checkbox"/> Elliptical <input type="checkbox"/> Box <input type="checkbox"/> Other:	<input checked="" type="checkbox"/> Single <input type="checkbox"/> Double <input type="checkbox"/> Triple <input type="checkbox"/> Other:	Diameter/Dimensions: 8  In Water: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully With Sediment: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully
<input type="checkbox"/> Open drainage	<input type="checkbox"/> Concrete <input type="checkbox"/> Earthen <input type="checkbox"/> rip-rap <input type="checkbox"/> Other:	<input type="checkbox"/> Trapezoid <input type="checkbox"/> Parabolic <input type="checkbox"/> Other:	Depth:  Top Width:  Bottom Width:	
<input type="checkbox"/> In-Stream	(applicable when collecting samples)			
Flow Present?	<input type="checkbox"/> Yes <input type="checkbox"/> No <i>If No, Skip to Section 5</i>			
Flow Description (If present)	<input type="checkbox"/> Trickle <input type="checkbox"/> Moderate <input type="checkbox"/> Substantial			

### Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER	RESULT	UNIT	EQUIPMENT	
<input type="checkbox"/> Flow #1	Volume		Liter	Bottle
	Time to fill		Seconds	
<input type="checkbox"/> Flow #2	Flow depth		Inches	Tape measure
	Flow width		Inches	Tape measure
	Measured length		Inches	Tape measure
	Time of travel		Seconds	Stop watch
Temperature			°F	Thermometer
pH			pH Units	Test strip/Probe
Ammonia			mg/L	Test strip



Outfall Reconnaissance Inventory Field Sheet

Section 4: Physical Indicators for Flowing Outfalls Only

Are Any Physical Indicators Present in the flow? ☐ Yes ☐ No *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	<input type="checkbox"/>	<input type="checkbox"/> Sewage <input type="checkbox"/> Rancid/sour <input type="checkbox"/> Petroleum/gas <input type="checkbox"/> Sulfide <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint	<input type="checkbox"/> 2 - Easily detected	<input type="checkbox"/> 3 - Noticeable from a distance
Color	<input type="checkbox"/>	<input type="checkbox"/> Clear <input type="checkbox"/> Brown <input type="checkbox"/> Gray <input type="checkbox"/> Yellow <input type="checkbox"/> Green <input type="checkbox"/> Orange <input type="checkbox"/> Red <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint colors in sample bottle	<input type="checkbox"/> 2 - Clearly visible in sample bottle	<input type="checkbox"/> 3 - Clearly visible in outfall flow
Turbidity	<input type="checkbox"/>	See severity	<input type="checkbox"/> 1 - Slight cloudiness	<input type="checkbox"/> 2 - Cloudy	<input type="checkbox"/> 3 - Opaque
Floatables -Does Not Include Trash!!	<input type="checkbox"/>	<input type="checkbox"/> Sewage (Toilet Paper, etc.) <input type="checkbox"/> Suds <input type="checkbox"/> Petroleum (oil sheen) <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Few/slight; origin not obvious	<input type="checkbox"/> 2 - Some; indications of origin (e.g., possible suds or oil sheen)	<input type="checkbox"/> 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☐ Yes ☒ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	<input type="checkbox"/>	<input type="checkbox"/> Spalling, Cracking or Chipping <input type="checkbox"/> Peeling Paint <input type="checkbox"/> Corrosion	
Deposits/Stains	<input type="checkbox"/>	<input type="checkbox"/> Oily <input type="checkbox"/> Flow Line <input type="checkbox"/> Paint <input type="checkbox"/> Other:	
Abnormal Vegetation	<input type="checkbox"/>	<input type="checkbox"/> Excessive <input type="checkbox"/> Inhibited	
Poor pool quality	<input type="checkbox"/>	<input type="checkbox"/> Odors <input type="checkbox"/> Colors <input type="checkbox"/> Floatables <input type="checkbox"/> Oil Sheen <input type="checkbox"/> Suds <input type="checkbox"/> Excessive Algae <input type="checkbox"/> Other:	
Pipe benthic growth	<input type="checkbox"/>	<input type="checkbox"/> Brown <input type="checkbox"/> Orange <input type="checkbox"/> Green <input type="checkbox"/> Other:	

Section 6: Overall Outfall Characterization

<input type="checkbox"/> Unlikely	<input type="checkbox"/> Potential (presence of two or more indicators)	<input type="checkbox"/> Suspect (one or more indicators with a severity of 3)	<input type="checkbox"/> Obvious
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Section 7: Data Collection

1. Sample for the lab?	<input type="checkbox"/> Yes <input type="checkbox"/> No
2. If yes, collected from:	<input type="checkbox"/> Flow <input type="checkbox"/> Pool
3. Intermittent flow trap set?	<input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, type: <input type="checkbox"/> OBM <input type="checkbox"/> Caulk dam

Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?



## Photo Log

Photo No. 1: CC61A.JPG





## OUTFALL RECONNAISSANCE INVENTORY/ SAMPLE COLLECTION FIELD SHEET

### Section 1: Background Data

Subwatershed:		Outfall ID: CC59	
Today's date: 04/10/17		Time (Military): 2:20PM	
Investigators: Lettice Brown		Form completed by: Lettice Brown	
Temperature (°F): 81		Rainfall (in.): Last 24 hours: 0 Last 48 hours: 0	
Latitude: 39.9617712	Longitude: -76.7325930	GPS Unit:	GPS LMK #:
Camera:		Photo #'s:	
Land Use in Drainage Area (Check all that apply): <input type="checkbox"/> Industrial <input type="checkbox"/> Ultra-Urban Residential <input type="checkbox"/> Suburban Residential <input type="checkbox"/> Commercial		<input type="checkbox"/> Open Space <input type="checkbox"/> Institutional Other: Known Industries:	
Notes (e.g., origin of outfall, if known): York City			

### Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE	DIMENSIONS (IN.)	SUBMERGED
<input checked="" type="checkbox"/> Closed Pipe	<input type="checkbox"/> RCP <input type="checkbox"/> CMP <input type="checkbox"/> PVC <input type="checkbox"/> HDPE <input type="checkbox"/> Steel <input checked="" type="checkbox"/> Other: SLPP	<input checked="" type="checkbox"/> Circular <input type="checkbox"/> Elliptical <input type="checkbox"/> Box <input type="checkbox"/> Other:	<input checked="" type="checkbox"/> Single <input type="checkbox"/> Double <input type="checkbox"/> Triple <input type="checkbox"/> Other:	Diameter/Dimensions: 10  In Water: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully With Sediment: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully
<input type="checkbox"/> Open drainage	<input type="checkbox"/> Concrete <input type="checkbox"/> Earthen <input type="checkbox"/> rip-rap <input type="checkbox"/> Other:	<input type="checkbox"/> Trapezoid <input type="checkbox"/> Parabolic <input type="checkbox"/> Other:	Depth:  Top Width:  Bottom Width:	
<input type="checkbox"/> In-Stream	(applicable when collecting samples)			
Flow Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <i>If No, Skip to Section 5</i>			
Flow Description (If present)	<input type="checkbox"/> Trickle <input type="checkbox"/> Moderate <input type="checkbox"/> Substantial			

### Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER	RESULT	UNIT	EQUIPMENT	
<input type="checkbox"/> Flow #1	Volume		Liter	Bottle
	Time to fill		Seconds	
<input type="checkbox"/> Flow #2	Flow depth		Inches	Tape measure
	Flow width		Inches	Tape measure
	Measured length		Inches	Tape measure
	Time of travel		Seconds	Stop watch
Temperature			°F	Thermometer
pH			pH Units	Test strip/Probe
Ammonia			mg/L	Test strip



Outfall Reconnaissance Inventory Field Sheet

Section 4: Physical Indicators for Flowing Outfalls Only

Are Any Physical Indicators Present in the flow? ☐ Yes ☐ No *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	<input type="checkbox"/>	<input type="checkbox"/> Sewage <input type="checkbox"/> Rancid/sour <input type="checkbox"/> Petroleum/gas <input type="checkbox"/> Sulfide <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint	<input type="checkbox"/> 2 - Easily detected	<input type="checkbox"/> 3 - Noticeable from a distance
Color	<input type="checkbox"/>	<input type="checkbox"/> Clear <input type="checkbox"/> Brown <input type="checkbox"/> Gray <input type="checkbox"/> Yellow <input type="checkbox"/> Green <input type="checkbox"/> Orange <input type="checkbox"/> Red <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint colors in sample bottle	<input type="checkbox"/> 2 - Clearly visible in sample bottle	<input type="checkbox"/> 3 - Clearly visible in outfall flow
Turbidity	<input type="checkbox"/>	See severity	<input type="checkbox"/> 1 - Slight cloudiness	<input type="checkbox"/> 2 - Cloudy	<input type="checkbox"/> 3 - Opaque
Floatables -Does Not Include Trash!!	<input type="checkbox"/>	<input type="checkbox"/> Sewage (Toilet Paper, etc.) <input type="checkbox"/> Suds <input type="checkbox"/> Petroleum (oil sheen) <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Few/slight; origin not obvious	<input type="checkbox"/> 2 - Some; indications of origin (e.g., possible suds or oil sheen)	<input type="checkbox"/> 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☐ Yes ☒ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	<input type="checkbox"/>	<input type="checkbox"/> Spalling, Cracking or Chipping <input type="checkbox"/> Peeling Paint <input type="checkbox"/> Corrosion	
Deposits/Stains	<input type="checkbox"/>	<input type="checkbox"/> Oily <input type="checkbox"/> Flow Line <input type="checkbox"/> Paint <input type="checkbox"/> Other:	
Abnormal Vegetation	<input type="checkbox"/>	<input type="checkbox"/> Excessive <input type="checkbox"/> Inhibited	
Poor pool quality	<input type="checkbox"/>	<input type="checkbox"/> Odors <input type="checkbox"/> Colors <input type="checkbox"/> Floatables <input type="checkbox"/> Oil Sheen <input type="checkbox"/> Suds <input type="checkbox"/> Excessive Algae <input type="checkbox"/> Other:	
Pipe benthic growth	<input type="checkbox"/>	<input type="checkbox"/> Brown <input type="checkbox"/> Orange <input type="checkbox"/> Green <input type="checkbox"/> Other:	

Section 6: Overall Outfall Characterization

<input checked="" type="checkbox"/> Unlikely	<input type="checkbox"/> Potential (presence of two or more indicators)	<input type="checkbox"/> Suspect (one or more indicators with a severity of 3)	<input type="checkbox"/> Obvious
--	---	--	----------------------------------

Section 7: Data Collection

1. Sample for the lab?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
2. If yes, collected from:	<input type="checkbox"/> Flow <input type="checkbox"/> Pool
3. Intermittent flow trap set?	<input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, type: <input type="checkbox"/> OBM <input type="checkbox"/> Caulk dam

Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?



## Photo Log

Photo No. 1: CC59.JPG





## OUTFALL RECONNAISSANCE INVENTORY/ SAMPLE COLLECTION FIELD SHEET

### Section 1: Background Data

Subwatershed:		Outfall ID: CC48	
Today's date: 04/11/17		Time (Military): 1:15PM	
Investigators: Lettice Brown		Form completed by: Lettice Brown	
Temperature (°F): 81		Rainfall (in.): Last 24 hours: 0 Last 48 hours: 0	
Latitude: 39.9630912	Longitude: -76.7335598	GPS Unit:	GPS LMK #:
Camera:		Photo #'s:	
Land Use in Drainage Area (Check all that apply): <input type="checkbox"/> Industrial <input type="checkbox"/> Ultra-Urban Residential <input type="checkbox"/> Suburban Residential <input type="checkbox"/> Commercial		<input type="checkbox"/> Open Space <input type="checkbox"/> Institutional Other: Known Industries:	
Notes (e.g., origin of outfall, if known): York City			

### Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE	DIMENSIONS (IN.)	SUBMERGED
<input checked="" type="checkbox"/> Closed Pipe	<input type="checkbox"/> RCP <input type="checkbox"/> CMP <input type="checkbox"/> PVC <input type="checkbox"/> HDPE <input type="checkbox"/> Steel <input checked="" type="checkbox"/> Other: Brick	<input checked="" type="checkbox"/> Circular <input type="checkbox"/> Elliptical <input type="checkbox"/> Box <input type="checkbox"/> Other:	<input checked="" type="checkbox"/> Single <input type="checkbox"/> Double <input type="checkbox"/> Triple <input type="checkbox"/> Other:	Diameter/Dimensions: 48  In Water: <input checked="" type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully With Sediment: <input checked="" type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully
<input type="checkbox"/> Open drainage	<input type="checkbox"/> Concrete <input type="checkbox"/> Earthen <input type="checkbox"/> rip-rap <input type="checkbox"/> Other:	<input type="checkbox"/> Trapezoid <input type="checkbox"/> Parabolic <input type="checkbox"/> Other:	Depth:  Top Width:  Bottom Width:	
<input type="checkbox"/> In-Stream	(applicable when collecting samples)			
Flow Present?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <i>If No, Skip to Section 5</i>			
Flow Description (If present)	<input type="checkbox"/> Trickle <input checked="" type="checkbox"/> Moderate <input type="checkbox"/> Substantial			

### Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER	RESULT	UNIT	EQUIPMENT	
<input type="checkbox"/> Flow #1	Volume		Liter	Bottle
	Time to fill		Seconds	
<input checked="" type="checkbox"/> Flow #2	Flow depth		Inches	Tape measure
	Flow width		Inches	Tape measure
	Measured length		Inches	Tape measure
	Time of travel		Seconds	Stop watch
Temperature			°F	Thermometer
pH			pH Units	Test strip/Probe
Ammonia			mg/L	Test strip



Outfall Reconnaissance Inventory Field Sheet

Section 4: Physical Indicators for Flowing Outfalls Only

Are Any Physical Indicators Present in the flow? ☐ Yes ☒ No (If No, Skip to Section 5)

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	<input type="checkbox"/>	<input type="checkbox"/> Sewage <input type="checkbox"/> Rancid/sour <input type="checkbox"/> Petroleum/gas <input type="checkbox"/> Sulfide <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint	<input type="checkbox"/> 2 - Easily detected	<input type="checkbox"/> 3 - Noticeable from a distance
Color	<input type="checkbox"/>	<input type="checkbox"/> Clear <input type="checkbox"/> Brown <input type="checkbox"/> Gray <input type="checkbox"/> Yellow <input type="checkbox"/> Green <input type="checkbox"/> Orange <input type="checkbox"/> Red <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint colors in sample bottle	<input type="checkbox"/> 2 - Clearly visible in sample bottle	<input type="checkbox"/> 3 - Clearly visible in outfall flow
Turbidity	<input type="checkbox"/>	See severity	<input type="checkbox"/> 1 - Slight cloudiness	<input type="checkbox"/> 2 - Cloudy	<input type="checkbox"/> 3 - Opaque
Floatables -Does Not Include Trash!!	<input type="checkbox"/>	<input type="checkbox"/> Sewage (Toilet Paper, etc.) <input type="checkbox"/> Suds <input type="checkbox"/> Petroleum (oil sheen) <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Few/slight; origin not obvious	<input type="checkbox"/> 2 - Some; indications of origin (e.g., possible suds or oil sheen)	<input type="checkbox"/> 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☒ Yes ☐ No (If No, Skip to Section 6)

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	<input type="checkbox"/>	<input type="checkbox"/> Spalling, Cracking or Chipping <input type="checkbox"/> Peeling Paint <input type="checkbox"/> Corrosion	
Deposits/Stains	<input type="checkbox"/>	<input type="checkbox"/> Oily <input type="checkbox"/> Flow Line <input type="checkbox"/> Paint <input type="checkbox"/> Other:	
Abnormal Vegetation	<input checked="" type="checkbox"/>	<input type="checkbox"/> Excessive <input type="checkbox"/> Inhibited	Some green growth
Poor pool quality	<input type="checkbox"/>	<input type="checkbox"/> Odors <input type="checkbox"/> Colors <input type="checkbox"/> Floatables <input type="checkbox"/> Oil Sheen <input type="checkbox"/> Suds <input type="checkbox"/> Excessive Algae <input type="checkbox"/> Other:	
Pipe benthic growth	<input type="checkbox"/>	<input type="checkbox"/> Brown <input type="checkbox"/> Orange <input type="checkbox"/> Green <input type="checkbox"/> Other:	

Section 6: Overall Outfall Characterization

<input type="checkbox"/> Unlikely <input checked="" type="checkbox"/> Potential (presence of two or more indicators) <input type="checkbox"/> Suspect (one or more indicators with a severity of 3) <input type="checkbox"/> Obvious
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Section 7: Data Collection

1. Sample for the lab? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
2. If yes, collected from: <input type="checkbox"/> Flow <input type="checkbox"/> Pool
3. Intermittent flow trap set? <input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, type: <input type="checkbox"/> OBM <input type="checkbox"/> Caulk dam

Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?



## Photo Log

Photo No. 1: image.jpg





## OUTFALL RECONNAISSANCE INVENTORY/ SAMPLE COLLECTION FIELD SHEET

### Section 1: Background Data

Subwatershed:		Outfall ID: CC108	
Today's date: 04/11/17		Time (Military): 1:35PM	
Investigators: Lettice Brown		Form completed by: Lettice Brown	
Temperature (°F): 86		Rainfall (in.): Last 24 hours: 0 Last 48 hours: 0	
Latitude: 39.9544533	Longitude: -76.7314293	GPS Unit:	GPS LMK #:
Camera:		Photo #'s:	
Land Use in Drainage Area (Check all that apply): <input type="checkbox"/> Industrial <input type="checkbox"/> Ultra-Urban Residential <input type="checkbox"/> Suburban Residential <input type="checkbox"/> Commercial		<input type="checkbox"/> Open Space <input type="checkbox"/> Institutional Other: Known Industries:	
Notes (e.g., origin of outfall, if known): York City			

### Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE	DIMENSIONS (IN.)	SUBMERGED
<input checked="" type="checkbox"/> Closed Pipe	<input type="checkbox"/> RCP <input type="checkbox"/> CMP <input type="checkbox"/> PVC <input type="checkbox"/> HDPE <input type="checkbox"/> Steel <input checked="" type="checkbox"/> Other: TCP	<input checked="" type="checkbox"/> Circular <input type="checkbox"/> Elliptical <input type="checkbox"/> Box <input type="checkbox"/> Other:	<input checked="" type="checkbox"/> Single <input type="checkbox"/> Double <input type="checkbox"/> Triple <input type="checkbox"/> Other:	Diameter/Dimensions: 30  In Water: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully With Sediment: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully
<input type="checkbox"/> Open drainage	<input type="checkbox"/> Concrete <input type="checkbox"/> Earthen <input type="checkbox"/> rip-rap <input type="checkbox"/> Other:	<input type="checkbox"/> Trapezoid <input type="checkbox"/> Parabolic <input type="checkbox"/> Other:	Depth:  Top Width:  Bottom Width:	
<input type="checkbox"/> In-Stream	(applicable when collecting samples)			
Flow Present?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <i>If No, Skip to Section 5</i>			
Flow Description (If present)	<input checked="" type="checkbox"/> Trickle <input type="checkbox"/> Moderate <input type="checkbox"/> Substantial			

### Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER	RESULT	UNIT	EQUIPMENT	
<input type="checkbox"/> Flow #1	Volume		Liter	Bottle
	Time to fill		Seconds	
<input checked="" type="checkbox"/> Flow #2	Flow depth		Inches	Tape measure
	Flow width		Inches	Tape measure
	Measured length		Inches	Tape measure
	Time of travel		Seconds	Stop watch
Temperature			°F	Thermometer
pH			pH Units	Test strip/Probe
Ammonia			mg/L	Test strip



Outfall Reconnaissance Inventory Field Sheet

Section 4: Physical Indicators for Flowing Outfalls Only

Are Any Physical Indicators Present in the flow? ☐ Yes ☒ No (If No, Skip to Section 5)

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	<input type="checkbox"/>	<input type="checkbox"/> Sewage <input type="checkbox"/> Rancid/sour <input type="checkbox"/> Petroleum/gas <input type="checkbox"/> Sulfide <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint	<input type="checkbox"/> 2 - Easily detected	<input type="checkbox"/> 3 - Noticeable from a distance
Color	<input type="checkbox"/>	<input type="checkbox"/> Clear <input type="checkbox"/> Brown <input type="checkbox"/> Gray <input type="checkbox"/> Yellow <input type="checkbox"/> Green <input type="checkbox"/> Orange <input type="checkbox"/> Red <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint colors in sample bottle	<input type="checkbox"/> 2 - Clearly visible in sample bottle	<input type="checkbox"/> 3 - Clearly visible in outfall flow
Turbidity	<input type="checkbox"/>	See severity	<input type="checkbox"/> 1 - Slight cloudiness	<input type="checkbox"/> 2 - Cloudy	<input type="checkbox"/> 3 - Opaque
Floatables -Does Not Include Trash!!	<input type="checkbox"/>	<input type="checkbox"/> Sewage (Toilet Paper, etc.) <input type="checkbox"/> Suds <input type="checkbox"/> Petroleum (oil sheen) <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Few/slight; origin not obvious	<input type="checkbox"/> 2 - Some; indications of origin (e.g., possible suds or oil sheen)	<input type="checkbox"/> 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☒ Yes ☐ No (If No, Skip to Section 6)

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	<input type="checkbox"/>	<input type="checkbox"/> Spalling, Cracking or Chipping <input type="checkbox"/> Peeling Paint <input type="checkbox"/> Corrosion	
Deposits/Stains	<input type="checkbox"/>	<input type="checkbox"/> Oily <input type="checkbox"/> Flow Line <input type="checkbox"/> Paint <input type="checkbox"/> Other:	
Abnormal Vegetation	<input type="checkbox"/>	<input type="checkbox"/> Excessive <input type="checkbox"/> Inhibited	
Poor pool quality	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> Odors <input type="checkbox"/> Colors <input type="checkbox"/> Floatables <input type="checkbox"/> Oil Sheen <input checked="" type="checkbox"/> Suds <input type="checkbox"/> Excessive Algae <input type="checkbox"/> Other:	Film on pool, not like a sheen. Some suds, slight odor
Pipe benthic growth	<input type="checkbox"/>	<input type="checkbox"/> Brown <input type="checkbox"/> Orange <input type="checkbox"/> Green <input type="checkbox"/> Other:	

Section 6: Overall Outfall Characterization

<input type="checkbox"/> Unlikely <input checked="" type="checkbox"/> Potential (presence of two or more indicators) <input type="checkbox"/> Suspect (one or more indicators with a severity of 3) <input type="checkbox"/> Obvious
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Section 7: Data Collection

1. Sample for the lab? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
2. If yes, collected from: <input type="checkbox"/> Flow <input type="checkbox"/> Pool
3. Intermittent flow trap set? <input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, type: <input type="checkbox"/> OBM <input type="checkbox"/> Caulk dam

Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

Odor and film could be from the water standing and not flowing



## Photo Log

Photo No. 1: image.jpg



Photo No. 2: image.jpg





## OUTFALL RECONNAISSANCE INVENTORY/ SAMPLE COLLECTION FIELD SHEET

### Section 1: Background Data

Subwatershed:		Outfall ID: CC109	
Today's date: 04/11/17		Time (Military): 1:40PM	
Investigators: Lettice Brown		Form completed by: Lettice Brown	
Temperature (°F): 86		Rainfall (in.): Last 24 hours: 0 Last 48 hours: 0	
Latitude: 39.9544402	Longitude: -76.7314172	GPS Unit:	GPS LMK #:
Camera:		Photo #'s:	
Land Use in Drainage Area (Check all that apply): <input type="checkbox"/> Industrial <input type="checkbox"/> Ultra-Urban Residential <input type="checkbox"/> Suburban Residential <input type="checkbox"/> Commercial		<input type="checkbox"/> Open Space <input type="checkbox"/> Institutional Other: Known Industries:	
Notes (e.g., origin of outfall, if known): York City			

### Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE	DIMENSIONS (IN.)	SUBMERGED
<input type="checkbox"/> Closed Pipe	<input type="checkbox"/> RCP <input type="checkbox"/> CMP <input type="checkbox"/> PVC <input type="checkbox"/> HDPE <input type="checkbox"/> Steel <input type="checkbox"/> Other:	<input type="checkbox"/> Circular <input type="checkbox"/> Elliptical <input type="checkbox"/> Box <input type="checkbox"/> Other:	<input type="checkbox"/> Single <input type="checkbox"/> Double <input type="checkbox"/> Triple <input type="checkbox"/> Other:	Diameter/Dimensions:  In Water: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully With Sediment: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully
<input checked="" type="checkbox"/> Open drainage	<input checked="" type="checkbox"/> Concrete <input type="checkbox"/> Earthen <input type="checkbox"/> rip-rap <input type="checkbox"/> Other:	<input checked="" type="checkbox"/> Trapezoid <input type="checkbox"/> Parabolic <input type="checkbox"/> Other:	Depth:  Top Width: 120  Bottom Width: 10	
<input type="checkbox"/> In-Stream	(applicable when collecting samples)			
Flow Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <i>If No, Skip to Section 5</i>			
Flow Description (If present)	<input type="checkbox"/> Trickle <input type="checkbox"/> Moderate <input type="checkbox"/> Substantial			

### Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER		RESULT	UNIT	EQUIPMENT
<input type="checkbox"/> Flow #1	Volume		Liter	Bottle
	Time to fill		Seconds	
<input type="checkbox"/> Flow #2	Flow depth		Inches	Tape measure
	Flow width		Inches	Tape measure
	Measured length		Inches	Tape measure
	Time of travel		Seconds	Stop watch
Temperature			°F	Thermometer
pH			pH Units	Test strip/Probe
Ammonia			mg/L	Test strip



Outfall Reconnaissance Inventory Field Sheet

Section 4: Physical Indicators for Flowing Outfalls Only

Are Any Physical Indicators Present in the flow? ☐ Yes ☐ No *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	<input type="checkbox"/>	<input type="checkbox"/> Sewage <input type="checkbox"/> Rancid/sour <input type="checkbox"/> Petroleum/gas <input type="checkbox"/> Sulfide <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint	<input type="checkbox"/> 2 - Easily detected	<input type="checkbox"/> 3 - Noticeable from a distance
Color	<input type="checkbox"/>	<input type="checkbox"/> Clear <input type="checkbox"/> Brown <input type="checkbox"/> Gray <input type="checkbox"/> Yellow <input type="checkbox"/> Green <input type="checkbox"/> Orange <input type="checkbox"/> Red <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint colors in sample bottle	<input type="checkbox"/> 2 - Clearly visible in sample bottle	<input type="checkbox"/> 3 - Clearly visible in outfall flow
Turbidity	<input type="checkbox"/>	See severity	<input type="checkbox"/> 1 - Slight cloudiness	<input type="checkbox"/> 2 - Cloudy	<input type="checkbox"/> 3 - Opaque
Floatables -Does Not Include Trash!!	<input type="checkbox"/>	<input type="checkbox"/> Sewage (Toilet Paper, etc.) <input type="checkbox"/> Suds <input type="checkbox"/> Petroleum (oil sheen) <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Few/slight; origin not obvious	<input type="checkbox"/> 2 - Some; indications of origin (e.g., possible suds or oil sheen)	<input type="checkbox"/> 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☐ Yes ☒ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	<input type="checkbox"/>	<input type="checkbox"/> Spalling, Cracking or Chipping <input type="checkbox"/> Peeling Paint <input type="checkbox"/> Corrosion	
Deposits/Stains	<input type="checkbox"/>	<input type="checkbox"/> Oily <input type="checkbox"/> Flow Line <input type="checkbox"/> Paint <input type="checkbox"/> Other:	
Abnormal Vegetation	<input type="checkbox"/>	<input type="checkbox"/> Excessive <input type="checkbox"/> Inhibited	
Poor pool quality	<input type="checkbox"/>	<input type="checkbox"/> Odors <input type="checkbox"/> Colors <input type="checkbox"/> Floatables <input type="checkbox"/> Oil Sheen <input type="checkbox"/> Suds <input type="checkbox"/> Excessive Algae <input type="checkbox"/> Other:	
Pipe benthic growth	<input type="checkbox"/>	<input type="checkbox"/> Brown <input type="checkbox"/> Orange <input type="checkbox"/> Green <input type="checkbox"/> Other:	

Section 6: Overall Outfall Characterization

<input checked="" type="checkbox"/> Unlikely	<input type="checkbox"/> Potential (presence of two or more indicators)	<input type="checkbox"/> Suspect (one or more indicators with a severity of 3)	<input type="checkbox"/> Obvious
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Section 7: Data Collection

1. Sample for the lab?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
2. If yes, collected from:	<input type="checkbox"/> Flow <input type="checkbox"/> Pool
3. Intermittent flow trap set?	<input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, type: <input type="checkbox"/> OBM <input type="checkbox"/> Caulk dam

Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?



## Photo Log

Photo No. 1: image.jpg





## OUTFALL RECONNAISSANCE INVENTORY/ SAMPLE COLLECTION FIELD SHEET

### Section 1: Background Data

Subwatershed:		Outfall ID: CC110	
Today's date: 04/11/17		Time (Military): 1:40PM	
Investigators: Lettice Brown		Form completed by: Lettice Brown	
Temperature (°F): 86		Rainfall (in.): Last 24 hours: 0 Last 48 hours: 0	
Latitude: 39.9544257	Longitude: -76.7314274	GPS Unit:	GPS LMK #:
Camera:		Photo #'s:	
Land Use in Drainage Area (Check all that apply): <input type="checkbox"/> Industrial <input type="checkbox"/> Ultra-Urban Residential <input type="checkbox"/> Suburban Residential <input type="checkbox"/> Commercial		<input type="checkbox"/> Open Space <input type="checkbox"/> Institutional Other: Known Industries:	
Notes (e.g., origin of outfall, if known): York City			

### Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE	DIMENSIONS (IN.)	SUBMERGED
<input checked="" type="checkbox"/> Closed Pipe	<input type="checkbox"/> RCP <input type="checkbox"/> CMP <input type="checkbox"/> PVC <input type="checkbox"/> HDPE <input type="checkbox"/> Steel <input checked="" type="checkbox"/> Other: TCP	<input checked="" type="checkbox"/> Circular <input type="checkbox"/> Elliptical <input type="checkbox"/> Box <input type="checkbox"/> Other:	<input checked="" type="checkbox"/> Single <input type="checkbox"/> Double <input type="checkbox"/> Triple <input type="checkbox"/> Other:	Diameter/Dimensions: 30  In Water: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully With Sediment: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully
<input type="checkbox"/> Open drainage	<input type="checkbox"/> Concrete <input type="checkbox"/> Earthen <input type="checkbox"/> rip-rap <input type="checkbox"/> Other:	<input type="checkbox"/> Trapezoid <input type="checkbox"/> Parabolic <input type="checkbox"/> Other:	Depth:  Top Width:  Bottom Width:	
<input type="checkbox"/> In-Stream	(applicable when collecting samples)			
Flow Present?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <i>If No, Skip to Section 5</i>			
Flow Description (If present)	<input checked="" type="checkbox"/> Trickle <input type="checkbox"/> Moderate <input type="checkbox"/> Substantial			

### Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER	RESULT	UNIT	EQUIPMENT	
<input type="checkbox"/> Flow #1	Volume		Liter	Bottle
	Time to fill		Seconds	
<input checked="" type="checkbox"/> Flow #2	Flow depth		Inches	Tape measure
	Flow width		Inches	Tape measure
	Measured length		Inches	Tape measure
	Time of travel		Seconds	Stop watch
Temperature			°F	Thermometer
pH			pH Units	Test strip/Probe
Ammonia			mg/L	Test strip



Outfall Reconnaissance Inventory Field Sheet

Section 4: Physical Indicators for Flowing Outfalls Only

Are Any Physical Indicators Present in the flow? ☐ Yes ☒ No (If No, Skip to Section 5)

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	<input type="checkbox"/>	<input type="checkbox"/> Sewage <input type="checkbox"/> Rancid/sour <input type="checkbox"/> Petroleum/gas <input type="checkbox"/> Sulfide <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint	<input type="checkbox"/> 2 - Easily detected	<input type="checkbox"/> 3 - Noticeable from a distance
Color	<input type="checkbox"/>	<input type="checkbox"/> Clear <input type="checkbox"/> Brown <input type="checkbox"/> Gray <input type="checkbox"/> Yellow <input type="checkbox"/> Green <input type="checkbox"/> Orange <input type="checkbox"/> Red <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint colors in sample bottle	<input type="checkbox"/> 2 - Clearly visible in sample bottle	<input type="checkbox"/> 3 - Clearly visible in outfall flow
Turbidity	<input type="checkbox"/>	See severity	<input type="checkbox"/> 1 - Slight cloudiness	<input type="checkbox"/> 2 - Cloudy	<input type="checkbox"/> 3 - Opaque
Floatables -Does Not Include Trash!!	<input type="checkbox"/>	<input type="checkbox"/> Sewage (Toilet Paper, etc.) <input type="checkbox"/> Suds <input type="checkbox"/> Petroleum (oil sheen) <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Few/slight; origin not obvious	<input type="checkbox"/> 2 - Some; indications of origin (e.g., possible suds or oil sheen)	<input type="checkbox"/> 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☒ Yes ☐ No (If No, Skip to Section 6)

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	<input type="checkbox"/>	<input type="checkbox"/> Spalling, Cracking or Chipping <input type="checkbox"/> Peeling Paint <input type="checkbox"/> Corrosion	
Deposits/Stains	<input type="checkbox"/>	<input type="checkbox"/> Oily <input type="checkbox"/> Flow Line <input type="checkbox"/> Paint <input type="checkbox"/> Other:	
Abnormal Vegetation	<input type="checkbox"/>	<input type="checkbox"/> Excessive <input type="checkbox"/> Inhibited	
Poor pool quality	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> Odors <input type="checkbox"/> Colors <input type="checkbox"/> Floatables <input type="checkbox"/> Oil Sheen <input checked="" type="checkbox"/> Suds <input type="checkbox"/> Excessive Algae <input type="checkbox"/> Other:	Suds and odor present, could be from stagnant water
Pipe benthic growth	<input type="checkbox"/>	<input type="checkbox"/> Brown <input type="checkbox"/> Orange <input type="checkbox"/> Green <input type="checkbox"/> Other:	

Section 6: Overall Outfall Characterization

<input type="checkbox"/> Unlikely <input checked="" type="checkbox"/> Potential (presence of two or more indicators) <input type="checkbox"/> Suspect (one or more indicators with a severity of 3) <input type="checkbox"/> Obvious
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Section 7: Data Collection

1. Sample for the lab? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
2. If yes, collected from: <input type="checkbox"/> Flow <input type="checkbox"/> Pool
3. Intermittent flow trap set? <input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, type: <input type="checkbox"/> OBM <input type="checkbox"/> Caulk dam

Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?



## Photo Log

Photo No. 1: image.jpg



Photo No. 2: image.jpg





## OUTFALL RECONNAISSANCE INVENTORY/ SAMPLE COLLECTION FIELD SHEET

### Section 1: Background Data

Subwatershed:		Outfall ID: HR1	
Today's date: 04/11/17		Time (Military): 1:50PM	
Investigators: Lettice Brown		Form completed by: Lettice Brown	
Temperature (°F): 86		Rainfall (in.): Last 24 hours: 0 Last 48 hours: 0	
Latitude: 39.9497549	Longitude: -76.7461336	GPS Unit:	GPS LMK #:
Camera:		Photo #'s:	
Land Use in Drainage Area (Check all that apply): <input type="checkbox"/> Industrial <input type="checkbox"/> Ultra-Urban Residential <input type="checkbox"/> Suburban Residential <input type="checkbox"/> Commercial		<input type="checkbox"/> Open Space <input type="checkbox"/> Institutional Other: Known Industries:	
Notes (e.g., origin of outfall, if known): York City			

### Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE	DIMENSIONS (IN.)	SUBMERGED
<input checked="" type="checkbox"/> Closed Pipe	<input type="checkbox"/> RCP <input type="checkbox"/> CMP <input type="checkbox"/> PVC <input type="checkbox"/> HDPE <input type="checkbox"/> Steel <input checked="" type="checkbox"/> Other: Concrete	<input type="checkbox"/> Circular <input type="checkbox"/> Elliptical <input checked="" type="checkbox"/> Box <input type="checkbox"/> Other:	<input checked="" type="checkbox"/> Single <input type="checkbox"/> Double <input type="checkbox"/> Triple <input type="checkbox"/> Other:	Diameter/Dimensions: 96 x 72  In Water: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully With Sediment: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully
<input type="checkbox"/> Open drainage	<input type="checkbox"/> Concrete <input type="checkbox"/> Earthen <input type="checkbox"/> rip-rap <input type="checkbox"/> Other:	<input type="checkbox"/> Trapezoid <input type="checkbox"/> Parabolic <input type="checkbox"/> Other:	Depth:  Top Width:  Bottom Width:	
<input type="checkbox"/> In-Stream	(applicable when collecting samples)			
Flow Present?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <i>If No, Skip to Section 5</i>			
Flow Description (If present)	<input type="checkbox"/> Trickle <input checked="" type="checkbox"/> Moderate <input type="checkbox"/> Substantial			

### Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER	RESULT	UNIT	EQUIPMENT	
<input type="checkbox"/> Flow #1	Volume		Liter	Bottle
	Time to fill		Seconds	
<input checked="" type="checkbox"/> Flow #2	Flow depth		Inches	Tape measure
	Flow width		Inches	Tape measure
	Measured length		Inches	Tape measure
	Time of travel		Seconds	Stop watch
Temperature			°F	Thermometer
pH			pH Units	Test strip/Probe
Ammonia			mg/L	Test strip



Outfall Reconnaissance Inventory Field Sheet

Section 4: Physical Indicators for Flowing Outfalls Only

Are Any Physical Indicators Present in the flow? ☐ Yes ☒ No (If No, Skip to Section 5)

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	<input type="checkbox"/>	<input type="checkbox"/> Sewage <input type="checkbox"/> Rancid/sour <input type="checkbox"/> Petroleum/gas <input type="checkbox"/> Sulfide <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint	<input type="checkbox"/> 2 - Easily detected	<input type="checkbox"/> 3 - Noticeable from a distance
Color	<input type="checkbox"/>	<input type="checkbox"/> Clear <input type="checkbox"/> Brown <input type="checkbox"/> Gray <input type="checkbox"/> Yellow <input type="checkbox"/> Green <input type="checkbox"/> Orange <input type="checkbox"/> Red <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint colors in sample bottle	<input type="checkbox"/> 2 - Clearly visible in sample bottle	<input type="checkbox"/> 3 - Clearly visible in outfall flow
Turbidity	<input type="checkbox"/>	See severity	<input type="checkbox"/> 1 - Slight cloudiness	<input type="checkbox"/> 2 - Cloudy	<input type="checkbox"/> 3 - Opaque
Floatables -Does Not Include Trash!!	<input type="checkbox"/>	<input type="checkbox"/> Sewage (Toilet Paper, etc.) <input type="checkbox"/> Suds <input type="checkbox"/> Petroleum (oil sheen) <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Few/slight; origin not obvious	<input type="checkbox"/> 2 - Some; indications of origin (e.g., possible suds or oil sheen)	<input type="checkbox"/> 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☒ Yes ☐ No (If No, Skip to Section 6)

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	<input type="checkbox"/>	<input type="checkbox"/> Spalling, Cracking or Chipping <input type="checkbox"/> Peeling Paint <input type="checkbox"/> Corrosion	
Deposits/Stains	<input type="checkbox"/>	<input type="checkbox"/> Oily <input type="checkbox"/> Flow Line <input type="checkbox"/> Paint <input type="checkbox"/> Other:	
Abnormal Vegetation	<input checked="" type="checkbox"/>	<input type="checkbox"/> Excessive <input type="checkbox"/> Inhibited	Some green algae growth
Poor pool quality	<input type="checkbox"/>	<input type="checkbox"/> Odors <input type="checkbox"/> Colors <input type="checkbox"/> Floatables <input type="checkbox"/> Oil Sheen <input type="checkbox"/> Suds <input type="checkbox"/> Excessive Algae <input type="checkbox"/> Other:	
Pipe benthic growth	<input type="checkbox"/>	<input type="checkbox"/> Brown <input type="checkbox"/> Orange <input type="checkbox"/> Green <input type="checkbox"/> Other:	

Section 6: Overall Outfall Characterization

<input type="checkbox"/> Unlikely	<input checked="" type="checkbox"/> Potential (presence of two or more indicators)	<input type="checkbox"/> Suspect (one or more indicators with a severity of 3)	<input type="checkbox"/> Obvious
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Section 7: Data Collection

1. Sample for the lab?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
2. If yes, collected from:	<input type="checkbox"/> Flow <input type="checkbox"/> Pool
3. Intermittent flow trap set?	<input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, type: <input type="checkbox"/> OBM <input type="checkbox"/> Caulk dam

Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?



## Photo Log

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## OUTFALL RECONNAISSANCE INVENTORY/ SAMPLE COLLECTION FIELD SHEET

### Section 1: Background Data

Subwatershed:		Outfall ID: PHR2	
Today's date: 04/11/17		Time (Military): 2:10PM	
Investigators: Lettice Brown		Form completed by: Lettice Brown	
Temperature (°F): 85		Rainfall (in.): Last 24 hours: 0 Last 48 hours: 0	
Latitude: 39.9683275	Longitude: -76.7225739	GPS Unit:	GPS LMK #:
Camera:		Photo #'s:	
Land Use in Drainage Area (Check all that apply): <input type="checkbox"/> Industrial <input type="checkbox"/> Ultra-Urban Residential <input type="checkbox"/> Suburban Residential <input type="checkbox"/> Commercial		<input type="checkbox"/> Open Space <input type="checkbox"/> Institutional Other: Known Industries:	
Notes (e.g., origin of outfall, if known): York City			

### Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE	DIMENSIONS (IN.)	SUBMERGED
<input checked="" type="checkbox"/> Closed Pipe	<input type="checkbox"/> RCP <input type="checkbox"/> CMP <input type="checkbox"/> PVC <input type="checkbox"/> HDPE <input type="checkbox"/> Steel <input checked="" type="checkbox"/> Other: concrete	<input type="checkbox"/> Circular <input type="checkbox"/> Elliptical <input checked="" type="checkbox"/> Box <input type="checkbox"/> Other:	<input checked="" type="checkbox"/> Single <input type="checkbox"/> Double <input type="checkbox"/> Triple <input type="checkbox"/> Other:	Diameter/Dimensions: 138 x 120  In Water: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully With Sediment: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully
<input type="checkbox"/> Open drainage	<input type="checkbox"/> Concrete <input type="checkbox"/> Earthen <input type="checkbox"/> rip-rap <input type="checkbox"/> Other:	<input type="checkbox"/> Trapezoid <input type="checkbox"/> Parabolic <input type="checkbox"/> Other:	Depth:  Top Width:  Bottom Width:	
<input type="checkbox"/> In-Stream	(applicable when collecting samples)			
Flow Present?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <i>If No, Skip to Section 5</i>			
Flow Description (If present)	<input type="checkbox"/> Trickle <input checked="" type="checkbox"/> Moderate <input type="checkbox"/> Substantial			

### Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER	RESULT	UNIT	EQUIPMENT	
<input type="checkbox"/> Flow #1	Volume		Liter	Bottle
	Time to fill		Seconds	
<input checked="" type="checkbox"/> Flow #2	Flow depth		Inches	Tape measure
	Flow width		Inches	Tape measure
	Measured length		Inches	Tape measure
	Time of travel		Seconds	Stop watch
Temperature			°F	Thermometer
pH			pH Units	Test strip/Probe
Ammonia			mg/L	Test strip



Outfall Reconnaissance Inventory Field Sheet

Section 4: Physical Indicators for Flowing Outfalls Only

Are Any Physical Indicators Present in the flow? ☐ Yes ☒ No (If No, Skip to Section 5)

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	<input type="checkbox"/>	<input type="checkbox"/> Sewage <input type="checkbox"/> Rancid/sour <input type="checkbox"/> Petroleum/gas <input type="checkbox"/> Sulfide <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint	<input type="checkbox"/> 2 - Easily detected	<input type="checkbox"/> 3 - Noticeable from a distance
Color	<input type="checkbox"/>	<input type="checkbox"/> Clear <input type="checkbox"/> Brown <input type="checkbox"/> Gray <input type="checkbox"/> Yellow <input type="checkbox"/> Green <input type="checkbox"/> Orange <input type="checkbox"/> Red <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint colors in sample bottle	<input type="checkbox"/> 2 - Clearly visible in sample bottle	<input type="checkbox"/> 3 - Clearly visible in outfall flow
Turbidity	<input type="checkbox"/>	See severity	<input type="checkbox"/> 1 - Slight cloudiness	<input type="checkbox"/> 2 - Cloudy	<input type="checkbox"/> 3 - Opaque
Floatables -Does Not Include Trash!!	<input type="checkbox"/>	<input type="checkbox"/> Sewage (Toilet Paper, etc.) <input type="checkbox"/> Suds <input type="checkbox"/> Petroleum (oil sheen) <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Few/slight; origin not obvious	<input type="checkbox"/> 2 - Some; indications of origin (e.g., possible suds or oil sheen)	<input type="checkbox"/> 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☐ Yes ☒ No (If No, Skip to Section 6)

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	<input type="checkbox"/>	<input type="checkbox"/> Spalling, Cracking or Chipping <input type="checkbox"/> Peeling Paint <input type="checkbox"/> Corrosion	
Deposits/Stains	<input type="checkbox"/>	<input type="checkbox"/> Oily <input type="checkbox"/> Flow Line <input type="checkbox"/> Paint <input type="checkbox"/> Other:	
Abnormal Vegetation	<input type="checkbox"/>	<input type="checkbox"/> Excessive <input type="checkbox"/> Inhibited	
Poor pool quality	<input type="checkbox"/>	<input type="checkbox"/> Odors <input type="checkbox"/> Colors <input type="checkbox"/> Floatables <input type="checkbox"/> Oil Sheen <input type="checkbox"/> Suds <input type="checkbox"/> Excessive Algae <input type="checkbox"/> Other:	
Pipe benthic growth	<input type="checkbox"/>	<input type="checkbox"/> Brown <input type="checkbox"/> Orange <input type="checkbox"/> Green <input type="checkbox"/> Other:	

Section 6: Overall Outfall Characterization

<input checked="" type="checkbox"/> Unlikely	<input type="checkbox"/> Potential (presence of two or more indicators)	<input type="checkbox"/> Suspect (one or more indicators with a severity of 3)	<input type="checkbox"/> Obvious
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Section 7: Data Collection

1. Sample for the lab?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
2. If yes, collected from:	<input type="checkbox"/> Flow <input type="checkbox"/> Pool
3. Intermittent flow trap set?	<input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, type: <input type="checkbox"/> OBM <input type="checkbox"/> Caulk dam

Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?



## Photo Log

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## OUTFALL RECONNAISSANCE INVENTORY/ SAMPLE COLLECTION FIELD SHEET

### Section 1: Background Data

Subwatershed:		Outfall ID: PHR36	
Today's date: 04/11/17		Time (Military): 2:25PM	
Investigators: Lettice Brown		Form completed by: Lettice Brown	
Temperature (°F): 85		Rainfall (in.): Last 24 hours: 0 Last 48 hours: 0	
Latitude: 39.9565683	Longitude: -76.7148867	GPS Unit:	GPS LMK #:
Camera:		Photo #'s:	
Land Use in Drainage Area (Check all that apply):			
<input type="checkbox"/> Industrial <input type="checkbox"/> Ultra-Urban Residential <input type="checkbox"/> Suburban Residential <input type="checkbox"/> Commercial		<input type="checkbox"/> Open Space <input type="checkbox"/> Institutional Other: Known Industries:	
Notes (e.g., origin of outfall, if known): York City			

### Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE	DIMENSIONS (IN.)	SUBMERGED
<input checked="" type="checkbox"/> Closed Pipe	<input type="checkbox"/> RCP <input type="checkbox"/> CMP <input type="checkbox"/> PVC <input type="checkbox"/> HDPE <input type="checkbox"/> Steel <input checked="" type="checkbox"/> Other: SLPP	<input checked="" type="checkbox"/> Circular <input type="checkbox"/> Elliptical <input type="checkbox"/> Box <input type="checkbox"/> Other:	<input checked="" type="checkbox"/> Single <input type="checkbox"/> Double <input type="checkbox"/> Triple <input type="checkbox"/> Other:	Diameter/Dimensions: 16  In Water: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully With Sediment: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully
<input type="checkbox"/> Open drainage	<input type="checkbox"/> Concrete <input type="checkbox"/> Earthen <input type="checkbox"/> rip-rap <input type="checkbox"/> Other:	<input type="checkbox"/> Trapezoid <input type="checkbox"/> Parabolic <input type="checkbox"/> Other:	Depth:  Top Width:  Bottom Width:	
<input type="checkbox"/> In-Stream	(applicable when collecting samples)			
Flow Present?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <i>If No, Skip to Section 5</i>			
Flow Description (If present)	<input checked="" type="checkbox"/> Trickle <input type="checkbox"/> Moderate <input type="checkbox"/> Substantial			

### Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER	RESULT	UNIT	EQUIPMENT	
<input type="checkbox"/> Flow #1	Volume		Liter	Bottle
	Time to fill		Seconds	
<input checked="" type="checkbox"/> Flow #2	Flow depth		Inches	Tape measure
	Flow width		Inches	Tape measure
	Measured length		Inches	Tape measure
	Time of travel		Seconds	Stop watch
Temperature			°F	Thermometer
pH			pH Units	Test strip/Probe
Ammonia			mg/L	Test strip



Outfall Reconnaissance Inventory Field Sheet

Section 4: Physical Indicators for Flowing Outfalls Only

Are Any Physical Indicators Present in the flow? ☐ Yes ☒ No (If No, Skip to Section 5)

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	<input type="checkbox"/>	<input type="checkbox"/> Sewage <input type="checkbox"/> Rancid/sour <input type="checkbox"/> Petroleum/gas <input type="checkbox"/> Sulfide <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint	<input type="checkbox"/> 2 - Easily detected	<input type="checkbox"/> 3 - Noticeable from a distance
Color	<input type="checkbox"/>	<input type="checkbox"/> Clear <input type="checkbox"/> Brown <input type="checkbox"/> Gray <input type="checkbox"/> Yellow <input type="checkbox"/> Green <input type="checkbox"/> Orange <input type="checkbox"/> Red <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint colors in sample bottle	<input type="checkbox"/> 2 - Clearly visible in sample bottle	<input type="checkbox"/> 3 - Clearly visible in outfall flow
Turbidity	<input type="checkbox"/>	See severity	<input type="checkbox"/> 1 - Slight cloudiness	<input type="checkbox"/> 2 - Cloudy	<input type="checkbox"/> 3 - Opaque
Floatables -Does Not Include Trash!!	<input type="checkbox"/>	<input type="checkbox"/> Sewage (Toilet Paper, etc.) <input type="checkbox"/> Suds <input type="checkbox"/> Petroleum (oil sheen) <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Few/slight; origin not obvious	<input type="checkbox"/> 2 - Some; indications of origin (e.g., possible suds or oil sheen)	<input type="checkbox"/> 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☒ Yes ☐ No (If No, Skip to Section 6)

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	<input type="checkbox"/>	<input type="checkbox"/> Spalling, Cracking or Chipping <input type="checkbox"/> Peeling Paint <input type="checkbox"/> Corrosion	
Deposits/Stains	<input type="checkbox"/>	<input type="checkbox"/> Oily <input type="checkbox"/> Flow Line <input type="checkbox"/> Paint <input type="checkbox"/> Other:	
Abnormal Vegetation	<input checked="" type="checkbox"/>	<input type="checkbox"/> Excessive <input type="checkbox"/> Inhibited	Some green moss in pipe
Poor pool quality	<input type="checkbox"/>	<input type="checkbox"/> Odors <input type="checkbox"/> Colors <input type="checkbox"/> Floatables <input type="checkbox"/> Oil Sheen <input type="checkbox"/> Suds <input type="checkbox"/> Excessive Algae <input type="checkbox"/> Other:	
Pipe benthic growth	<input checked="" type="checkbox"/>	<input type="checkbox"/> Brown <input type="checkbox"/> Orange <input checked="" type="checkbox"/> Green <input type="checkbox"/> Other:	Some green moss in pipe

Section 6: Overall Outfall Characterization

<input checked="" type="checkbox"/> Unlikely <input type="checkbox"/> Potential (presence of two or more indicators) <input type="checkbox"/> Suspect (one or more indicators with a severity of 3) <input type="checkbox"/> Obvious
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Section 7: Data Collection

1. Sample for the lab? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
2. If yes, collected from: <input type="checkbox"/> Flow <input type="checkbox"/> Pool
3. Intermittent flow trap set? <input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, type: <input type="checkbox"/> OBM <input type="checkbox"/> Caulk dam

Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?



## Photo Log

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## OUTFALL RECONNAISSANCE INVENTORY/ SAMPLE COLLECTION FIELD SHEET

### Section 1: Background Data

Subwatershed:		Outfall ID: PHR38	
Today's date: 04/11/17		Time (Military): 2:30PM	
Investigators: Lettice Brown		Form completed by: Lettice Brown	
Temperature (°F): 86		Rainfall (in.): Last 24 hours: 0 Last 48 hours: 0	
Latitude: 39.9556059	Longitude: -76.7141356	GPS Unit:	GPS LMK #:
Camera:		Photo #'s:	
Land Use in Drainage Area (Check all that apply): <input type="checkbox"/> Industrial <input type="checkbox"/> Ultra-Urban Residential <input type="checkbox"/> Suburban Residential <input type="checkbox"/> Commercial		<input type="checkbox"/> Open Space <input type="checkbox"/> Institutional Other: Known Industries:	
Notes (e.g., origin of outfall, if known): York City			

### Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE	DIMENSIONS (IN.)	SUBMERGED
<input checked="" type="checkbox"/> Closed Pipe	<input type="checkbox"/> RCP <input type="checkbox"/> PVC <input type="checkbox"/> Steel <input type="checkbox"/> Other:	<input checked="" type="checkbox"/> Circular <input type="checkbox"/> Elliptical <input type="checkbox"/> Box <input type="checkbox"/> Other:	<input checked="" type="checkbox"/> Single <input type="checkbox"/> Double <input type="checkbox"/> Triple <input type="checkbox"/> Other:	Diameter/Dimensions: 24
	<input checked="" type="checkbox"/> CMP <input type="checkbox"/> HDPE			In Water: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully With Sediment: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully
<input type="checkbox"/> Open drainage	<input type="checkbox"/> Concrete <input type="checkbox"/> Earthen <input type="checkbox"/> rip-rap <input type="checkbox"/> Other:	<input type="checkbox"/> Trapezoid <input type="checkbox"/> Parabolic <input type="checkbox"/> Other:	Depth:  Top Width:  Bottom Width:	
<input type="checkbox"/> In-Stream	(applicable when collecting samples)			
Flow Present?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <i>If No, Skip to Section 5</i>			
Flow Description (If present)	<input checked="" type="checkbox"/> Trickle <input type="checkbox"/> Moderate <input type="checkbox"/> Substantial			

### Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER	RESULT	UNIT	EQUIPMENT	
<input type="checkbox"/> Flow #1	Volume		Liter	Bottle
	Time to fill		Seconds	
<input checked="" type="checkbox"/> Flow #2	Flow depth		Inches	Tape measure
	Flow width		Inches	Tape measure
	Measured length		Inches	Tape measure
	Time of travel		Seconds	Stop watch
Temperature			°F	Thermometer
pH			pH Units	Test strip/Probe
Ammonia			mg/L	Test strip



Outfall Reconnaissance Inventory Field Sheet

Section 4: Physical Indicators for Flowing Outfalls Only

Are Any Physical Indicators Present in the flow? ☐ Yes ☒ No (If No, Skip to Section 5)

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	<input type="checkbox"/>	<input type="checkbox"/> Sewage <input type="checkbox"/> Rancid/sour <input type="checkbox"/> Petroleum/gas <input type="checkbox"/> Sulfide <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint	<input type="checkbox"/> 2 - Easily detected	<input type="checkbox"/> 3 - Noticeable from a distance
Color	<input type="checkbox"/>	<input type="checkbox"/> Clear <input type="checkbox"/> Brown <input type="checkbox"/> Gray <input type="checkbox"/> Yellow <input type="checkbox"/> Green <input type="checkbox"/> Orange <input type="checkbox"/> Red <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint colors in sample bottle	<input type="checkbox"/> 2 - Clearly visible in sample bottle	<input type="checkbox"/> 3 - Clearly visible in outfall flow
Turbidity	<input type="checkbox"/>	See severity	<input type="checkbox"/> 1 - Slight cloudiness	<input type="checkbox"/> 2 - Cloudy	<input type="checkbox"/> 3 - Opaque
Floatables -Does Not Include Trash!!	<input type="checkbox"/>	<input type="checkbox"/> Sewage (Toilet Paper, etc.) <input type="checkbox"/> Suds <input type="checkbox"/> Petroleum (oil sheen) <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Few/slight; origin not obvious	<input type="checkbox"/> 2 - Some; indications of origin (e.g., possible suds or oil sheen)	<input type="checkbox"/> 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☒ Yes ☐ No (If No, Skip to Section 6)

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	<input type="checkbox"/>	<input type="checkbox"/> Spalling, Cracking or Chipping <input type="checkbox"/> Peeling Paint <input type="checkbox"/> Corrosion	
Deposits/Stains	<input type="checkbox"/>	<input type="checkbox"/> Oily <input type="checkbox"/> Flow Line <input type="checkbox"/> Paint <input type="checkbox"/> Other:	
Abnormal Vegetation	<input checked="" type="checkbox"/>	<input type="checkbox"/> Excessive <input type="checkbox"/> Inhibited	Some green moss in pipe
Poor pool quality	<input type="checkbox"/>	<input type="checkbox"/> Odors <input type="checkbox"/> Colors <input type="checkbox"/> Floatables <input type="checkbox"/> Oil Sheen <input type="checkbox"/> Suds <input type="checkbox"/> Excessive Algae <input type="checkbox"/> Other:	
Pipe benthic growth	<input checked="" type="checkbox"/>	<input type="checkbox"/> Brown <input type="checkbox"/> Orange <input checked="" type="checkbox"/> Green <input type="checkbox"/> Other:	Some green moss in pipe

Section 6: Overall Outfall Characterization

<input checked="" type="checkbox"/> Unlikely	<input type="checkbox"/> Potential (presence of two or more indicators)	<input type="checkbox"/> Suspect (one or more indicators with a severity of 3)	<input type="checkbox"/> Obvious
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Section 7: Data Collection

1. Sample for the lab?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
2. If yes, collected from:	<input type="checkbox"/> Flow <input type="checkbox"/> Pool
3. Intermittent flow trap set?	<input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, type: <input type="checkbox"/> OBM <input type="checkbox"/> Caulk dam

Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?



## Photo Log

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## OUTFALL RECONNAISSANCE INVENTORY/ SAMPLE COLLECTION FIELD SHEET

### Section 1: Background Data

Subwatershed:		Outfall ID: PHR50	
Today's date: 04/11/17		Time (Military): 2:35PM	
Investigators: Lettice Brown		Form completed by: Lettice Brown	
Temperature (°F): 85		Rainfall (in.): Last 24 hours: 0 Last 48 hours: 0	
Latitude: 39.9526182	Longitude: -76.7108032	GPS Unit:	GPS LMK #:
Camera:		Photo #'s:	
Land Use in Drainage Area (Check all that apply): <input type="checkbox"/> Industrial <input type="checkbox"/> Ultra-Urban Residential <input type="checkbox"/> Suburban Residential <input type="checkbox"/> Commercial		<input type="checkbox"/> Open Space <input type="checkbox"/> Institutional Other: Known Industries:	
Notes (e.g., origin of outfall, if known): York City			

### Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE	DIMENSIONS (IN.)	SUBMERGED
<input checked="" type="checkbox"/> Closed Pipe	<input checked="" type="checkbox"/> RCP <input type="checkbox"/> CMP <input type="checkbox"/> PVC <input type="checkbox"/> HDPE <input type="checkbox"/> Steel <input type="checkbox"/> Other:	<input checked="" type="checkbox"/> Circular <input type="checkbox"/> Elliptical <input type="checkbox"/> Box <input type="checkbox"/> Other:	<input checked="" type="checkbox"/> Single <input type="checkbox"/> Double <input type="checkbox"/> Triple <input type="checkbox"/> Other:	Diameter/Dimensions: 42  In Water: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully With Sediment: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully
<input type="checkbox"/> Open drainage	<input type="checkbox"/> Concrete <input type="checkbox"/> Earthen <input type="checkbox"/> rip-rap <input type="checkbox"/> Other:	<input type="checkbox"/> Trapezoid <input type="checkbox"/> Parabolic <input type="checkbox"/> Other:	Depth:  Top Width:  Bottom Width:	
<input type="checkbox"/> In-Stream	(applicable when collecting samples)			
Flow Present?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <i>If No, Skip to Section 5</i>			
Flow Description (If present)	<input checked="" type="checkbox"/> Trickle <input type="checkbox"/> Moderate <input type="checkbox"/> Substantial			

### Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER		RESULT	UNIT	EQUIPMENT
<input type="checkbox"/> Flow #1	Volume		Liter	Bottle
	Time to fill		Seconds	
<input checked="" type="checkbox"/> Flow #2	Flow depth		Inches	Tape measure
	Flow width		Inches	Tape measure
	Measured length		Inches	Tape measure
	Time of travel		Seconds	Stop watch
Temperature			°F	Thermometer
pH			pH Units	Test strip/Probe
Ammonia			mg/L	Test strip



Outfall Reconnaissance Inventory Field Sheet

Section 4: Physical Indicators for Flowing Outfalls Only

Are Any Physical Indicators Present in the flow? ☐ Yes ☒ No (If No, Skip to Section 5)

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	<input type="checkbox"/>	<input type="checkbox"/> Sewage <input type="checkbox"/> Rancid/sour <input type="checkbox"/> Petroleum/gas <input type="checkbox"/> Sulfide <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint	<input type="checkbox"/> 2 - Easily detected	<input type="checkbox"/> 3 - Noticeable from a distance
Color	<input type="checkbox"/>	<input type="checkbox"/> Clear <input type="checkbox"/> Brown <input type="checkbox"/> Gray <input type="checkbox"/> Yellow <input type="checkbox"/> Green <input type="checkbox"/> Orange <input type="checkbox"/> Red <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint colors in sample bottle	<input type="checkbox"/> 2 - Clearly visible in sample bottle	<input type="checkbox"/> 3 - Clearly visible in outfall flow
Turbidity	<input type="checkbox"/>	See severity	<input type="checkbox"/> 1 - Slight cloudiness	<input type="checkbox"/> 2 - Cloudy	<input type="checkbox"/> 3 - Opaque
Floatables -Does Not Include Trash!!	<input type="checkbox"/>	<input type="checkbox"/> Sewage (Toilet Paper, etc.) <input type="checkbox"/> Suds <input type="checkbox"/> Petroleum (oil sheen) <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Few/slight; origin not obvious	<input type="checkbox"/> 2 - Some; indications of origin (e.g., possible suds or oil sheen)	<input type="checkbox"/> 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☐ Yes ☒ No (If No, Skip to Section 6)

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	<input type="checkbox"/>	<input type="checkbox"/> Spalling, Cracking or Chipping <input type="checkbox"/> Peeling Paint <input type="checkbox"/> Corrosion	
Deposits/Stains	<input type="checkbox"/>	<input type="checkbox"/> Oily <input type="checkbox"/> Flow Line <input type="checkbox"/> Paint <input type="checkbox"/> Other:	
Abnormal Vegetation	<input type="checkbox"/>	<input type="checkbox"/> Excessive <input type="checkbox"/> Inhibited	
Poor pool quality	<input type="checkbox"/>	<input type="checkbox"/> Odors <input type="checkbox"/> Colors <input type="checkbox"/> Floatables <input type="checkbox"/> Oil Sheen <input type="checkbox"/> Suds <input type="checkbox"/> Excessive Algae <input type="checkbox"/> Other:	
Pipe benthic growth	<input type="checkbox"/>	<input type="checkbox"/> Brown <input type="checkbox"/> Orange <input type="checkbox"/> Green <input type="checkbox"/> Other:	

Section 6: Overall Outfall Characterization

<input checked="" type="checkbox"/> Unlikely	<input type="checkbox"/> Potential (presence of two or more indicators)	<input type="checkbox"/> Suspect (one or more indicators with a severity of 3)	<input type="checkbox"/> Obvious
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Section 7: Data Collection

1. Sample for the lab?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
2. If yes, collected from:	<input type="checkbox"/> Flow <input type="checkbox"/> Pool
3. Intermittent flow trap set?	<input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, type: <input type="checkbox"/> OBM <input type="checkbox"/> Caulk dam

Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?



## Photo Log

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## OUTFALL RECONNAISSANCE INVENTORY/ SAMPLE COLLECTION FIELD SHEET

### Section 1: Background Data

Subwatershed:		Outfall ID: TR7	
Today's date: 04/11/17		Time (Military): 2:50PM	
Investigators: Lettice Brown		Form completed by: Lettice Brown	
Temperature (°F): 85		Rainfall (in.): Last 24 hours: 0 Last 48 hours: 0	
Latitude: 39.9495404	Longitude: -76.7316789	GPS Unit:	GPS LMK #:
Camera:		Photo #'s:	
Land Use in Drainage Area (Check all that apply): <input type="checkbox"/> Industrial <input type="checkbox"/> Ultra-Urban Residential <input type="checkbox"/> Suburban Residential <input type="checkbox"/> Commercial		<input type="checkbox"/> Open Space <input type="checkbox"/> Institutional Other: Known Industries:	
Notes (e.g., origin of outfall, if known): York City			

### Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE	DIMENSIONS (IN.)	SUBMERGED
<input checked="" type="checkbox"/> Closed Pipe	<input checked="" type="checkbox"/> RCP <input type="checkbox"/> CMP <input type="checkbox"/> PVC <input type="checkbox"/> HDPE <input type="checkbox"/> Steel <input type="checkbox"/> Other:	<input checked="" type="checkbox"/> Circular <input type="checkbox"/> Elliptical <input type="checkbox"/> Box <input type="checkbox"/> Other:	<input checked="" type="checkbox"/> Single <input type="checkbox"/> Double <input type="checkbox"/> Triple <input type="checkbox"/> Other:	Diameter/Dimensions: 36  In Water: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully With Sediment: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully
<input type="checkbox"/> Open drainage	<input type="checkbox"/> Concrete <input type="checkbox"/> Earthen <input type="checkbox"/> rip-rap <input type="checkbox"/> Other:	<input type="checkbox"/> Trapezoid <input type="checkbox"/> Parabolic <input type="checkbox"/> Other:	Depth:  Top Width:  Bottom Width:	
<input type="checkbox"/> In-Stream	(applicable when collecting samples)			
Flow Present?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <i>If No, Skip to Section 5</i>			
Flow Description (If present)	<input checked="" type="checkbox"/> Trickle <input type="checkbox"/> Moderate <input type="checkbox"/> Substantial			

### Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER		RESULT	UNIT	EQUIPMENT
<input type="checkbox"/> Flow #1	Volume		Liter	Bottle
	Time to fill		Seconds	
<input checked="" type="checkbox"/> Flow #2	Flow depth		Inches	Tape measure
	Flow width		Inches	Tape measure
	Measured length		Inches	Tape measure
	Time of travel		Seconds	Stop watch
Temperature			°F	Thermometer
pH			pH Units	Test strip/Probe
Ammonia			mg/L	Test strip



Outfall Reconnaissance Inventory Field Sheet

Section 4: Physical Indicators for Flowing Outfalls Only

Are Any Physical Indicators Present in the flow? ☐ Yes ☒ No (If No, Skip to Section 5)

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	<input type="checkbox"/>	<input type="checkbox"/> Sewage <input type="checkbox"/> Rancid/sour <input type="checkbox"/> Petroleum/gas <input type="checkbox"/> Sulfide <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint	<input type="checkbox"/> 2 - Easily detected	<input type="checkbox"/> 3 - Noticeable from a distance
Color	<input type="checkbox"/>	<input type="checkbox"/> Clear <input type="checkbox"/> Brown <input type="checkbox"/> Gray <input type="checkbox"/> Yellow <input type="checkbox"/> Green <input type="checkbox"/> Orange <input type="checkbox"/> Red <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint colors in sample bottle	<input type="checkbox"/> 2 - Clearly visible in sample bottle	<input type="checkbox"/> 3 - Clearly visible in outfall flow
Turbidity	<input type="checkbox"/>	See severity	<input type="checkbox"/> 1 - Slight cloudiness	<input type="checkbox"/> 2 - Cloudy	<input type="checkbox"/> 3 - Opaque
Floatables -Does Not Include Trash!!	<input type="checkbox"/>	<input type="checkbox"/> Sewage (Toilet Paper, etc.) <input type="checkbox"/> Suds <input type="checkbox"/> Petroleum (oil sheen) <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Few/slight; origin not obvious	<input type="checkbox"/> 2 - Some; indications of origin (e.g., possible suds or oil sheen)	<input type="checkbox"/> 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☐ Yes ☒ No (If No, Skip to Section 6)

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	<input type="checkbox"/>	<input type="checkbox"/> Spalling, Cracking or Chipping <input type="checkbox"/> Peeling Paint <input type="checkbox"/> Corrosion	
Deposits/Stains	<input type="checkbox"/>	<input type="checkbox"/> Oily <input type="checkbox"/> Flow Line <input type="checkbox"/> Paint <input type="checkbox"/> Other:	
Abnormal Vegetation	<input type="checkbox"/>	<input type="checkbox"/> Excessive <input type="checkbox"/> Inhibited	
Poor pool quality	<input type="checkbox"/>	<input type="checkbox"/> Odors <input type="checkbox"/> Colors <input type="checkbox"/> Floatables <input type="checkbox"/> Oil Sheen <input type="checkbox"/> Suds <input type="checkbox"/> Excessive Algae <input type="checkbox"/> Other:	
Pipe benthic growth	<input type="checkbox"/>	<input type="checkbox"/> Brown <input type="checkbox"/> Orange <input type="checkbox"/> Green <input type="checkbox"/> Other:	

Section 6: Overall Outfall Characterization

<input checked="" type="checkbox"/> Unlikely	<input type="checkbox"/> Potential (presence of two or more indicators)	<input type="checkbox"/> Suspect (one or more indicators with a severity of 3)	<input type="checkbox"/> Obvious
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Section 7: Data Collection

1. Sample for the lab?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
2. If yes, collected from:	<input type="checkbox"/> Flow <input type="checkbox"/> Pool
3. Intermittent flow trap set?	<input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, type: <input type="checkbox"/> OBM <input type="checkbox"/> Caulk dam

Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?



## Photo Log

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## OUTFALL RECONNAISSANCE INVENTORY/ SAMPLE COLLECTION FIELD SHEET

### Section 1: Background Data

Subwatershed:		Outfall ID: TR8	
Today's date: 04/11/17		Time (Military): 2:55PM	
Investigators: Lettice Brown		Form completed by: Lettice Brown	
Temperature (°F): 85		Rainfall (in.): Last 24 hours: 0 Last 48 hours: 0	
Latitude: 39.9495522	Longitude: -76.7317757	GPS Unit:	GPS LMK #:
Camera:		Photo #'s:	
Land Use in Drainage Area (Check all that apply): <input type="checkbox"/> Industrial <input type="checkbox"/> Ultra-Urban Residential <input type="checkbox"/> Suburban Residential <input type="checkbox"/> Commercial		<input type="checkbox"/> Open Space <input type="checkbox"/> Institutional Other: Known Industries:	
Notes (e.g., origin of outfall, if known): York City			

### Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE	DIMENSIONS (IN.)	SUBMERGED
<input checked="" type="checkbox"/> Closed Pipe	<input checked="" type="checkbox"/> RCP <input type="checkbox"/> CMP <input type="checkbox"/> PVC <input type="checkbox"/> HDPE <input type="checkbox"/> Steel <input type="checkbox"/> Other:	<input checked="" type="checkbox"/> Circular <input type="checkbox"/> Elliptical <input type="checkbox"/> Box <input type="checkbox"/> Other:	<input checked="" type="checkbox"/> Single <input type="checkbox"/> Double <input type="checkbox"/> Triple <input type="checkbox"/> Other:	Diameter/Dimensions: 18  In Water: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully With Sediment: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully
<input type="checkbox"/> Open drainage	<input type="checkbox"/> Concrete <input type="checkbox"/> Earthen <input type="checkbox"/> rip-rap <input type="checkbox"/> Other:	<input type="checkbox"/> Trapezoid <input type="checkbox"/> Parabolic <input type="checkbox"/> Other:	Depth:  Top Width:  Bottom Width:	
<input type="checkbox"/> In-Stream	(applicable when collecting samples)			
Flow Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <i>If No, Skip to Section 5</i>			
Flow Description (If present)	<input type="checkbox"/> Trickle <input type="checkbox"/> Moderate <input type="checkbox"/> Substantial			

### Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER		RESULT	UNIT	EQUIPMENT
<input type="checkbox"/> Flow #1	Volume		Liter	Bottle
	Time to fill		Seconds	
<input type="checkbox"/> Flow #2	Flow depth		Inches	Tape measure
	Flow width		Inches	Tape measure
	Measured length		Inches	Tape measure
	Time of travel		Seconds	Stop watch
Temperature			°F	Thermometer
pH			pH Units	Test strip/Probe
Ammonia			mg/L	Test strip



Outfall Reconnaissance Inventory Field Sheet

Section 4: Physical Indicators for Flowing Outfalls Only

Are Any Physical Indicators Present in the flow? ☐ Yes ☐ No (If No, Skip to Section 5)

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	<input type="checkbox"/>	<input type="checkbox"/> Sewage <input type="checkbox"/> Rancid/sour <input type="checkbox"/> Petroleum/gas <input type="checkbox"/> Sulfide <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint	<input type="checkbox"/> 2 - Easily detected	<input type="checkbox"/> 3 - Noticeable from a distance
Color	<input type="checkbox"/>	<input type="checkbox"/> Clear <input type="checkbox"/> Brown <input type="checkbox"/> Gray <input type="checkbox"/> Yellow <input type="checkbox"/> Green <input type="checkbox"/> Orange <input type="checkbox"/> Red <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint colors in sample bottle	<input type="checkbox"/> 2 - Clearly visible in sample bottle	<input type="checkbox"/> 3 - Clearly visible in outfall flow
Turbidity	<input type="checkbox"/>	See severity	<input type="checkbox"/> 1 - Slight cloudiness	<input type="checkbox"/> 2 - Cloudy	<input type="checkbox"/> 3 - Opaque
Floatables -Does Not Include Trash!!	<input type="checkbox"/>	<input type="checkbox"/> Sewage (Toilet Paper, etc.) <input type="checkbox"/> Suds <input type="checkbox"/> Petroleum (oil sheen) <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Few/slight; origin not obvious	<input type="checkbox"/> 2 - Some; indications of origin (e.g., possible suds or oil sheen)	<input type="checkbox"/> 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☒ Yes ☐ No (If No, Skip to Section 6)

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	<input type="checkbox"/>	<input type="checkbox"/> Spalling, Cracking or Chipping <input type="checkbox"/> Peeling Paint <input type="checkbox"/> Corrosion	
Deposits/Stains	<input checked="" type="checkbox"/>	<input type="checkbox"/> Oily <input type="checkbox"/> Flow Line <input type="checkbox"/> Paint <input checked="" type="checkbox"/> Other:	Dark stain under outfall
Abnormal Vegetation	<input type="checkbox"/>	<input type="checkbox"/> Excessive <input type="checkbox"/> Inhibited	
Poor pool quality	<input type="checkbox"/>	<input type="checkbox"/> Odors <input type="checkbox"/> Colors <input type="checkbox"/> Floatables <input type="checkbox"/> Oil Sheen <input type="checkbox"/> Suds <input type="checkbox"/> Excessive Algae <input type="checkbox"/> Other:	
Pipe benthic growth	<input type="checkbox"/>	<input type="checkbox"/> Brown <input type="checkbox"/> Orange <input type="checkbox"/> Green <input type="checkbox"/> Other:	

Section 6: Overall Outfall Characterization

<input checked="" type="checkbox"/> Unlikely	<input type="checkbox"/> Potential (presence of two or more indicators)	<input type="checkbox"/> Suspect (one or more indicators with a severity of 3)	<input type="checkbox"/> Obvious
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Section 7: Data Collection

1. Sample for the lab?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
2. If yes, collected from:	<input type="checkbox"/> Flow <input type="checkbox"/> Pool
3. Intermittent flow trap set?	<input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, type: <input type="checkbox"/> OBM <input type="checkbox"/> Caulk dam

Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?



## Photo Log

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## OUTFALL RECONNAISSANCE INVENTORY/ SAMPLE COLLECTION FIELD SHEET

### Section 1: Background Data

Subwatershed:		Outfall ID: TR8	
Today's date: 04/11/17		Time (Military): 2:55PM	
Investigators: Lettice Brown		Form completed by: Lettice Brown	
Temperature (°F): 85		Rainfall (in.): Last 24 hours: 0 Last 48 hours: 0	
Latitude: 39.9495522	Longitude: -76.7317757	GPS Unit:	GPS LMK #:
Camera:		Photo #'s:	
Land Use in Drainage Area (Check all that apply): <input type="checkbox"/> Industrial <input type="checkbox"/> Ultra-Urban Residential <input type="checkbox"/> Suburban Residential <input type="checkbox"/> Commercial		<input type="checkbox"/> Open Space <input type="checkbox"/> Institutional Other: Known Industries:	
Notes (e.g., origin of outfall, if known): York City			

### Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE	DIMENSIONS (IN.)	SUBMERGED
<input checked="" type="checkbox"/> Closed Pipe	<input checked="" type="checkbox"/> RCP <input type="checkbox"/> CMP <input type="checkbox"/> PVC <input type="checkbox"/> HDPE <input type="checkbox"/> Steel <input type="checkbox"/> Other:	<input checked="" type="checkbox"/> Circular <input type="checkbox"/> Elliptical <input type="checkbox"/> Box <input type="checkbox"/> Other:	<input checked="" type="checkbox"/> Single <input type="checkbox"/> Double <input type="checkbox"/> Triple <input type="checkbox"/> Other:	Diameter/Dimensions: 18  In Water: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully With Sediment: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully
<input type="checkbox"/> Open drainage	<input type="checkbox"/> Concrete <input type="checkbox"/> Earthen <input type="checkbox"/> rip-rap <input type="checkbox"/> Other:	<input type="checkbox"/> Trapezoid <input type="checkbox"/> Parabolic <input type="checkbox"/> Other:	Depth:  Top Width:  Bottom Width:	
<input type="checkbox"/> In-Stream	(applicable when collecting samples)			
Flow Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <i>If No, Skip to Section 5</i>			
Flow Description (If present)	<input type="checkbox"/> Trickle <input type="checkbox"/> Moderate <input type="checkbox"/> Substantial			

### Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER	RESULT	UNIT	EQUIPMENT	
<input type="checkbox"/> Flow #1	Volume		Liter	Bottle
	Time to fill		Seconds	
<input type="checkbox"/> Flow #2	Flow depth		Inches	Tape measure
	Flow width		Inches	Tape measure
	Measured length		Inches	Tape measure
	Time of travel		Seconds	Stop watch
Temperature			°F	Thermometer
pH			pH Units	Test strip/Probe
Ammonia			mg/L	Test strip



Outfall Reconnaissance Inventory Field Sheet

Section 4: Physical Indicators for Flowing Outfalls Only

Are Any Physical Indicators Present in the flow? ☐ Yes ☐ No (If No, Skip to Section 5)

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	<input type="checkbox"/>	<input type="checkbox"/> Sewage <input type="checkbox"/> Rancid/sour <input type="checkbox"/> Petroleum/gas <input type="checkbox"/> Sulfide <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint	<input type="checkbox"/> 2 - Easily detected	<input type="checkbox"/> 3 - Noticeable from a distance
Color	<input type="checkbox"/>	<input type="checkbox"/> Clear <input type="checkbox"/> Brown <input type="checkbox"/> Gray <input type="checkbox"/> Yellow <input type="checkbox"/> Green <input type="checkbox"/> Orange <input type="checkbox"/> Red <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint colors in sample bottle	<input type="checkbox"/> 2 - Clearly visible in sample bottle	<input type="checkbox"/> 3 - Clearly visible in outfall flow
Turbidity	<input type="checkbox"/>	See severity	<input type="checkbox"/> 1 - Slight cloudiness	<input type="checkbox"/> 2 - Cloudy	<input type="checkbox"/> 3 - Opaque
Floatables -Does Not Include Trash!!	<input type="checkbox"/>	<input type="checkbox"/> Sewage (Toilet Paper, etc.) <input type="checkbox"/> Suds <input type="checkbox"/> Petroleum (oil sheen) <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Few/slight; origin not obvious	<input type="checkbox"/> 2 - Some; indications of origin (e.g., possible suds or oil sheen)	<input type="checkbox"/> 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☒ Yes ☐ No (If No, Skip to Section 6)

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	<input type="checkbox"/>	<input type="checkbox"/> Spalling, Cracking or Chipping <input type="checkbox"/> Peeling Paint <input type="checkbox"/> Corrosion	
Deposits/Stains	<input checked="" type="checkbox"/>	<input type="checkbox"/> Oily <input type="checkbox"/> Flow Line <input type="checkbox"/> Paint <input checked="" type="checkbox"/> Other:	Black stain under outfall
Abnormal Vegetation	<input type="checkbox"/>	<input type="checkbox"/> Excessive <input type="checkbox"/> Inhibited	
Poor pool quality	<input type="checkbox"/>	<input type="checkbox"/> Odors <input type="checkbox"/> Colors <input type="checkbox"/> Floatables <input type="checkbox"/> Oil Sheen <input type="checkbox"/> Suds <input type="checkbox"/> Excessive Algae <input type="checkbox"/> Other:	
Pipe benthic growth	<input type="checkbox"/>	<input type="checkbox"/> Brown <input type="checkbox"/> Orange <input type="checkbox"/> Green <input type="checkbox"/> Other:	

Section 6: Overall Outfall Characterization

<input checked="" type="checkbox"/> Unlikely <input type="checkbox"/> Potential (presence of two or more indicators) <input type="checkbox"/> Suspect (one or more indicators with a severity of 3) <input type="checkbox"/> Obvious
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Section 7: Data Collection

1. Sample for the lab? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
2. If yes, collected from: <input type="checkbox"/> Flow <input type="checkbox"/> Pool
3. Intermittent flow trap set? <input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, type: <input type="checkbox"/> OBM <input type="checkbox"/> Caulk dam

Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?



## Photo Log

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## OUTFALL RECONNAISSANCE INVENTORY/ SAMPLE COLLECTION FIELD SHEET

### Section 1: Background Data

Subwatershed:		Outfall ID: TR6	
Today's date: 04/11/17		Time (Military): 2:55PM	
Investigators: Lettice Brown		Form completed by: Lettice Brown	
Temperature (°F): 85		Rainfall (in.): Last 24 hours: 0 Last 48 hours: 0	
Latitude: 39.9494554	Longitude: -76.7317075	GPS Unit:	GPS LMK #:
Camera:		Photo #'s:	
Land Use in Drainage Area (Check all that apply): <input type="checkbox"/> Industrial <input type="checkbox"/> Ultra-Urban Residential <input type="checkbox"/> Suburban Residential <input type="checkbox"/> Commercial		<input type="checkbox"/> Open Space <input type="checkbox"/> Institutional Other: Known Industries:	
Notes (e.g., origin of outfall, if known): York City			

### Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE	DIMENSIONS (IN.)	SUBMERGED
<input checked="" type="checkbox"/> Closed Pipe	<input checked="" type="checkbox"/> RCP <input type="checkbox"/> CMP <input type="checkbox"/> PVC <input type="checkbox"/> HDPE <input type="checkbox"/> Steel <input type="checkbox"/> Other:	<input checked="" type="checkbox"/> Circular <input checked="" type="checkbox"/> Single <input type="checkbox"/> Elliptical <input type="checkbox"/> Double <input type="checkbox"/> Box <input type="checkbox"/> Triple <input type="checkbox"/> Other: <input type="checkbox"/> Other:	Diameter/Dimensions: 18	In Water: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully With Sediment: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully
<input type="checkbox"/> Open drainage	<input type="checkbox"/> Concrete <input type="checkbox"/> Earthen <input type="checkbox"/> rip-rap <input type="checkbox"/> Other:	<input type="checkbox"/> Trapezoid <input type="checkbox"/> Parabolic <input type="checkbox"/> Other:	Depth:  Top Width:  Bottom Width:	
<input type="checkbox"/> In-Stream	(applicable when collecting samples)			
Flow Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <i>If No, Skip to Section 5</i>			
Flow Description (If present)	<input type="checkbox"/> Trickle <input type="checkbox"/> Moderate <input type="checkbox"/> Substantial			

### Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER		RESULT	UNIT	EQUIPMENT
<input type="checkbox"/> Flow #1	Volume		Liter	Bottle
	Time to fill		Seconds	
<input type="checkbox"/> Flow #2	Flow depth		Inches	Tape measure
	Flow width		Inches	Tape measure
	Measured length		Inches	Tape measure
	Time of travel		Seconds	Stop watch
Temperature			°F	Thermometer
pH			pH Units	Test strip/Probe
Ammonia			mg/L	Test strip



Outfall Reconnaissance Inventory Field Sheet

Section 4: Physical Indicators for Flowing Outfalls Only

Are Any Physical Indicators Present in the flow? ☐ Yes ☐ No (If No, Skip to Section 5)

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	<input type="checkbox"/>	<input type="checkbox"/> Sewage <input type="checkbox"/> Rancid/sour <input type="checkbox"/> Petroleum/gas <input type="checkbox"/> Sulfide <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint	<input type="checkbox"/> 2 - Easily detected	<input type="checkbox"/> 3 - Noticeable from a distance
Color	<input type="checkbox"/>	<input type="checkbox"/> Clear <input type="checkbox"/> Brown <input type="checkbox"/> Gray <input type="checkbox"/> Yellow <input type="checkbox"/> Green <input type="checkbox"/> Orange <input type="checkbox"/> Red <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint colors in sample bottle	<input type="checkbox"/> 2 - Clearly visible in sample bottle	<input type="checkbox"/> 3 - Clearly visible in outfall flow
Turbidity	<input type="checkbox"/>	See severity	<input type="checkbox"/> 1 - Slight cloudiness	<input type="checkbox"/> 2 - Cloudy	<input type="checkbox"/> 3 - Opaque
Floatables -Does Not Include Trash!!	<input type="checkbox"/>	<input type="checkbox"/> Sewage (Toilet Paper, etc.) <input type="checkbox"/> Suds <input type="checkbox"/> Petroleum (oil sheen) <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Few/slight; origin not obvious	<input type="checkbox"/> 2 - Some; indications of origin (e.g., possible suds or oil sheen)	<input type="checkbox"/> 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☒ Yes ☐ No (If No, Skip to Section 6)

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	<input type="checkbox"/>	<input type="checkbox"/> Spalling, Cracking or Chipping <input type="checkbox"/> Peeling Paint <input type="checkbox"/> Corrosion	
Deposits/Stains	<input checked="" type="checkbox"/>	<input type="checkbox"/> Oily <input type="checkbox"/> Flow Line <input type="checkbox"/> Paint <input checked="" type="checkbox"/> Other:	Black stain under outfall
Abnormal Vegetation	<input type="checkbox"/>	<input type="checkbox"/> Excessive <input type="checkbox"/> Inhibited	
Poor pool quality	<input type="checkbox"/>	<input type="checkbox"/> Odors <input type="checkbox"/> Colors <input type="checkbox"/> Floatables <input type="checkbox"/> Oil Sheen <input type="checkbox"/> Suds <input type="checkbox"/> Excessive Algae <input type="checkbox"/> Other:	
Pipe benthic growth	<input type="checkbox"/>	<input type="checkbox"/> Brown <input type="checkbox"/> Orange <input type="checkbox"/> Green <input type="checkbox"/> Other:	

Section 6: Overall Outfall Characterization

<input checked="" type="checkbox"/> Unlikely	<input type="checkbox"/> Potential (presence of two or more indicators)	<input type="checkbox"/> Suspect (one or more indicators with a severity of 3)	<input type="checkbox"/> Obvious
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Section 7: Data Collection

1. Sample for the lab?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
2. If yes, collected from:	<input type="checkbox"/> Flow <input type="checkbox"/> Pool
3. Intermittent flow trap set?	<input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, type: <input type="checkbox"/> OBM <input type="checkbox"/> Caulk dam

Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?



## Photo Log

Photo No. 1: DSCN0097.jpg







## MS4 OUTFALL FIELD SCREENING REPORT

BACKGROUND INFORMATION				
Permittee Name: CITY OF YORK		NPDES Permit No.: PA		
Date of Inspection: 06/08/18		Outfall ID No.: TR3		
Land Use in Outfall Drainage Area (Select All): <input type="checkbox"/> Industrial <input type="checkbox"/> Urban Residential <input type="checkbox"/> Commercial <input type="checkbox"/> Suburban Residential <input type="checkbox"/> Open Space <input type="checkbox"/> Other:		Latitude: 39 ° 56 ' 54.2 "		
		Latitude: -76 ° 43 ' 48.3 "		
		Dry Weather Inspection? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		
		Date of Previous Precipitation:		
Inspector Name(s): Lettice Brown		Amount of Previous Precipitation: .00 in		
		Were Photographs Taken? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		
		Are Photographs Attached? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		
OUTFALL DESCRIPTION				
TYPE	MATERIAL	SHAPE	DIMENSIONS	SUBMERGED
<input checked="" type="checkbox"/> Closed Pipe	<input type="checkbox"/> RCP <input checked="" type="checkbox"/> CMP <input type="checkbox"/> PVC <input type="checkbox"/> HDPE <input type="checkbox"/> Steel <input type="checkbox"/> Other	<input checked="" type="checkbox"/> Circular <input checked="" type="checkbox"/> Single <input type="checkbox"/> Elliptical <input type="checkbox"/> Double <input type="checkbox"/> Box <input type="checkbox"/> Triple <input type="checkbox"/> Other <input type="checkbox"/> Other	Diameter: 18 in	<input type="checkbox"/> In Water <input type="checkbox"/> With Sediment:
<input type="checkbox"/> Open Channel	<input type="checkbox"/> Concrete <input type="checkbox"/> Earthen <input type="checkbox"/> Rip-Rap <input type="checkbox"/> Other	<input type="checkbox"/> Trapezoid <input type="checkbox"/> Parabolic <input type="checkbox"/> Other	Depth: _____ in Top Width: _____ in Bottom Width: _____	
Dry Weather Flow Present at Outfall During Inspection? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No (If No, skip to Certification Section)				
Description of Flow Rate <input type="checkbox"/> Trickle <input type="checkbox"/> Moderate <input type="checkbox"/> Significant <input checked="" type="checkbox"/> N/A				
DRY WEATHER FLOW EVALUATION				
Does the dry weather flow contain color? <input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, provide a description below.				
Does the dry weather flow contain an odor? <input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, provide a description below.				
Is there an observed change in the receiving waters as a result of the discharge? <input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, provide a description below.				
Does the dry weather flow contain floating solids, scum, sheen or substances that result in deposits? <input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, provide a description below.				



Were sample(s) collected of the dry weather flow? ☐ Yes ☐ No (If Yes, No. Samples: \_\_\_\_\_)

### FIELD / LABORATORY ANALYSIS

PARAMETER	RESULTS	UNITS	PARAMETER	RESULTS	UNITS
Flow Rate		GPM	Fecal Coliform		No./100 mL
pH		S.U.	COD		mg/L
Total Residual Chlorine (TRC)		mg/L	BOD5		mg/L
Conductivity		µmhos/cm	TSS		mg/L
Ammonia-Nitrogen		mg/L	TDS		mg/L
Other: _____			Oil and Grease		mg/L
Other: _____			Other: _____		

Indicate the parameters above that were analyzed by a DEP-certified laboratory:

### ILLICIT DISCHARGES

Is the dry weather flow an illicit discharge? ☐ Yes ☐ No

If Yes, describe efforts made to determine the source(s) of the illicit discharge.

Describe corrective actions taken by the permittee in response to the finding of an illicit discharge.

Inspector Comments:

### RESPONSIBLE OFFICIAL 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 gathered and evaluated 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 knowledge of violations. See 18 Pa. C.S. § 4904 (relating to unsworn falsification).

Lettice Brown

Responsible Official Name

(717)324-6532

Telephone No.



Signature

06/13/2018

Date



## Photo Log

Photo No. 1: image.jpg








## MS4 OUTFALL FIELD SCREENING REPORT

BACKGROUND INFORMATION				
Permittee Name: CITY OF YORK		NPDES Permit No.: PA		
Date of Inspection: 06/08/18		Outfall ID No.: TR4		
Land Use in Outfall Drainage Area (Select All): <input type="checkbox"/> Industrial <input type="checkbox"/> Urban Residential <input type="checkbox"/> Commercial <input type="checkbox"/> Suburban Residential <input type="checkbox"/> Open Space <input type="checkbox"/> Other:		Latitude: 39 ° 56 ' 56.9 "		
		Latitude: -76 ° 43 ' 52.3 "		
		Dry Weather Inspection? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		
		Date of Previous Precipitation:		
		Amount of Previous Precipitation: in		
Inspector Name(s): Lettice Brown		Were Photographs Taken? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		
		Are Photographs Attached? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		
OUTFALL DESCRIPTION				
TYPE	MATERIAL	SHAPE	DIMENSIONS	SUBMERGED
<input checked="" type="checkbox"/> Closed Pipe	<input type="checkbox"/> RCP <input checked="" type="checkbox"/> CMP <input type="checkbox"/> PVC <input type="checkbox"/> HDPE <input type="checkbox"/> Steel <input type="checkbox"/> Other	<input type="checkbox"/> Circular <input checked="" type="checkbox"/> Single <input checked="" type="checkbox"/> Elliptical <input type="checkbox"/> Double <input type="checkbox"/> Box <input type="checkbox"/> Triple <input type="checkbox"/> Other <input type="checkbox"/> Other	Diameter: 42 x 32 in	<input type="checkbox"/> In Water <input type="checkbox"/> With Sediment:
<input type="checkbox"/> Open Channel	<input type="checkbox"/> Concrete <input type="checkbox"/> Earthen <input type="checkbox"/> Rip-Rap <input type="checkbox"/> Other	<input type="checkbox"/> Trapezoid <input type="checkbox"/> Parabolic <input type="checkbox"/> Other	Depth: _____ in Top Width: _____ in Bottom Width: _____	
Dry Weather Flow Present at Outfall During Inspection? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No (If No, skip to Certification Section)				
Description of Flow Rate <input type="checkbox"/> Trickle <input type="checkbox"/> Moderate <input type="checkbox"/> Significant <input checked="" type="checkbox"/> N/A				
DRY WEATHER FLOW EVALUATION				
Does the dry weather flow contain color? <input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, provide a description below.				
Does the dry weather flow contain an odor? <input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, provide a description below.				
Is there an observed change in the receiving waters as a result of the discharge? <input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, provide a description below.				
Does the dry weather flow contain floating solids, scum, sheen or substances that result in deposits? <input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, provide a description below.				



Were sample(s) collected of the dry weather flow? <input type="checkbox"/> Yes <input type="checkbox"/> No (If Yes, No. Samples: _____)					
<b>FIELD / LABORATORY ANALYSIS</b>					
<b>PARAMETER</b>	<b>RESULTS</b>	<b>UNITS</b>	<b>PARAMETER</b>	<b>RESULTS</b>	<b>UNITS</b>
Flow Rate		GPM	Fecal Coliform		No./100 mL
pH		S.U.	COD		mg/L
Total Residual Chlorine (TRC)		mg/L	BOD5		mg/L
Conductivity		µmhos/cm	TSS		mg/L
Ammonia-Nitrogen		mg/L	TDS		mg/L
Other: _____			Oil and Grease		mg/L
Other: _____			Other: _____		
Indicate the parameters above that were analyzed by a DEP-certified laboratory:					
<b>ILLICIT DISCHARGES</b>					
Is the dry weather flow an illicit discharge? <input type="checkbox"/> Yes <input type="checkbox"/> No					
If Yes, describe efforts made to determine the source(s) of the illicit discharge.					
Describe corrective actions taken by the permittee in response to the finding of an illicit discharge.					
Inspector Comments:					
<b>RESPONSIBLE OFFICIAL CERTIFICATION</b>					
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 gathered and evaluated 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 knowledge of violations. See 18 Pa. C.S. § 4904 (relating to unsworn falsification).					
Lettice Brown					
Responsible Official Name					
(717)324-6532			06/13/2018		
Telephone No.			Date		



## Photo Log

Photo No. 1: image.jpg








## MS4 OUTFALL FIELD SCREENING REPORT

BACKGROUND INFORMATION				
Permittee Name: CITY OF YORK		NPDES Permit No.: PA		
Date of Inspection: 06/08/18		Outfall ID No.: TR10		
Land Use in Outfall Drainage Area (Select All): <input type="checkbox"/> Industrial <input type="checkbox"/> Urban Residential <input type="checkbox"/> Commercial <input type="checkbox"/> Suburban Residential <input type="checkbox"/> Open Space <input type="checkbox"/> Other:		Latitude: 39 ° 56 ' 59.8 "		
		Latitude: -76 ° 43 ' 55.3 "		
		Dry Weather Inspection? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		
		Date of Previous Precipitation:		
		Amount of Previous Precipitation: in		
Inspector Name(s): Lettice Brown		Were Photographs Taken? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		
		Are Photographs Attached? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		
OUTFALL DESCRIPTION				
TYPE	MATERIAL	SHAPE	DIMENSIONS	SUBMERGED
<input type="checkbox"/> Closed Pipe	<input type="checkbox"/> RCP <input type="checkbox"/> CMP <input type="checkbox"/> PVC <input type="checkbox"/> HDPE <input type="checkbox"/> Steel <input type="checkbox"/> Other	<input type="checkbox"/> Circular <input type="checkbox"/> Single <input type="checkbox"/> Elliptical <input type="checkbox"/> Double <input type="checkbox"/> Box <input type="checkbox"/> Triple <input type="checkbox"/> Other <input type="checkbox"/> Other	Diameter: _____ in	<input type="checkbox"/> In Water <input type="checkbox"/> With Sediment:
<input checked="" type="checkbox"/> Open Channel	<input type="checkbox"/> Concrete <input type="checkbox"/> Earthen <input type="checkbox"/> Rip-Rap <input checked="" type="checkbox"/> Other	<input type="checkbox"/> Trapezoid <input type="checkbox"/> Parabolic <input checked="" type="checkbox"/> Other	Depth: _____ in Top Width: 60 in Bottom Width: 24	
Dry Weather Flow Present at Outfall During Inspection? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No (If No, skip to Certification Section)				
Description of Flow Rate <input type="checkbox"/> Trickle <input type="checkbox"/> Moderate <input type="checkbox"/> Significant <input checked="" type="checkbox"/> N/A				
DRY WEATHER FLOW EVALUATION				
Does the dry weather flow contain color? <input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, provide a description below.				
Does the dry weather flow contain an odor? <input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, provide a description below.				
Is there an observed change in the receiving waters as a result of the discharge? <input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, provide a description below.				
Does the dry weather flow contain floating solids, scum, sheen or substances that result in deposits? <input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, provide a description below.				

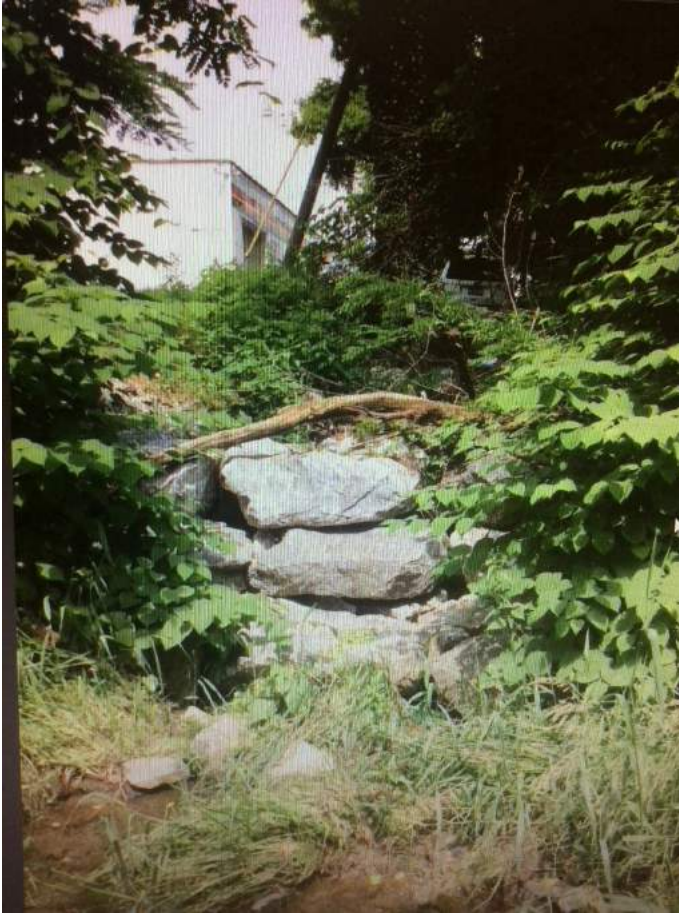


Were sample(s) collected of the dry weather flow? <input type="checkbox"/> Yes <input type="checkbox"/> No (If Yes, No. Samples: _____)					
<b>FIELD / LABORATORY ANALYSIS</b>					
<b>PARAMETER</b>	<b>RESULTS</b>	<b>UNITS</b>	<b>PARAMETER</b>	<b>RESULTS</b>	<b>UNITS</b>
Flow Rate		GPM	Fecal Coliform		No./100 mL
pH		S.U.	COD		mg/L
Total Residual Chlorine (TRC)		mg/L	BOD5		mg/L
Conductivity		µmhos/cm	TSS		mg/L
Ammonia-Nitrogen		mg/L	TDS		mg/L
Other: _____			Oil and Grease		mg/L
Other: _____			Other: _____		
Indicate the parameters above that were analyzed by a DEP-certified laboratory:					
<b>ILLICIT DISCHARGES</b>					
Is the dry weather flow an illicit discharge? <input type="checkbox"/> Yes <input type="checkbox"/> No					
If Yes, describe efforts made to determine the source(s) of the illicit discharge.					
Describe corrective actions taken by the permittee in response to the finding of an illicit discharge.					
Inspector Comments: Needs a lot of TLC. Very eroded					
<b>RESPONSIBLE OFFICIAL CERTIFICATION</b>					
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 gathered and evaluated 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 knowledge of violations. See 18 Pa. C.S. § 4904 (relating to unsworn falsification).					
Lettice Brown					
Responsible Official Name					
(717)324-6532			06/13/2018		
Telephone No.			Date		



## Photo Log

Photo No. 1: image.jpg








## MS4 OUTFALL FIELD SCREENING REPORT

BACKGROUND INFORMATION				
Permittee Name: CITY OF YORK		NPDES Permit No.: PA		
Date of Inspection: 06/08/18		Outfall ID No.: TR13		
Land Use in Outfall Drainage Area (Select All): <input type="checkbox"/> Industrial <input type="checkbox"/> Urban Residential <input type="checkbox"/> Commercial <input type="checkbox"/> Suburban Residential <input type="checkbox"/> Open Space <input type="checkbox"/> Other:		Latitude: 39 ° 57 ' 2.8 "		
		Latitude: -76 ° 43 ' 57.6 "		
		Dry Weather Inspection? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		
		Date of Previous Precipitation:		
		Amount of Previous Precipitation: in		
Inspector Name(s): Lettice Brown		Were Photographs Taken? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		
		Are Photographs Attached? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		
OUTFALL DESCRIPTION				
TYPE	MATERIAL	SHAPE	DIMENSIONS	SUBMERGED
<input type="checkbox"/> Closed Pipe	<input type="checkbox"/> RCP <input type="checkbox"/> CMP <input type="checkbox"/> PVC <input type="checkbox"/> HDPE <input type="checkbox"/> Steel <input type="checkbox"/> Other	<input type="checkbox"/> Circular <input type="checkbox"/> Single <input type="checkbox"/> Elliptical <input type="checkbox"/> Double <input type="checkbox"/> Box <input type="checkbox"/> Triple <input type="checkbox"/> Other <input type="checkbox"/> Other	Diameter: _____ in	<input type="checkbox"/> In Water <input type="checkbox"/> With Sediment:
<input checked="" type="checkbox"/> Open Channel	<input type="checkbox"/> Concrete <input type="checkbox"/> Earthen <input type="checkbox"/> Rip-Rap <input checked="" type="checkbox"/> Other	<input type="checkbox"/> Trapezoid <input checked="" type="checkbox"/> Parabolic <input type="checkbox"/> Other	Depth: _____ in Top Width: 30 in Bottom Width: 10	
Dry Weather Flow Present at Outfall During Inspection? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No (If No, skip to Certification Section)				
Description of Flow Rate <input type="checkbox"/> Trickle <input type="checkbox"/> Moderate <input type="checkbox"/> Significant <input checked="" type="checkbox"/> N/A				
DRY WEATHER FLOW EVALUATION				
Does the dry weather flow contain color? <input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, provide a description below.				
Does the dry weather flow contain an odor? <input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, provide a description below.				
Is there an observed change in the receiving waters as a result of the discharge? <input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, provide a description below.				
Does the dry weather flow contain floating solids, scum, sheen or substances that result in deposits? <input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, provide a description below.				



Were sample(s) collected of the dry weather flow? <input type="checkbox"/> Yes <input type="checkbox"/> No (If Yes, No. Samples: _____)					
<b>FIELD / LABORATORY ANALYSIS</b>					
<b>PARAMETER</b>	<b>RESULTS</b>	<b>UNITS</b>	<b>PARAMETER</b>	<b>RESULTS</b>	<b>UNITS</b>
Flow Rate		GPM	Fecal Coliform		No./100 mL
pH		S.U.	COD		mg/L
Total Residual Chlorine (TRC)		mg/L	BOD5		mg/L
Conductivity		µmhos/cm	TSS		mg/L
Ammonia-Nitrogen		mg/L	TDS		mg/L
Other: _____			Oil and Grease		mg/L
Other: _____			Other: _____		
Indicate the parameters above that were analyzed by a DEP-certified laboratory:					
<b>ILLICIT DISCHARGES</b>					
Is the dry weather flow an illicit discharge? <input type="checkbox"/> Yes <input type="checkbox"/> No					
If Yes, describe efforts made to determine the source(s) of the illicit discharge.					
Describe corrective actions taken by the permittee in response to the finding of an illicit discharge.					
Inspector Comments:					
<b>RESPONSIBLE OFFICIAL CERTIFICATION</b>					
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 gathered and evaluated 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 knowledge of violations. See 18 Pa. C.S. § 4904 (relating to unsworn falsification).					
Lettice Brown					
Responsible Official Name					
(717)324-6532			06/13/2018		
Telephone No.			Date		



## Photo Log

Photo No. 1: image.jpg








## MS4 OUTFALL FIELD SCREENING REPORT

BACKGROUND INFORMATION				
Permittee Name: CITY OF YORK		NPDES Permit No.: PA		
Date of Inspection: 06/08/18		Outfall ID No.: TR12		
Land Use in Outfall Drainage Area (Select All): <input type="checkbox"/> Industrial <input type="checkbox"/> Urban Residential <input type="checkbox"/> Commercial <input type="checkbox"/> Suburban Residential <input type="checkbox"/> Open Space <input type="checkbox"/> Other:		Latitude: 39 ° 57 ' 2.5 "		
		Latitude: -76 ° 43 ' 57.8 "		
		Dry Weather Inspection? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		
		Date of Previous Precipitation:		
Inspector Name(s): Lettice Brown		Amount of Previous Precipitation: in		
		Were Photographs Taken? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		
		Are Photographs Attached? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		
OUTFALL DESCRIPTION				
TYPE	MATERIAL	SHAPE	DIMENSIONS	SUBMERGED
<input checked="" type="checkbox"/> Closed Pipe	<input type="checkbox"/> RCP <input checked="" type="checkbox"/> CMP <input type="checkbox"/> PVC <input type="checkbox"/> HDPE <input type="checkbox"/> Steel <input type="checkbox"/> Other	<input checked="" type="checkbox"/> Circular <input checked="" type="checkbox"/> Single <input type="checkbox"/> Elliptical <input type="checkbox"/> Double <input type="checkbox"/> Box <input type="checkbox"/> Triple <input type="checkbox"/> Other <input type="checkbox"/> Other	Diameter: 12 in	<input type="checkbox"/> In Water <input type="checkbox"/> With Sediment:
<input type="checkbox"/> Open Channel	<input type="checkbox"/> Concrete <input type="checkbox"/> Earthen <input type="checkbox"/> Rip-Rap <input type="checkbox"/> Other	<input type="checkbox"/> Trapezoid <input type="checkbox"/> Parabolic <input type="checkbox"/> Other	Depth: _____ in Top Width: _____ in Bottom Width: _____	
Dry Weather Flow Present at Outfall During Inspection? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No (If No, skip to Certification Section)				
Description of Flow Rate <input type="checkbox"/> Trickle <input type="checkbox"/> Moderate <input type="checkbox"/> Significant <input checked="" type="checkbox"/> N/A				
DRY WEATHER FLOW EVALUATION				
Does the dry weather flow contain color? <input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, provide a description below.				
Does the dry weather flow contain an odor? <input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, provide a description below.				
Is there an observed change in the receiving waters as a result of the discharge? <input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, provide a description below.				
Does the dry weather flow contain floating solids, scum, sheen or substances that result in deposits? <input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, provide a description below.				



Were sample(s) collected of the dry weather flow? <input type="checkbox"/> Yes <input type="checkbox"/> No (If Yes, No. Samples: _____)					
<b>FIELD / LABORATORY ANALYSIS</b>					
<b>PARAMETER</b>	<b>RESULTS</b>	<b>UNITS</b>	<b>PARAMETER</b>	<b>RESULTS</b>	<b>UNITS</b>
Flow Rate		GPM	Fecal Coliform		No./100 mL
pH		S.U.	COD		mg/L
Total Residual Chlorine (TRC)		mg/L	BOD5		mg/L
Conductivity		µmhos/cm	TSS		mg/L
Ammonia-Nitrogen		mg/L	TDS		mg/L
Other: _____			Oil and Grease		mg/L
Other: _____			Other: _____		
Indicate the parameters above that were analyzed by a DEP-certified laboratory:					
<b>ILLICIT DISCHARGES</b>					
Is the dry weather flow an illicit discharge? <input type="checkbox"/> Yes <input type="checkbox"/> No					
If Yes, describe efforts made to determine the source(s) of the illicit discharge.					
Describe corrective actions taken by the permittee in response to the finding of an illicit discharge.					
Inspector Comments:					
<b>RESPONSIBLE OFFICIAL CERTIFICATION</b>					
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 gathered and evaluated 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 knowledge of violations. See 18 Pa. C.S. § 4904 (relating to unsworn falsification).					
Lettice Brown					
Responsible Official Name					
(717)324-6532			06/13/2018		
Telephone No.			Date		



## Photo Log

Photo No. 1: image.jpg








## MS4 OUTFALL FIELD SCREENING REPORT

BACKGROUND INFORMATION				
Permittee Name: CITY OF YORK		NPDES Permit No.: PA		
Date of Inspection: 06/08/18		Outfall ID No.: TR11		
Land Use in Outfall Drainage Area (Select All): <input type="checkbox"/> Industrial <input type="checkbox"/> Urban Residential <input type="checkbox"/> Commercial <input type="checkbox"/> Suburban Residential <input type="checkbox"/> Open Space <input type="checkbox"/> Other:		Latitude: 39 ° 57 ' 1.1 "		
		Latitude: -76 ° 43 ' 56.5 "		
		Dry Weather Inspection? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		
		Date of Previous Precipitation:		
		Amount of Previous Precipitation: in		
Inspector Name(s): Lettice Brown		Were Photographs Taken? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		
		Are Photographs Attached? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		
OUTFALL DESCRIPTION				
TYPE	MATERIAL	SHAPE	DIMENSIONS	SUBMERGED
<input type="checkbox"/> Closed Pipe	<input type="checkbox"/> RCP <input type="checkbox"/> CMP <input type="checkbox"/> PVC <input type="checkbox"/> HDPE <input type="checkbox"/> Steel <input type="checkbox"/> Other	<input type="checkbox"/> Circular <input type="checkbox"/> Single <input type="checkbox"/> Elliptical <input type="checkbox"/> Double <input type="checkbox"/> Box <input type="checkbox"/> Triple <input type="checkbox"/> Other <input type="checkbox"/> Other	Diameter: _____ in	<input type="checkbox"/> In Water <input type="checkbox"/> With Sediment:
<input checked="" type="checkbox"/> Open Channel	<input type="checkbox"/> Concrete <input checked="" type="checkbox"/> Earthen <input type="checkbox"/> Rip-Rap <input type="checkbox"/> Other	<input type="checkbox"/> Trapezoid <input type="checkbox"/> Parabolic <input checked="" type="checkbox"/> Other	Depth: _____ in Top Width: 24 in Bottom Width: 12	
Dry Weather Flow Present at Outfall During Inspection? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No (If No, skip to Certification Section)				
Description of Flow Rate <input type="checkbox"/> Trickle <input type="checkbox"/> Moderate <input type="checkbox"/> Significant <input checked="" type="checkbox"/> N/A				
DRY WEATHER FLOW EVALUATION				
Does the dry weather flow contain color? <input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, provide a description below.				
Does the dry weather flow contain an odor? <input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, provide a description below.				
Is there an observed change in the receiving waters as a result of the discharge? <input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, provide a description below.				
Does the dry weather flow contain floating solids, scum, sheen or substances that result in deposits? <input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, provide a description below.				



Were sample(s) collected of the dry weather flow? <input type="checkbox"/> Yes <input type="checkbox"/> No (If Yes, No. Samples: _____)					
<b>FIELD / LABORATORY ANALYSIS</b>					
<b>PARAMETER</b>	<b>RESULTS</b>	<b>UNITS</b>	<b>PARAMETER</b>	<b>RESULTS</b>	<b>UNITS</b>
Flow Rate		GPM	Fecal Coliform		No./100 mL
pH		S.U.	COD		mg/L
Total Residual Chlorine (TRC)		mg/L	BOD5		mg/L
Conductivity		µmhos/cm	TSS		mg/L
Ammonia-Nitrogen		mg/L	TDS		mg/L
Other: _____			Oil and Grease		mg/L
Other: _____			Other: _____		
Indicate the parameters above that were analyzed by a DEP-certified laboratory:					
<b>ILLICIT DISCHARGES</b>					
Is the dry weather flow an illicit discharge? <input type="checkbox"/> Yes <input type="checkbox"/> No					
If Yes, describe efforts made to determine the source(s) of the illicit discharge.					
Describe corrective actions taken by the permittee in response to the finding of an illicit discharge.					
Inspector Comments: Very overgrown. Needs TLC majorly					
<b>RESPONSIBLE OFFICIAL CERTIFICATION</b>					
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 gathered and evaluated 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 knowledge of violations. See 18 Pa. C.S. § 4904 (relating to unsworn falsification).					
Lettice Brown					
Responsible Official Name					
(717)324-6532			06/13/2018		
Telephone No.			Date		



## Photo Log

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## OUTFALL RECONNAISSANCE INVENTORY/ SAMPLE COLLECTION FIELD SHEET

### Section 1: Background Data

Subwatershed:		Outfall ID: CC76	
Today's date: 06/15/17		Time (Military): 1:50PM	
Investigators: Lettice Brown		Form completed by: Lettice Brown	
Temperature (°F): 83		Rainfall (in.): Last 24 hours: 0 Last 48 hours: 0	
Latitude: 39.9602762	Longitude: -76.7320895	GPS Unit:	GPS LMK #:
Camera:		Photo #'s:	
Land Use in Drainage Area (Check all that apply): <input type="checkbox"/> Industrial <input type="checkbox"/> Ultra-Urban Residential <input type="checkbox"/> Suburban Residential <input type="checkbox"/> Commercial		<input type="checkbox"/> Open Space <input type="checkbox"/> Institutional Other: Known Industries:	
Notes (e.g., origin of outfall, if known): York City			

### Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE	DIMENSIONS (IN.)	SUBMERGED
<input checked="" type="checkbox"/> Closed Pipe	<input type="checkbox"/> RCP <input type="checkbox"/> CMP <input type="checkbox"/> PVC <input type="checkbox"/> HDPE <input type="checkbox"/> Steel <input checked="" type="checkbox"/> Other: TCP	<input checked="" type="checkbox"/> Circular <input type="checkbox"/> Elliptical <input type="checkbox"/> Box <input type="checkbox"/> Other:	<input checked="" type="checkbox"/> Single <input type="checkbox"/> Double <input type="checkbox"/> Triple <input type="checkbox"/> Other:	Diameter/Dimensions: 18  In Water: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully With Sediment: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully
<input type="checkbox"/> Open drainage	<input type="checkbox"/> Concrete <input type="checkbox"/> Earthen <input type="checkbox"/> rip-rap <input type="checkbox"/> Other:	<input type="checkbox"/> Trapezoid <input type="checkbox"/> Parabolic <input type="checkbox"/> Other:	Depth:  Top Width:  Bottom Width:	
<input type="checkbox"/> In-Stream	(applicable when collecting samples)			
Flow Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <i>If No, Skip to Section 5</i>			
Flow Description (If present)	<input type="checkbox"/> Trickle <input type="checkbox"/> Moderate <input type="checkbox"/> Substantial			

### Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER	RESULT	UNIT	EQUIPMENT	
<input type="checkbox"/> Flow #1	Volume		Liter	Bottle
	Time to fill		Seconds	
<input type="checkbox"/> Flow #2	Flow depth		Inches	Tape measure
	Flow width		Inches	Tape measure
	Measured length		Inches	Tape measure
	Time of travel		Seconds	Stop watch
Temperature			°F	Thermometer
pH			pH Units	Test strip/Probe
Ammonia			mg/L	Test strip



Outfall Reconnaissance Inventory Field Sheet

Section 4: Physical Indicators for Flowing Outfalls Only

Are Any Physical Indicators Present in the flow? ☐ Yes ☐ No *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	<input type="checkbox"/>	<input type="checkbox"/> Sewage <input type="checkbox"/> Rancid/sour <input type="checkbox"/> Petroleum/gas <input type="checkbox"/> Sulfide <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint	<input type="checkbox"/> 2 - Easily detected	<input type="checkbox"/> 3 - Noticeable from a distance
Color	<input type="checkbox"/>	<input type="checkbox"/> Clear <input type="checkbox"/> Brown <input type="checkbox"/> Gray <input type="checkbox"/> Yellow <input type="checkbox"/> Green <input type="checkbox"/> Orange <input type="checkbox"/> Red <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint colors in sample bottle	<input type="checkbox"/> 2 - Clearly visible in sample bottle	<input type="checkbox"/> 3 - Clearly visible in outfall flow
Turbidity	<input type="checkbox"/>	See severity	<input type="checkbox"/> 1 - Slight cloudiness	<input type="checkbox"/> 2 - Cloudy	<input type="checkbox"/> 3 - Opaque
Floatables -Does Not Include Trash!!	<input type="checkbox"/>	<input type="checkbox"/> Sewage (Toilet Paper, etc.) <input type="checkbox"/> Suds <input type="checkbox"/> Petroleum (oil sheen) <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Few/slight; origin not obvious	<input type="checkbox"/> 2 - Some; indications of origin (e.g., possible suds or oil sheen)	<input type="checkbox"/> 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☐ Yes ☒ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	<input type="checkbox"/>	<input type="checkbox"/> Spalling, Cracking or Chipping <input type="checkbox"/> Peeling Paint <input type="checkbox"/> Corrosion	
Deposits/Stains	<input type="checkbox"/>	<input type="checkbox"/> Oily <input type="checkbox"/> Flow Line <input type="checkbox"/> Paint <input type="checkbox"/> Other:	
Abnormal Vegetation	<input type="checkbox"/>	<input type="checkbox"/> Excessive <input type="checkbox"/> Inhibited	
Poor pool quality	<input type="checkbox"/>	<input type="checkbox"/> Odors <input type="checkbox"/> Colors <input type="checkbox"/> Floatables <input type="checkbox"/> Oil Sheen <input type="checkbox"/> Suds <input type="checkbox"/> Excessive Algae <input type="checkbox"/> Other:	
Pipe benthic growth	<input type="checkbox"/>	<input type="checkbox"/> Brown <input type="checkbox"/> Orange <input type="checkbox"/> Green <input type="checkbox"/> Other:	

Section 6: Overall Outfall Characterization

<input checked="" type="checkbox"/> Unlikely	<input type="checkbox"/> Potential (presence of two or more indicators)	<input type="checkbox"/> Suspect (one or more indicators with a severity of 3)	<input type="checkbox"/> Obvious
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Section 7: Data Collection

1. Sample for the lab?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
2. If yes, collected from:	<input type="checkbox"/> Flow <input type="checkbox"/> Pool
3. Intermittent flow trap set?	<input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, type: <input type="checkbox"/> OBM <input type="checkbox"/> Caulk dam

Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?



## Photo Log

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## OUTFALL RECONNAISSANCE INVENTORY/ SAMPLE COLLECTION FIELD SHEET

### Section 1: Background Data

Subwatershed:		Outfall ID: CC77	
Today's date: 06/15/17		Time (Military): 1:50PM	
Investigators: Lettice Brown		Form completed by: Lettice Brown	
Temperature (°F): 83		Rainfall (in.): Last 24 hours: 0 Last 48 hours: 0	
Latitude: 39.9602621	Longitude: -76.7320778	GPS Unit:	GPS LMK #:
Camera:		Photo #'s:	
Land Use in Drainage Area (Check all that apply): <input type="checkbox"/> Industrial <input type="checkbox"/> Ultra-Urban Residential <input type="checkbox"/> Suburban Residential <input type="checkbox"/> Commercial		<input type="checkbox"/> Open Space <input type="checkbox"/> Institutional Other: Known Industries:	
Notes (e.g., origin of outfall, if known): York City			

### Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE	DIMENSIONS (IN.)	SUBMERGED
<input checked="" type="checkbox"/> Closed Pipe	<input type="checkbox"/> RCP <input type="checkbox"/> CMP <input type="checkbox"/> PVC <input type="checkbox"/> HDPE <input type="checkbox"/> Steel <input checked="" type="checkbox"/> Other: TCP	<input checked="" type="checkbox"/> Circular <input type="checkbox"/> Elliptical <input type="checkbox"/> Box <input type="checkbox"/> Other:	<input checked="" type="checkbox"/> Single <input type="checkbox"/> Double <input type="checkbox"/> Triple <input type="checkbox"/> Other:	Diameter/Dimensions: 18  In Water: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully With Sediment: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully
<input type="checkbox"/> Open drainage	<input type="checkbox"/> Concrete <input type="checkbox"/> Earthen <input type="checkbox"/> rip-rap <input type="checkbox"/> Other:	<input type="checkbox"/> Trapezoid <input type="checkbox"/> Parabolic <input type="checkbox"/> Other:	Depth:  Top Width:  Bottom Width:	
<input type="checkbox"/> In-Stream	(applicable when collecting samples)			
Flow Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <i>If No, Skip to Section 5</i>			
Flow Description (If present)	<input type="checkbox"/> Trickle <input type="checkbox"/> Moderate <input type="checkbox"/> Substantial			

### Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER		RESULT	UNIT	EQUIPMENT
<input type="checkbox"/> Flow #1	Volume		Liter	Bottle
	Time to fill		Seconds	
<input type="checkbox"/> Flow #2	Flow depth		Inches	Tape measure
	Flow width		Inches	Tape measure
	Measured length		Inches	Tape measure
	Time of travel		Seconds	Stop watch
Temperature			°F	Thermometer
pH			pH Units	Test strip/Probe
Ammonia			mg/L	Test strip



Outfall Reconnaissance Inventory Field Sheet

Section 4: Physical Indicators for Flowing Outfalls Only

Are Any Physical Indicators Present in the flow? ☐ Yes ☐ No *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	<input type="checkbox"/>	<input type="checkbox"/> Sewage <input type="checkbox"/> Rancid/sour <input type="checkbox"/> Petroleum/gas <input type="checkbox"/> Sulfide <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint	<input type="checkbox"/> 2 - Easily detected	<input type="checkbox"/> 3 - Noticeable from a distance
Color	<input type="checkbox"/>	<input type="checkbox"/> Clear <input type="checkbox"/> Brown <input type="checkbox"/> Gray <input type="checkbox"/> Yellow <input type="checkbox"/> Green <input type="checkbox"/> Orange <input type="checkbox"/> Red <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint colors in sample bottle	<input type="checkbox"/> 2 - Clearly visible in sample bottle	<input type="checkbox"/> 3 - Clearly visible in outfall flow
Turbidity	<input type="checkbox"/>	See severity	<input type="checkbox"/> 1 - Slight cloudiness	<input type="checkbox"/> 2 - Cloudy	<input type="checkbox"/> 3 - Opaque
Floatables -Does Not Include Trash!!	<input type="checkbox"/>	<input type="checkbox"/> Sewage (Toilet Paper, etc.) <input type="checkbox"/> Suds <input type="checkbox"/> Petroleum (oil sheen) <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Few/slight; origin not obvious	<input type="checkbox"/> 2 - Some; indications of origin (e.g., possible suds or oil sheen)	<input type="checkbox"/> 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☐ Yes ☒ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	<input type="checkbox"/>	<input type="checkbox"/> Spalling, Cracking or Chipping <input type="checkbox"/> Peeling Paint <input type="checkbox"/> Corrosion	
Deposits/Stains	<input type="checkbox"/>	<input type="checkbox"/> Oily <input type="checkbox"/> Flow Line <input type="checkbox"/> Paint <input type="checkbox"/> Other:	
Abnormal Vegetation	<input type="checkbox"/>	<input type="checkbox"/> Excessive <input type="checkbox"/> Inhibited	
Poor pool quality	<input type="checkbox"/>	<input type="checkbox"/> Odors <input type="checkbox"/> Colors <input type="checkbox"/> Floatables <input type="checkbox"/> Oil Sheen <input type="checkbox"/> Suds <input type="checkbox"/> Excessive Algae <input type="checkbox"/> Other:	
Pipe benthic growth	<input type="checkbox"/>	<input type="checkbox"/> Brown <input type="checkbox"/> Orange <input type="checkbox"/> Green <input type="checkbox"/> Other:	

Section 6: Overall Outfall Characterization

<input checked="" type="checkbox"/> Unlikely	<input type="checkbox"/> Potential (presence of two or more indicators)	<input type="checkbox"/> Suspect (one or more indicators with a severity of 3)	<input type="checkbox"/> Obvious
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Section 7: Data Collection

1. Sample for the lab?	<input type="checkbox"/> Yes <input type="checkbox"/> No
2. If yes, collected from:	<input type="checkbox"/> Flow <input type="checkbox"/> Pool
3. Intermittent flow trap set?	<input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, type: <input type="checkbox"/> OBM <input type="checkbox"/> Caulk dam

Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?



## Photo Log

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## OUTFALL RECONNAISSANCE INVENTORY/ SAMPLE COLLECTION FIELD SHEET

### Section 1: Background Data

Subwatershed:		Outfall ID: CC83	
Today's date: 06/15/17		Time (Military): 2:00PM	
Investigators: Lettice Brown		Form completed by: Lettice Brown	
Temperature (°F): 83		Rainfall (in.): Last 24 hours: 0 Last 48 hours: 0	
Latitude: 39.9596091	Longitude: -76.7319175	GPS Unit:	GPS LMK #:
Camera:		Photo #'s:	
Land Use in Drainage Area (Check all that apply): <input type="checkbox"/> Industrial <input type="checkbox"/> Ultra-Urban Residential <input type="checkbox"/> Suburban Residential <input type="checkbox"/> Commercial		<input type="checkbox"/> Open Space <input type="checkbox"/> Institutional Other: Known Industries:	
Notes (e.g., origin of outfall, if known): York City			

### Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE	DIMENSIONS (IN.)	SUBMERGED
<input checked="" type="checkbox"/> Closed Pipe	<input type="checkbox"/> RCP <input type="checkbox"/> CMP <input type="checkbox"/> PVC <input type="checkbox"/> HDPE <input type="checkbox"/> Steel <input checked="" type="checkbox"/> Other: Brick	<input checked="" type="checkbox"/> Circular <input type="checkbox"/> Elliptical <input type="checkbox"/> Box <input type="checkbox"/> Other:	<input checked="" type="checkbox"/> Single <input type="checkbox"/> Double <input type="checkbox"/> Triple <input type="checkbox"/> Other:	Diameter/Dimensions: 48  In Water: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully With Sediment: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully
<input type="checkbox"/> Open drainage	<input type="checkbox"/> Concrete <input type="checkbox"/> Earthen <input type="checkbox"/> rip-rap <input type="checkbox"/> Other:	<input type="checkbox"/> Trapezoid <input type="checkbox"/> Parabolic <input type="checkbox"/> Other:	Depth:  Top Width:  Bottom Width:	
<input type="checkbox"/> In-Stream	(applicable when collecting samples)			
Flow Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <i>If No, Skip to Section 5</i>			
Flow Description (If present)	<input type="checkbox"/> Trickle <input type="checkbox"/> Moderate <input type="checkbox"/> Substantial			

### Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER		RESULT	UNIT	EQUIPMENT
<input type="checkbox"/> Flow #1	Volume		Liter	Bottle
	Time to fill		Seconds	
<input type="checkbox"/> Flow #2	Flow depth		Inches	Tape measure
	Flow width		Inches	Tape measure
	Measured length		Inches	Tape measure
	Time of travel		Seconds	Stop watch
Temperature			°F	Thermometer
pH			pH Units	Test strip/Probe
Ammonia			mg/L	Test strip



Outfall Reconnaissance Inventory Field Sheet

Section 4: Physical Indicators for Flowing Outfalls Only

Are Any Physical Indicators Present in the flow? ☐ Yes ☐ No *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	<input type="checkbox"/>	<input type="checkbox"/> Sewage <input type="checkbox"/> Rancid/sour <input type="checkbox"/> Petroleum/gas <input type="checkbox"/> Sulfide <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint	<input type="checkbox"/> 2 - Easily detected	<input type="checkbox"/> 3 - Noticeable from a distance
Color	<input type="checkbox"/>	<input type="checkbox"/> Clear <input type="checkbox"/> Brown <input type="checkbox"/> Gray <input type="checkbox"/> Yellow <input type="checkbox"/> Green <input type="checkbox"/> Orange <input type="checkbox"/> Red <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint colors in sample bottle	<input type="checkbox"/> 2 - Clearly visible in sample bottle	<input type="checkbox"/> 3 - Clearly visible in outfall flow
Turbidity	<input type="checkbox"/>	See severity	<input type="checkbox"/> 1 - Slight cloudiness	<input type="checkbox"/> 2 - Cloudy	<input type="checkbox"/> 3 - Opaque
Floatables -Does Not Include Trash!!	<input type="checkbox"/>	<input type="checkbox"/> Sewage (Toilet Paper, etc.) <input type="checkbox"/> Suds <input type="checkbox"/> Petroleum (oil sheen) <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Few/slight; origin not obvious	<input type="checkbox"/> 2 - Some; indications of origin (e.g., possible suds or oil sheen)	<input type="checkbox"/> 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☐ Yes ☒ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	<input type="checkbox"/>	<input type="checkbox"/> Spalling, Cracking or Chipping <input type="checkbox"/> Peeling Paint <input type="checkbox"/> Corrosion	
Deposits/Stains	<input type="checkbox"/>	<input type="checkbox"/> Oily <input type="checkbox"/> Flow Line <input type="checkbox"/> Paint <input type="checkbox"/> Other:	
Abnormal Vegetation	<input type="checkbox"/>	<input type="checkbox"/> Excessive <input type="checkbox"/> Inhibited	
Poor pool quality	<input type="checkbox"/>	<input type="checkbox"/> Odors <input type="checkbox"/> Colors <input type="checkbox"/> Floatables <input type="checkbox"/> Oil Sheen <input type="checkbox"/> Suds <input type="checkbox"/> Excessive Algae <input type="checkbox"/> Other:	
Pipe benthic growth	<input type="checkbox"/>	<input type="checkbox"/> Brown <input type="checkbox"/> Orange <input type="checkbox"/> Green <input type="checkbox"/> Other:	

Section 6: Overall Outfall Characterization

<input checked="" type="checkbox"/> Unlikely	<input type="checkbox"/> Potential (presence of two or more indicators)	<input type="checkbox"/> Suspect (one or more indicators with a severity of 3)	<input type="checkbox"/> Obvious
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Section 7: Data Collection

1. Sample for the lab?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
2. If yes, collected from:	<input type="checkbox"/> Flow <input type="checkbox"/> Pool
3. Intermittent flow trap set?	<input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, type: <input type="checkbox"/> OBM <input type="checkbox"/> Caulk dam

Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?



## Photo Log

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## OUTFALL RECONNAISSANCE INVENTORY/ SAMPLE COLLECTION FIELD SHEET

### Section 1: Background Data

Subwatershed:		Outfall ID: CC85	
Today's date: 06/15/17		Time (Military): 2:00PM	
Investigators: Lettice Brown		Form completed by: Lettice Brown	
Temperature (°F): 83		Rainfall (in.): Last 24 hours: 0 Last 48 hours: 0	
Latitude: 39.9594750	Longitude: -76.7319058	GPS Unit:	GPS LMK #:
Camera:		Photo #'s:	
Land Use in Drainage Area (Check all that apply): <input type="checkbox"/> Industrial <input type="checkbox"/> Ultra-Urban Residential <input type="checkbox"/> Suburban Residential <input type="checkbox"/> Commercial		<input type="checkbox"/> Open Space <input type="checkbox"/> Institutional Other: Known Industries:	
Notes (e.g., origin of outfall, if known): York City			

### Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE	DIMENSIONS (IN.)	SUBMERGED
<input checked="" type="checkbox"/> Closed Pipe	<input type="checkbox"/> RCP <input type="checkbox"/> CMP <input type="checkbox"/> PVC <input type="checkbox"/> HDPE <input type="checkbox"/> Steel <input checked="" type="checkbox"/> Other: TCP	<input checked="" type="checkbox"/> Circular <input type="checkbox"/> Elliptical <input type="checkbox"/> Box <input type="checkbox"/> Other:	<input checked="" type="checkbox"/> Single <input type="checkbox"/> Double <input type="checkbox"/> Triple <input type="checkbox"/> Other:	Diameter/Dimensions: 24  In Water: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully With Sediment: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully
<input type="checkbox"/> Open drainage	<input type="checkbox"/> Concrete <input type="checkbox"/> Earthen <input type="checkbox"/> rip-rap <input type="checkbox"/> Other:	<input type="checkbox"/> Trapezoid <input type="checkbox"/> Parabolic <input type="checkbox"/> Other:	Depth:  Top Width:  Bottom Width:	
<input type="checkbox"/> In-Stream	(applicable when collecting samples)			
Flow Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <i>If No, Skip to Section 5</i>			
Flow Description (If present)	<input type="checkbox"/> Trickle <input type="checkbox"/> Moderate <input type="checkbox"/> Substantial			

### Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER		RESULT	UNIT	EQUIPMENT
<input type="checkbox"/> Flow #1	Volume		Liter	Bottle
	Time to fill		Seconds	
<input type="checkbox"/> Flow #2	Flow depth		Inches	Tape measure
	Flow width		Inches	Tape measure
	Measured length		Inches	Tape measure
	Time of travel		Seconds	Stop watch
Temperature			°F	Thermometer
pH			pH Units	Test strip/Probe
Ammonia			mg/L	Test strip



Outfall Reconnaissance Inventory Field Sheet

Section 4: Physical Indicators for Flowing Outfalls Only

Are Any Physical Indicators Present in the flow? ☐ Yes ☐ No (If No, Skip to Section 5)

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	<input type="checkbox"/>	<input type="checkbox"/> Sewage <input type="checkbox"/> Rancid/sour <input type="checkbox"/> Petroleum/gas <input type="checkbox"/> Sulfide <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint	<input type="checkbox"/> 2 - Easily detected	<input type="checkbox"/> 3 - Noticeable from a distance
Color	<input type="checkbox"/>	<input type="checkbox"/> Clear <input type="checkbox"/> Brown <input type="checkbox"/> Gray <input type="checkbox"/> Yellow <input type="checkbox"/> Green <input type="checkbox"/> Orange <input type="checkbox"/> Red <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint colors in sample bottle	<input type="checkbox"/> 2 - Clearly visible in sample bottle	<input type="checkbox"/> 3 - Clearly visible in outfall flow
Turbidity	<input type="checkbox"/>	See severity	<input type="checkbox"/> 1 - Slight cloudiness	<input type="checkbox"/> 2 - Cloudy	<input type="checkbox"/> 3 - Opaque
Floatables -Does Not Include Trash!!	<input type="checkbox"/>	<input type="checkbox"/> Sewage (Toilet Paper, etc.) <input type="checkbox"/> Suds <input type="checkbox"/> Petroleum (oil sheen) <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Few/slight; origin not obvious	<input type="checkbox"/> 2 - Some; indications of origin (e.g., possible suds or oil sheen)	<input type="checkbox"/> 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☐ Yes ☒ No (If No, Skip to Section 6)

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	<input type="checkbox"/>	<input type="checkbox"/> Spalling, Cracking or Chipping <input type="checkbox"/> Peeling Paint <input type="checkbox"/> Corrosion	
Deposits/Stains	<input type="checkbox"/>	<input type="checkbox"/> Oily <input type="checkbox"/> Flow Line <input type="checkbox"/> Paint <input type="checkbox"/> Other:	
Abnormal Vegetation	<input type="checkbox"/>	<input type="checkbox"/> Excessive <input type="checkbox"/> Inhibited	
Poor pool quality	<input type="checkbox"/>	<input type="checkbox"/> Odors <input type="checkbox"/> Colors <input type="checkbox"/> Floatables <input type="checkbox"/> Oil Sheen <input type="checkbox"/> Suds <input type="checkbox"/> Excessive Algae <input type="checkbox"/> Other:	
Pipe benthic growth	<input type="checkbox"/>	<input type="checkbox"/> Brown <input type="checkbox"/> Orange <input type="checkbox"/> Green <input type="checkbox"/> Other:	

Section 6: Overall Outfall Characterization

<input checked="" type="checkbox"/> Unlikely	<input type="checkbox"/> Potential (presence of two or more indicators)	<input type="checkbox"/> Suspect (one or more indicators with a severity of 3)	<input type="checkbox"/> Obvious
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Section 7: Data Collection

1. Sample for the lab?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
2. If yes, collected from:	<input type="checkbox"/> Flow <input type="checkbox"/> Pool
3. Intermittent flow trap set?	<input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, type: <input type="checkbox"/> OBM <input type="checkbox"/> Caulk dam

Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?



## Photo Log

Photo No. 1: image.jpg





## OUTFALL RECONNAISSANCE INVENTORY/ SAMPLE COLLECTION FIELD SHEET

### Section 1: Background Data

Subwatershed:		Outfall ID: CC86	
Today's date: 06/15/17		Time (Military): 2:15PM	
Investigators: Lettice Brown		Form completed by: Lettice Brown	
Temperature (°F): 83		Rainfall (in.): Last 24 hours: 0 Last 48 hours: 0	
Latitude: 39.9590686	Longitude: -76.7318636	GPS Unit:	GPS LMK #:
Camera:		Photo #'s:	
Land Use in Drainage Area (Check all that apply): <input type="checkbox"/> Industrial <input type="checkbox"/> Ultra-Urban Residential <input type="checkbox"/> Suburban Residential <input type="checkbox"/> Commercial		<input type="checkbox"/> Open Space <input type="checkbox"/> Institutional Other: Known Industries:	
Notes (e.g., origin of outfall, if known): York City			

### Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE	DIMENSIONS (IN.)	SUBMERGED
<input checked="" type="checkbox"/> Closed Pipe	<input type="checkbox"/> RCP <input checked="" type="checkbox"/> CMP <input type="checkbox"/> PVC <input type="checkbox"/> HDPE <input type="checkbox"/> Steel <input type="checkbox"/> Other:	<input checked="" type="checkbox"/> Circular <input type="checkbox"/> Elliptical <input type="checkbox"/> Box <input type="checkbox"/> Other:	<input checked="" type="checkbox"/> Single <input type="checkbox"/> Double <input type="checkbox"/> Triple <input type="checkbox"/> Other:	Diameter/Dimensions: 12  In Water: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully With Sediment: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully
<input type="checkbox"/> Open drainage	<input type="checkbox"/> Concrete <input type="checkbox"/> Earthen <input type="checkbox"/> rip-rap <input type="checkbox"/> Other:	<input type="checkbox"/> Trapezoid <input type="checkbox"/> Parabolic <input type="checkbox"/> Other:	Depth:  Top Width:  Bottom Width:	
<input type="checkbox"/> In-Stream	(applicable when collecting samples)			
Flow Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <i>If No, Skip to Section 5</i>			
Flow Description (If present)	<input type="checkbox"/> Trickle <input type="checkbox"/> Moderate <input type="checkbox"/> Substantial			

### Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER	RESULT	UNIT	EQUIPMENT	
<input type="checkbox"/> Flow #1	Volume	Liter	Bottle	
	Time to fill	Seconds		
<input type="checkbox"/> Flow #2	Flow depth	Inches	Tape measure	
	Flow width	Inches	Tape measure	
	Measured length	Inches	Tape measure	
	Time of travel	Seconds	Stop watch	
Temperature		°F	Thermometer	
pH		pH Units	Test strip/Probe	
Ammonia		mg/L	Test strip	



Outfall Reconnaissance Inventory Field Sheet

Section 4: Physical Indicators for Flowing Outfalls Only

Are Any Physical Indicators Present in the flow? ☐ Yes ☐ No (If No, Skip to Section 5)

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	<input type="checkbox"/>	<input type="checkbox"/> Sewage <input type="checkbox"/> Rancid/sour <input type="checkbox"/> Petroleum/gas <input type="checkbox"/> Sulfide <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint	<input type="checkbox"/> 2 - Easily detected	<input type="checkbox"/> 3 - Noticeable from a distance
Color	<input type="checkbox"/>	<input type="checkbox"/> Clear <input type="checkbox"/> Brown <input type="checkbox"/> Gray <input type="checkbox"/> Yellow <input type="checkbox"/> Green <input type="checkbox"/> Orange <input type="checkbox"/> Red <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint colors in sample bottle	<input type="checkbox"/> 2 - Clearly visible in sample bottle	<input type="checkbox"/> 3 - Clearly visible in outfall flow
Turbidity	<input type="checkbox"/>	See severity	<input type="checkbox"/> 1 - Slight cloudiness	<input type="checkbox"/> 2 - Cloudy	<input type="checkbox"/> 3 - Opaque
Floatables -Does Not Include Trash!!	<input type="checkbox"/>	<input type="checkbox"/> Sewage (Toilet Paper, etc.) <input type="checkbox"/> Suds <input type="checkbox"/> Petroleum (oil sheen) <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Few/slight; origin not obvious	<input type="checkbox"/> 2 - Some; indications of origin (e.g., possible suds or oil sheen)	<input type="checkbox"/> 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☐ Yes ☒ No (If No, Skip to Section 6)

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	<input type="checkbox"/>	<input type="checkbox"/> Spalling, Cracking or Chipping <input type="checkbox"/> Peeling Paint <input type="checkbox"/> Corrosion	
Deposits/Stains	<input type="checkbox"/>	<input type="checkbox"/> Oily <input type="checkbox"/> Flow Line <input type="checkbox"/> Paint <input type="checkbox"/> Other:	
Abnormal Vegetation	<input type="checkbox"/>	<input type="checkbox"/> Excessive <input type="checkbox"/> Inhibited	
Poor pool quality	<input type="checkbox"/>	<input type="checkbox"/> Odors <input type="checkbox"/> Colors <input type="checkbox"/> Floatables <input type="checkbox"/> Oil Sheen <input type="checkbox"/> Suds <input type="checkbox"/> Excessive Algae <input type="checkbox"/> Other:	
Pipe benthic growth	<input type="checkbox"/>	<input type="checkbox"/> Brown <input type="checkbox"/> Orange <input type="checkbox"/> Green <input type="checkbox"/> Other:	

Section 6: Overall Outfall Characterization

<input checked="" type="checkbox"/> Unlikely	<input type="checkbox"/> Potential (presence of two or more indicators)	<input type="checkbox"/> Suspect (one or more indicators with a severity of 3)	<input type="checkbox"/> Obvious
--	---	--	----------------------------------

Section 7: Data Collection

1. Sample for the lab?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
2. If yes, collected from:	<input type="checkbox"/> Flow <input type="checkbox"/> Pool
3. Intermittent flow trap set?	<input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, type: <input type="checkbox"/> OBM <input type="checkbox"/> Caulk dam

Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?



## Photo Log

Photo No. 1: image.jpg





## OUTFALL RECONNAISSANCE INVENTORY/ SAMPLE COLLECTION FIELD SHEET

### Section 1: Background Data

Subwatershed:		Outfall ID: CC89	
Today's date: 06/15/17		Time (Military): 2:15PM	
Investigators: Lettice Brown		Form completed by: Lettice Brown	
Temperature (°F): 83		Rainfall (in.): Last 24 hours: 0 Last 48 hours: 0	
Latitude: 39.9587204	Longitude: -76.7318707	GPS Unit:	GPS LMK #:
Camera:		Photo #'s:	
Land Use in Drainage Area (Check all that apply): <input type="checkbox"/> Industrial <input type="checkbox"/> Ultra-Urban Residential <input type="checkbox"/> Suburban Residential <input type="checkbox"/> Commercial		<input type="checkbox"/> Open Space <input type="checkbox"/> Institutional Other: Known Industries:	
Notes (e.g., origin of outfall, if known): York City			

### Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE	DIMENSIONS (IN.)	SUBMERGED
<input checked="" type="checkbox"/> Closed Pipe	<input checked="" type="checkbox"/> RCP <input type="checkbox"/> CMP <input type="checkbox"/> PVC <input type="checkbox"/> HDPE <input type="checkbox"/> Steel <input type="checkbox"/> Other:	<input checked="" type="checkbox"/> Circular <input type="checkbox"/> Elliptical <input type="checkbox"/> Box <input type="checkbox"/> Other:	<input checked="" type="checkbox"/> Single <input type="checkbox"/> Double <input type="checkbox"/> Triple <input type="checkbox"/> Other:	Diameter/Dimensions: 18  In Water: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully With Sediment: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully
<input type="checkbox"/> Open drainage	<input type="checkbox"/> Concrete <input type="checkbox"/> Earthen <input type="checkbox"/> rip-rap <input type="checkbox"/> Other:	<input type="checkbox"/> Trapezoid <input type="checkbox"/> Parabolic <input type="checkbox"/> Other:	Depth:  Top Width:  Bottom Width:	
<input type="checkbox"/> In-Stream	(applicable when collecting samples)			
Flow Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <i>If No, Skip to Section 5</i>			
Flow Description (If present)	<input type="checkbox"/> Trickle <input type="checkbox"/> Moderate <input type="checkbox"/> Substantial			

### Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER	RESULT	UNIT	EQUIPMENT	
<input type="checkbox"/> Flow #1	Volume		Liter	Bottle
	Time to fill		Seconds	
<input type="checkbox"/> Flow #2	Flow depth		Inches	Tape measure
	Flow width		Inches	Tape measure
	Measured length		Inches	Tape measure
	Time of travel		Seconds	Stop watch
Temperature			°F	Thermometer
pH			pH Units	Test strip/Probe
Ammonia			mg/L	Test strip



Outfall Reconnaissance Inventory Field Sheet

Section 4: Physical Indicators for Flowing Outfalls Only

Are Any Physical Indicators Present in the flow? ☐ Yes ☐ No *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	<input type="checkbox"/>	<input type="checkbox"/> Sewage <input type="checkbox"/> Rancid/sour <input type="checkbox"/> Petroleum/gas <input type="checkbox"/> Sulfide <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint	<input type="checkbox"/> 2 - Easily detected	<input type="checkbox"/> 3 - Noticeable from a distance
Color	<input type="checkbox"/>	<input type="checkbox"/> Clear <input type="checkbox"/> Brown <input type="checkbox"/> Gray <input type="checkbox"/> Yellow <input type="checkbox"/> Green <input type="checkbox"/> Orange <input type="checkbox"/> Red <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint colors in sample bottle	<input type="checkbox"/> 2 - Clearly visible in sample bottle	<input type="checkbox"/> 3 - Clearly visible in outfall flow
Turbidity	<input type="checkbox"/>	See severity	<input type="checkbox"/> 1 - Slight cloudiness	<input type="checkbox"/> 2 - Cloudy	<input type="checkbox"/> 3 - Opaque
Floatables -Does Not Include Trash!!	<input type="checkbox"/>	<input type="checkbox"/> Sewage (Toilet Paper, etc.) <input type="checkbox"/> Suds <input type="checkbox"/> Petroleum (oil sheen) <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Few/slight; origin not obvious	<input type="checkbox"/> 2 - Some; indications of origin (e.g., possible suds or oil sheen)	<input type="checkbox"/> 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☐ Yes ☒ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	<input type="checkbox"/>	<input type="checkbox"/> Spalling, Cracking or Chipping <input type="checkbox"/> Peeling Paint <input type="checkbox"/> Corrosion	
Deposits/Stains	<input type="checkbox"/>	<input type="checkbox"/> Oily <input type="checkbox"/> Flow Line <input type="checkbox"/> Paint <input type="checkbox"/> Other:	
Abnormal Vegetation	<input type="checkbox"/>	<input type="checkbox"/> Excessive <input type="checkbox"/> Inhibited	
Poor pool quality	<input type="checkbox"/>	<input type="checkbox"/> Odors <input type="checkbox"/> Colors <input type="checkbox"/> Floatables <input type="checkbox"/> Oil Sheen <input type="checkbox"/> Suds <input type="checkbox"/> Excessive Algae <input type="checkbox"/> Other:	
Pipe benthic growth	<input type="checkbox"/>	<input type="checkbox"/> Brown <input type="checkbox"/> Orange <input type="checkbox"/> Green <input type="checkbox"/> Other:	

Section 6: Overall Outfall Characterization

<input checked="" type="checkbox"/> Unlikely <input type="checkbox"/> Potential (presence of two or more indicators) <input type="checkbox"/> Suspect (one or more indicators with a severity of 3) <input type="checkbox"/> Obvious
--

Section 7: Data Collection

1. Sample for the lab? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
2. If yes, collected from: <input type="checkbox"/> Flow <input type="checkbox"/> Pool
3. Intermittent flow trap set? <input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, type: <input type="checkbox"/> OBM <input type="checkbox"/> Caulk dam

Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?



## Photo Log

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## OUTFALL RECONNAISSANCE INVENTORY/ SAMPLE COLLECTION FIELD SHEET

### Section 1: Background Data

Subwatershed:		Outfall ID: CC92	
Today's date: 06/15/17		Time (Military): 2:20PM	
Investigators: Lettice Brown		Form completed by: Lettice Brown	
Temperature (°F): 83		Rainfall (in.): Last 24 hours: 0 Last 48 hours: 0	
Latitude: 39.9584701	Longitude: -76.7318077	GPS Unit:	GPS LMK #:
Camera:		Photo #'s:	
Land Use in Drainage Area (Check all that apply): <input type="checkbox"/> Industrial <input type="checkbox"/> Ultra-Urban Residential <input type="checkbox"/> Suburban Residential <input type="checkbox"/> Commercial		<input type="checkbox"/> Open Space <input type="checkbox"/> Institutional Other: Known Industries:	
Notes (e.g., origin of outfall, if known): York City			

### Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE	DIMENSIONS (IN.)	SUBMERGED
<input checked="" type="checkbox"/> Closed Pipe	<input type="checkbox"/> RCP <input type="checkbox"/> PVC <input type="checkbox"/> Steel <input type="checkbox"/> Other:	<input checked="" type="checkbox"/> Circular <input type="checkbox"/> Elliptical <input type="checkbox"/> Box <input type="checkbox"/> Other:	<input checked="" type="checkbox"/> Single <input type="checkbox"/> Double <input type="checkbox"/> Triple <input type="checkbox"/> Other:	Diameter/Dimensions: 18
	<input checked="" type="checkbox"/> CMP <input type="checkbox"/> HDPE			In Water: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully With Sediment: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully
<input type="checkbox"/> Open drainage	<input type="checkbox"/> Concrete <input type="checkbox"/> Earthen <input type="checkbox"/> rip-rap <input type="checkbox"/> Other:	<input type="checkbox"/> Trapezoid <input type="checkbox"/> Parabolic <input type="checkbox"/> Other:	Depth:  Top Width:  Bottom Width:	
<input type="checkbox"/> In-Stream	(applicable when collecting samples)			
Flow Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <i>If No, Skip to Section 5</i>			
Flow Description (If present)	<input type="checkbox"/> Trickle <input type="checkbox"/> Moderate <input type="checkbox"/> Substantial			

### Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER	RESULT	UNIT	EQUIPMENT	
<input type="checkbox"/> Flow #1	Volume		Liter	Bottle
	Time to fill		Seconds	
<input type="checkbox"/> Flow #2	Flow depth		Inches	Tape measure
	Flow width		Inches	Tape measure
	Measured length		Inches	Tape measure
	Time of travel		Seconds	Stop watch
Temperature			°F	Thermometer
pH			pH Units	Test strip/Probe
Ammonia			mg/L	Test strip



Outfall Reconnaissance Inventory Field Sheet

Section 4: Physical Indicators for Flowing Outfalls Only

Are Any Physical Indicators Present in the flow? ☐ Yes ☐ No *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	<input type="checkbox"/>	<input type="checkbox"/> Sewage <input type="checkbox"/> Rancid/sour <input type="checkbox"/> Petroleum/gas <input type="checkbox"/> Sulfide <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint	<input type="checkbox"/> 2 - Easily detected	<input type="checkbox"/> 3 - Noticeable from a distance
Color	<input type="checkbox"/>	<input type="checkbox"/> Clear <input type="checkbox"/> Brown <input type="checkbox"/> Gray <input type="checkbox"/> Yellow <input type="checkbox"/> Green <input type="checkbox"/> Orange <input type="checkbox"/> Red <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint colors in sample bottle	<input type="checkbox"/> 2 - Clearly visible in sample bottle	<input type="checkbox"/> 3 - Clearly visible in outfall flow
Turbidity	<input type="checkbox"/>	See severity	<input type="checkbox"/> 1 - Slight cloudiness	<input type="checkbox"/> 2 - Cloudy	<input type="checkbox"/> 3 - Opaque
Floatables -Does Not Include Trash!!	<input type="checkbox"/>	<input type="checkbox"/> Sewage (Toilet Paper, etc.) <input type="checkbox"/> Suds <input type="checkbox"/> Petroleum (oil sheen) <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Few/slight; origin not obvious	<input type="checkbox"/> 2 - Some; indications of origin (e.g., possible suds or oil sheen)	<input type="checkbox"/> 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☒ Yes ☐ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	<input checked="" type="checkbox"/>	<input type="checkbox"/> Spalling, Cracking or Chipping <input type="checkbox"/> Peeling Paint <input type="checkbox"/> Corrosion	Looks like water coming from above the drain over the surface is eroding away the surrounding earth supporting the outfall
Deposits/Stains	<input type="checkbox"/>	<input type="checkbox"/> Oily <input type="checkbox"/> Flow Line <input type="checkbox"/> Paint <input type="checkbox"/> Other:	
Abnormal Vegetation	<input type="checkbox"/>	<input type="checkbox"/> Excessive <input type="checkbox"/> Inhibited	
Poor pool quality	<input type="checkbox"/>	<input type="checkbox"/> Odors <input type="checkbox"/> Colors <input type="checkbox"/> Floatables <input type="checkbox"/> Oil Sheen <input type="checkbox"/> Suds <input type="checkbox"/> Excessive Algae <input type="checkbox"/> Other:	
Pipe benthic growth	<input type="checkbox"/>	<input type="checkbox"/> Brown <input type="checkbox"/> Orange <input type="checkbox"/> Green <input type="checkbox"/> Other:	

Section 6: Overall Outfall Characterization

<input checked="" type="checkbox"/> Unlikely <input type="checkbox"/> Potential (presence of two or more indicators) <input type="checkbox"/> Suspect (one or more indicators with a severity of 3) <input type="checkbox"/> Obvious
--

Section 7: Data Collection

1. Sample for the lab? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
2. If yes, collected from: <input type="checkbox"/> Flow <input type="checkbox"/> Pool
3. Intermittent flow trap set? <input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, type: <input type="checkbox"/> OBM <input type="checkbox"/> Caulk dam

Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?



## Photo Log

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Photo No. 2: image.jpg





## OUTFALL RECONNAISSANCE INVENTORY/ SAMPLE COLLECTION FIELD SHEET

### Section 1: Background Data

Subwatershed:		Outfall ID: CC94	
Today's date: 06/15/17		Time (Military): 2:25PM	
Investigators: Lettice Brown		Form completed by: Lettice Brown	
Temperature (°F): 83		Rainfall (in.): Last 24 hours: 0 Last 48 hours: 0	
Latitude: 39.9580870	Longitude: -76.7317659	GPS Unit:	GPS LMK #:
Camera:		Photo #'s:	
Land Use in Drainage Area (Check all that apply): <input type="checkbox"/> Industrial <input type="checkbox"/> Ultra-Urban Residential <input type="checkbox"/> Suburban Residential <input type="checkbox"/> Commercial		<input type="checkbox"/> Open Space <input type="checkbox"/> Institutional Other: Known Industries:	
Notes (e.g., origin of outfall, if known): York City			

### Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE	DIMENSIONS (IN.)	SUBMERGED
<input checked="" type="checkbox"/> Closed Pipe	<input type="checkbox"/> RCP <input type="checkbox"/> CMP <input type="checkbox"/> PVC <input type="checkbox"/> HDPE <input type="checkbox"/> Steel <input checked="" type="checkbox"/> Other: stone	<input type="checkbox"/> Circular <input type="checkbox"/> Elliptical <input checked="" type="checkbox"/> Box <input type="checkbox"/> Other:	<input checked="" type="checkbox"/> Single <input type="checkbox"/> Double <input type="checkbox"/> Triple <input type="checkbox"/> Other:	Diameter/Dimensions: 66 x 48  In Water: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully With Sediment: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully
<input type="checkbox"/> Open drainage	<input type="checkbox"/> Concrete <input type="checkbox"/> Earthen <input type="checkbox"/> rip-rap <input type="checkbox"/> Other:	<input type="checkbox"/> Trapezoid <input type="checkbox"/> Parabolic <input type="checkbox"/> Other:	Depth:  Top Width:  Bottom Width:	
<input type="checkbox"/> In-Stream	(applicable when collecting samples)			
Flow Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <i>If No, Skip to Section 5</i>			
Flow Description (If present)	<input type="checkbox"/> Trickle <input type="checkbox"/> Moderate <input type="checkbox"/> Substantial			

### Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER	RESULT	UNIT	EQUIPMENT	
<input type="checkbox"/> Flow #1	Volume		Liter	Bottle
	Time to fill		Seconds	
<input type="checkbox"/> Flow #2	Flow depth		Inches	Tape measure
	Flow width		Inches	Tape measure
	Measured length		Inches	Tape measure
	Time of travel		Seconds	Stop watch
Temperature			°F	Thermometer
pH			pH Units	Test strip/Probe
Ammonia			mg/L	Test strip



Outfall Reconnaissance Inventory Field Sheet

Section 4: Physical Indicators for Flowing Outfalls Only

Are Any Physical Indicators Present in the flow? ☐ Yes ☐ No (If No, Skip to Section 5)

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	<input type="checkbox"/>	<input type="checkbox"/> Sewage <input type="checkbox"/> Rancid/sour <input type="checkbox"/> Petroleum/gas <input type="checkbox"/> Sulfide <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint	<input type="checkbox"/> 2 - Easily detected	<input type="checkbox"/> 3 - Noticeable from a distance
Color	<input type="checkbox"/>	<input type="checkbox"/> Clear <input type="checkbox"/> Brown <input type="checkbox"/> Gray <input type="checkbox"/> Yellow <input type="checkbox"/> Green <input type="checkbox"/> Orange <input type="checkbox"/> Red <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint colors in sample bottle	<input type="checkbox"/> 2 - Clearly visible in sample bottle	<input type="checkbox"/> 3 - Clearly visible in outfall flow
Turbidity	<input type="checkbox"/>	See severity	<input type="checkbox"/> 1 - Slight cloudiness	<input type="checkbox"/> 2 - Cloudy	<input type="checkbox"/> 3 - Opaque
Floatables -Does Not Include Trash!!	<input type="checkbox"/>	<input type="checkbox"/> Sewage (Toilet Paper, etc.) <input type="checkbox"/> Suds <input type="checkbox"/> Petroleum (oil sheen) <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Few/slight; origin not obvious	<input type="checkbox"/> 2 - Some; indications of origin (e.g., possible suds or oil sheen)	<input type="checkbox"/> 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☐ Yes ☒ No (If No, Skip to Section 6)

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	<input type="checkbox"/>	<input type="checkbox"/> Spalling, Cracking or Chipping <input type="checkbox"/> Peeling Paint <input type="checkbox"/> Corrosion	
Deposits/Stains	<input type="checkbox"/>	<input type="checkbox"/> Oily <input type="checkbox"/> Flow Line <input type="checkbox"/> Paint <input type="checkbox"/> Other:	
Abnormal Vegetation	<input type="checkbox"/>	<input type="checkbox"/> Excessive <input type="checkbox"/> Inhibited	
Poor pool quality	<input type="checkbox"/>	<input type="checkbox"/> Odors <input type="checkbox"/> Colors <input type="checkbox"/> Floatables <input type="checkbox"/> Oil Sheen <input type="checkbox"/> Suds <input type="checkbox"/> Excessive Algae <input type="checkbox"/> Other:	
Pipe benthic growth	<input type="checkbox"/>	<input type="checkbox"/> Brown <input type="checkbox"/> Orange <input type="checkbox"/> Green <input type="checkbox"/> Other:	

Section 6: Overall Outfall Characterization

<input checked="" type="checkbox"/> Unlikely <input type="checkbox"/> Potential (presence of two or more indicators) <input type="checkbox"/> Suspect (one or more indicators with a severity of 3) <input type="checkbox"/> Obvious
--

Section 7: Data Collection

1. Sample for the lab? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
2. If yes, collected from: <input type="checkbox"/> Flow <input type="checkbox"/> Pool
3. Intermittent flow trap set? <input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, type: <input type="checkbox"/> OBM <input type="checkbox"/> Caulk dam

Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?



## Photo Log

Photo No. 1: image.jpg





## OUTFALL RECONNAISSANCE INVENTORY/ SAMPLE COLLECTION FIELD SHEET

### Section 1: Background Data

Subwatershed:		Outfall ID: CC95	
Today's date: 06/15/17		Time (Military): 2:30PM	
Investigators: Lettice Brown		Form completed by: Lettice Brown	
Temperature (°F): 84		Rainfall (in.): Last 24 hours: 0 Last 48 hours: 0	
Latitude: 39.9580476	Longitude: -76.7317599	GPS Unit:	GPS LMK #:
Camera:		Photo #'s:	
Land Use in Drainage Area (Check all that apply): <input type="checkbox"/> Industrial <input type="checkbox"/> Ultra-Urban Residential <input type="checkbox"/> Suburban Residential <input type="checkbox"/> Commercial		<input type="checkbox"/> Open Space <input type="checkbox"/> Institutional Other: Known Industries:	
Notes (e.g., origin of outfall, if known): York City			

### Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE	DIMENSIONS (IN.)	SUBMERGED
<input checked="" type="checkbox"/> Closed Pipe	<input type="checkbox"/> RCP <input type="checkbox"/> CMP <input type="checkbox"/> PVC <input type="checkbox"/> HDPE <input checked="" type="checkbox"/> Steel <input type="checkbox"/> Other:	<input checked="" type="checkbox"/> Circular <input type="checkbox"/> Elliptical <input type="checkbox"/> Box <input type="checkbox"/> Other:	<input checked="" type="checkbox"/> Single <input type="checkbox"/> Double <input type="checkbox"/> Triple <input type="checkbox"/> Other:	Diameter/Dimensions: 15  In Water: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully With Sediment: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully
<input type="checkbox"/> Open drainage	<input type="checkbox"/> Concrete <input type="checkbox"/> Earthen <input type="checkbox"/> rip-rap <input type="checkbox"/> Other:	<input type="checkbox"/> Trapezoid <input type="checkbox"/> Parabolic <input type="checkbox"/> Other:	Depth:  Top Width:  Bottom Width:	
<input type="checkbox"/> In-Stream	(applicable when collecting samples)			
Flow Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <i>If No, Skip to Section 5</i>			
Flow Description (If present)	<input type="checkbox"/> Trickle <input type="checkbox"/> Moderate <input type="checkbox"/> Substantial			

### Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER		RESULT	UNIT	EQUIPMENT
<input type="checkbox"/> Flow #1	Volume		Liter	Bottle
	Time to fill		Seconds	
<input type="checkbox"/> Flow #2	Flow depth		Inches	Tape measure
	Flow width		Inches	Tape measure
	Measured length		Inches	Tape measure
	Time of travel		Seconds	Stop watch
Temperature			°F	Thermometer
pH			pH Units	Test strip/Probe
Ammonia			mg/L	Test strip



Outfall Reconnaissance Inventory Field Sheet

Section 4: Physical Indicators for Flowing Outfalls Only

Are Any Physical Indicators Present in the flow? ☐ Yes ☐ No *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	<input type="checkbox"/>	<input type="checkbox"/> Sewage <input type="checkbox"/> Rancid/sour <input type="checkbox"/> Petroleum/gas <input type="checkbox"/> Sulfide <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint	<input type="checkbox"/> 2 - Easily detected	<input type="checkbox"/> 3 - Noticeable from a distance
Color	<input type="checkbox"/>	<input type="checkbox"/> Clear <input type="checkbox"/> Brown <input type="checkbox"/> Gray <input type="checkbox"/> Yellow <input type="checkbox"/> Green <input type="checkbox"/> Orange <input type="checkbox"/> Red <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint colors in sample bottle	<input type="checkbox"/> 2 - Clearly visible in sample bottle	<input type="checkbox"/> 3 - Clearly visible in outfall flow
Turbidity	<input type="checkbox"/>	See severity	<input type="checkbox"/> 1 - Slight cloudiness	<input type="checkbox"/> 2 - Cloudy	<input type="checkbox"/> 3 - Opaque
Floatables -Does Not Include Trash!!	<input type="checkbox"/>	<input type="checkbox"/> Sewage (Toilet Paper, etc.) <input type="checkbox"/> Suds <input type="checkbox"/> Petroleum (oil sheen) <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Few/slight; origin not obvious	<input type="checkbox"/> 2 - Some; indications of origin (e.g., possible suds or oil sheen)	<input type="checkbox"/> 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☐ Yes ☒ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	<input type="checkbox"/>	<input type="checkbox"/> Spalling, Cracking or Chipping <input type="checkbox"/> Peeling Paint <input type="checkbox"/> Corrosion	
Deposits/Stains	<input type="checkbox"/>	<input type="checkbox"/> Oily <input type="checkbox"/> Flow Line <input type="checkbox"/> Paint <input type="checkbox"/> Other:	
Abnormal Vegetation	<input type="checkbox"/>	<input type="checkbox"/> Excessive <input type="checkbox"/> Inhibited	
Poor pool quality	<input type="checkbox"/>	<input type="checkbox"/> Odors <input type="checkbox"/> Colors <input type="checkbox"/> Floatables <input type="checkbox"/> Oil Sheen <input type="checkbox"/> Suds <input type="checkbox"/> Excessive Algae <input type="checkbox"/> Other:	
Pipe benthic growth	<input type="checkbox"/>	<input type="checkbox"/> Brown <input type="checkbox"/> Orange <input type="checkbox"/> Green <input type="checkbox"/> Other:	

Section 6: Overall Outfall Characterization

<input checked="" type="checkbox"/> Unlikely	<input type="checkbox"/> Potential (presence of two or more indicators)	<input type="checkbox"/> Suspect (one or more indicators with a severity of 3)	<input type="checkbox"/> Obvious
--	---	--	----------------------------------

Section 7: Data Collection

1. Sample for the lab?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
2. If yes, collected from:	<input type="checkbox"/> Flow <input type="checkbox"/> Pool
3. Intermittent flow trap set?	<input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, type: <input type="checkbox"/> OBM <input type="checkbox"/> Caulk dam

Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?



## Photo Log

Photo No. 1: image.jpg





## OUTFALL RECONNAISSANCE INVENTORY/ SAMPLE COLLECTION FIELD SHEET

### Section 1: Background Data

Subwatershed:		Outfall ID: CC97	
Today's date: 06/15/17		Time (Military): 2:30PM	
Investigators: Lettice Brown		Form completed by: Lettice Brown	
Temperature (°F): 84		Rainfall (in.): Last 24 hours: 0 Last 48 hours: 0	
Latitude: 39.9579291	Longitude: -76.7317325	GPS Unit:	GPS LMK #:
Camera:		Photo #'s:	
Land Use in Drainage Area (Check all that apply): <input type="checkbox"/> Industrial <input type="checkbox"/> Ultra-Urban Residential <input type="checkbox"/> Suburban Residential <input type="checkbox"/> Commercial		<input type="checkbox"/> Open Space <input type="checkbox"/> Institutional Other: Known Industries:	
Notes (e.g., origin of outfall, if known): York City			

### Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE	DIMENSIONS (IN.)	SUBMERGED	
<input checked="" type="checkbox"/> Closed Pipe	<input type="checkbox"/> RCP <input type="checkbox"/> PVC <input type="checkbox"/> Steel <input type="checkbox"/> Other:	<input checked="" type="checkbox"/> Circular <input type="checkbox"/> Elliptical <input type="checkbox"/> Box <input type="checkbox"/> Other:	<input checked="" type="checkbox"/> Single <input type="checkbox"/> Double <input type="checkbox"/> Triple <input type="checkbox"/> Other:	Diameter/Dimensions: 15	In Water: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully With Sediment: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully
	<input type="checkbox"/> Concrete <input type="checkbox"/> Earthen <input type="checkbox"/> rip-rap <input type="checkbox"/> Other:	<input type="checkbox"/> Trapezoid <input type="checkbox"/> Parabolic <input type="checkbox"/> Other:	Depth:  Top Width:  Bottom Width:		
<input type="checkbox"/> Open drainage					
<input type="checkbox"/> In-Stream	(applicable when collecting samples)				
Flow Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <i>If No, Skip to Section 5</i>				
Flow Description (If present)	<input type="checkbox"/> Trickle <input type="checkbox"/> Moderate <input type="checkbox"/> Substantial				

### Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER		RESULT	UNIT	EQUIPMENT
<input type="checkbox"/> Flow #1	Volume		Liter	Bottle
	Time to fill		Seconds	
<input type="checkbox"/> Flow #2	Flow depth		Inches	Tape measure
	Flow width		Inches	Tape measure
	Measured length		Inches	Tape measure
	Time of travel		Seconds	Stop watch
Temperature			°F	Thermometer
pH			pH Units	Test strip/Probe
Ammonia			mg/L	Test strip



Outfall Reconnaissance Inventory Field Sheet

Section 4: Physical Indicators for Flowing Outfalls Only

Are Any Physical Indicators Present in the flow? ☐ Yes ☐ No *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	<input type="checkbox"/>	<input type="checkbox"/> Sewage <input type="checkbox"/> Rancid/sour <input type="checkbox"/> Petroleum/gas <input type="checkbox"/> Sulfide <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint	<input type="checkbox"/> 2 - Easily detected	<input type="checkbox"/> 3 - Noticeable from a distance
Color	<input type="checkbox"/>	<input type="checkbox"/> Clear <input type="checkbox"/> Brown <input type="checkbox"/> Gray <input type="checkbox"/> Yellow <input type="checkbox"/> Green <input type="checkbox"/> Orange <input type="checkbox"/> Red <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint colors in sample bottle	<input type="checkbox"/> 2 - Clearly visible in sample bottle	<input type="checkbox"/> 3 - Clearly visible in outfall flow
Turbidity	<input type="checkbox"/>	See severity	<input type="checkbox"/> 1 - Slight cloudiness	<input type="checkbox"/> 2 - Cloudy	<input type="checkbox"/> 3 - Opaque
Floatables -Does Not Include Trash!!	<input type="checkbox"/>	<input type="checkbox"/> Sewage (Toilet Paper, etc.) <input type="checkbox"/> Suds <input type="checkbox"/> Petroleum (oil sheen) <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Few/slight; origin not obvious	<input type="checkbox"/> 2 - Some; indications of origin (e.g., possible suds or oil sheen)	<input type="checkbox"/> 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☐ Yes ☒ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	<input type="checkbox"/>	<input type="checkbox"/> Spalling, Cracking or Chipping <input type="checkbox"/> Peeling Paint <input type="checkbox"/> Corrosion	
Deposits/Stains	<input type="checkbox"/>	<input type="checkbox"/> Oily <input type="checkbox"/> Flow Line <input type="checkbox"/> Paint <input type="checkbox"/> Other:	
Abnormal Vegetation	<input type="checkbox"/>	<input type="checkbox"/> Excessive <input type="checkbox"/> Inhibited	
Poor pool quality	<input type="checkbox"/>	<input type="checkbox"/> Odors <input type="checkbox"/> Colors <input type="checkbox"/> Floatables <input type="checkbox"/> Oil Sheen <input type="checkbox"/> Suds <input type="checkbox"/> Excessive Algae <input type="checkbox"/> Other:	
Pipe benthic growth	<input type="checkbox"/>	<input type="checkbox"/> Brown <input type="checkbox"/> Orange <input type="checkbox"/> Green <input type="checkbox"/> Other:	

Section 6: Overall Outfall Characterization

<input checked="" type="checkbox"/> Unlikely	<input type="checkbox"/> Potential (presence of two or more indicators)	<input type="checkbox"/> Suspect (one or more indicators with a severity of 3)	<input type="checkbox"/> Obvious
--	---	--	----------------------------------

Section 7: Data Collection

1. Sample for the lab?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
2. If yes, collected from:	<input type="checkbox"/> Flow <input type="checkbox"/> Pool
3. Intermittent flow trap set?	<input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, type: <input type="checkbox"/> OBM <input type="checkbox"/> Caulk dam

Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?



## Photo Log

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## OUTFALL RECONNAISSANCE INVENTORY/ SAMPLE COLLECTION FIELD SHEET

### Section 1: Background Data

Subwatershed:		Outfall ID: CC106	
Today's date: 06/15/17		Time (Military): 2:55PM	
Investigators: Lettice Brown		Form completed by: Lettice Brown	
Temperature (°F): 84		Rainfall (in.): Last 24 hours: 0 Last 48 hours: 0	
Latitude: 39.9564791	Longitude: -76.7316096	GPS Unit:	GPS LMK #:
Camera:		Photo #'s:	
Land Use in Drainage Area (Check all that apply): <input type="checkbox"/> Industrial <input type="checkbox"/> Ultra-Urban Residential <input type="checkbox"/> Suburban Residential <input type="checkbox"/> Commercial		<input type="checkbox"/> Open Space <input type="checkbox"/> Institutional Other: Known Industries:	
Notes (e.g., origin of outfall, if known): York City			

### Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE	DIMENSIONS (IN.)	SUBMERGED
<input checked="" type="checkbox"/> Closed Pipe	<input type="checkbox"/> RCP <input type="checkbox"/> CMP <input type="checkbox"/> PVC <input type="checkbox"/> HDPE <input type="checkbox"/> Steel <input checked="" type="checkbox"/> Other: TCP	<input checked="" type="checkbox"/> Circular <input type="checkbox"/> Elliptical <input type="checkbox"/> Box <input type="checkbox"/> Other:	<input checked="" type="checkbox"/> Single <input type="checkbox"/> Double <input type="checkbox"/> Triple <input type="checkbox"/> Other:	Diameter/Dimensions: 24  In Water: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully With Sediment: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully
<input type="checkbox"/> Open drainage	<input type="checkbox"/> Concrete <input type="checkbox"/> Earthen <input type="checkbox"/> rip-rap <input type="checkbox"/> Other:	<input type="checkbox"/> Trapezoid <input type="checkbox"/> Parabolic <input type="checkbox"/> Other:	Depth:  Top Width:  Bottom Width:	
<input type="checkbox"/> In-Stream	(applicable when collecting samples)			
Flow Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <i>If No, Skip to Section 5</i>			
Flow Description (If present)	<input type="checkbox"/> Trickle <input type="checkbox"/> Moderate <input type="checkbox"/> Substantial			

### Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER		RESULT	UNIT	EQUIPMENT
<input type="checkbox"/> Flow #1	Volume		Liter	Bottle
	Time to fill		Seconds	
<input type="checkbox"/> Flow #2	Flow depth		Inches	Tape measure
	Flow width		Inches	Tape measure
	Measured length		Inches	Tape measure
	Time of travel		Seconds	Stop watch
Temperature			°F	Thermometer
pH			pH Units	Test strip/Probe
Ammonia			mg/L	Test strip



Outfall Reconnaissance Inventory Field Sheet

Section 4: Physical Indicators for Flowing Outfalls Only

Are Any Physical Indicators Present in the flow? ☐ Yes ☐ No *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	<input type="checkbox"/>	<input type="checkbox"/> Sewage <input type="checkbox"/> Rancid/sour <input type="checkbox"/> Petroleum/gas <input type="checkbox"/> Sulfide <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint	<input type="checkbox"/> 2 - Easily detected	<input type="checkbox"/> 3 - Noticeable from a distance
Color	<input type="checkbox"/>	<input type="checkbox"/> Clear <input type="checkbox"/> Brown <input type="checkbox"/> Gray <input type="checkbox"/> Yellow <input type="checkbox"/> Green <input type="checkbox"/> Orange <input type="checkbox"/> Red <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint colors in sample bottle	<input type="checkbox"/> 2 - Clearly visible in sample bottle	<input type="checkbox"/> 3 - Clearly visible in outfall flow
Turbidity	<input type="checkbox"/>	See severity	<input type="checkbox"/> 1 - Slight cloudiness	<input type="checkbox"/> 2 - Cloudy	<input type="checkbox"/> 3 - Opaque
Floatables -Does Not Include Trash!!	<input type="checkbox"/>	<input type="checkbox"/> Sewage (Toilet Paper, etc.) <input type="checkbox"/> Suds <input type="checkbox"/> Petroleum (oil sheen) <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Few/slight; origin not obvious	<input type="checkbox"/> 2 - Some; indications of origin (e.g., possible suds or oil sheen)	<input type="checkbox"/> 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☐ Yes ☒ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	<input type="checkbox"/>	<input type="checkbox"/> Spalling, Cracking or Chipping <input type="checkbox"/> Peeling Paint <input type="checkbox"/> Corrosion	
Deposits/Stains	<input type="checkbox"/>	<input type="checkbox"/> Oily <input type="checkbox"/> Flow Line <input type="checkbox"/> Paint <input type="checkbox"/> Other:	
Abnormal Vegetation	<input type="checkbox"/>	<input type="checkbox"/> Excessive <input type="checkbox"/> Inhibited	
Poor pool quality	<input type="checkbox"/>	<input type="checkbox"/> Odors <input type="checkbox"/> Colors <input type="checkbox"/> Floatables <input type="checkbox"/> Oil Sheen <input type="checkbox"/> Suds <input type="checkbox"/> Excessive Algae <input type="checkbox"/> Other:	
Pipe benthic growth	<input type="checkbox"/>	<input type="checkbox"/> Brown <input type="checkbox"/> Orange <input type="checkbox"/> Green <input type="checkbox"/> Other:	

Section 6: Overall Outfall Characterization

<input checked="" type="checkbox"/> Unlikely <input type="checkbox"/> Potential (presence of two or more indicators) <input type="checkbox"/> Suspect (one or more indicators with a severity of 3) <input type="checkbox"/> Obvious
--

Section 7: Data Collection

1. Sample for the lab? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
2. If yes, collected from: <input type="checkbox"/> Flow <input type="checkbox"/> Pool
3. Intermittent flow trap set? <input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, type: <input type="checkbox"/> OBM <input type="checkbox"/> Caulk dam

Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

Lots of trash around



## Photo Log

Photo No. 1: image.jpg





## OUTFALL RECONNAISSANCE INVENTORY/ SAMPLE COLLECTION FIELD SHEET

### Section 1: Background Data

Subwatershed:		Outfall ID: CC107	
Today's date: 06/16/17		Time (Military): 2:15PM	
Investigators: Lettice Brown		Form completed by: Lettice Brown	
Temperature (°F): 77		Rainfall (in.): Last 24 hours: 0 Last 48 hours: 0	
Latitude: 39.9557074	Longitude: -76.7314695	GPS Unit:	GPS LMK #:
Camera:		Photo #'s:	
Land Use in Drainage Area (Check all that apply): <input type="checkbox"/> Industrial <input type="checkbox"/> Ultra-Urban Residential <input type="checkbox"/> Suburban Residential <input type="checkbox"/> Commercial		<input type="checkbox"/> Open Space <input type="checkbox"/> Institutional Other: Known Industries:	
Notes (e.g., origin of outfall, if known): York City			

### Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE	DIMENSIONS (IN.)	SUBMERGED
<input checked="" type="checkbox"/> Closed Pipe	<input type="checkbox"/> RCP <input type="checkbox"/> CMP <input type="checkbox"/> PVC <input type="checkbox"/> HDPE <input checked="" type="checkbox"/> Steel <input type="checkbox"/> Other:	<input checked="" type="checkbox"/> Circular <input type="checkbox"/> Elliptical <input type="checkbox"/> Box <input type="checkbox"/> Other:	<input checked="" type="checkbox"/> Single <input type="checkbox"/> Double <input type="checkbox"/> Triple <input type="checkbox"/> Other:	Diameter/Dimensions: 18  In Water: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully With Sediment: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully
<input type="checkbox"/> Open drainage	<input type="checkbox"/> Concrete <input type="checkbox"/> Earthen <input type="checkbox"/> rip-rap <input type="checkbox"/> Other:	<input type="checkbox"/> Trapezoid <input type="checkbox"/> Parabolic <input type="checkbox"/> Other:	Depth:  Top Width:  Bottom Width:	
<input type="checkbox"/> In-Stream	(applicable when collecting samples)			
Flow Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <i>If No, Skip to Section 5</i>			
Flow Description (If present)	<input type="checkbox"/> Trickle <input type="checkbox"/> Moderate <input type="checkbox"/> Substantial			

### Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER	RESULT	UNIT	EQUIPMENT	
<input type="checkbox"/> Flow #1	Volume		Liter	Bottle
	Time to fill		Seconds	
<input type="checkbox"/> Flow #2	Flow depth		Inches	Tape measure
	Flow width		Inches	Tape measure
	Measured length		Inches	Tape measure
	Time of travel		Seconds	Stop watch
Temperature			°F	Thermometer
pH			pH Units	Test strip/Probe
Ammonia			mg/L	Test strip



Outfall Reconnaissance Inventory Field Sheet

Section 4: Physical Indicators for Flowing Outfalls Only

Are Any Physical Indicators Present in the flow? ☐ Yes ☐ No *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	<input type="checkbox"/>	<input type="checkbox"/> Sewage <input type="checkbox"/> Rancid/sour <input type="checkbox"/> Petroleum/gas <input type="checkbox"/> Sulfide <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint	<input type="checkbox"/> 2 - Easily detected	<input type="checkbox"/> 3 - Noticeable from a distance
Color	<input type="checkbox"/>	<input type="checkbox"/> Clear <input type="checkbox"/> Brown <input type="checkbox"/> Gray <input type="checkbox"/> Yellow <input type="checkbox"/> Green <input type="checkbox"/> Orange <input type="checkbox"/> Red <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint colors in sample bottle	<input type="checkbox"/> 2 - Clearly visible in sample bottle	<input type="checkbox"/> 3 - Clearly visible in outfall flow
Turbidity	<input type="checkbox"/>	See severity	<input type="checkbox"/> 1 - Slight cloudiness	<input type="checkbox"/> 2 - Cloudy	<input type="checkbox"/> 3 - Opaque
Floatables -Does Not Include Trash!!	<input type="checkbox"/>	<input type="checkbox"/> Sewage (Toilet Paper, etc.) <input type="checkbox"/> Suds <input type="checkbox"/> Petroleum (oil sheen) <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Few/slight; origin not obvious	<input type="checkbox"/> 2 - Some; indications of origin (e.g., possible suds or oil sheen)	<input type="checkbox"/> 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☒ Yes ☐ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	<input type="checkbox"/>	<input type="checkbox"/> Spalling, Cracking or Chipping <input type="checkbox"/> Peeling Paint <input type="checkbox"/> Corrosion	
Deposits/Stains	<input checked="" type="checkbox"/>	<input type="checkbox"/> Oily <input type="checkbox"/> Flow Line <input type="checkbox"/> Paint <input checked="" type="checkbox"/> Other: Dirt stains	Just some dirt stains
Abnormal Vegetation	<input type="checkbox"/>	<input type="checkbox"/> Excessive <input type="checkbox"/> Inhibited	
Poor pool quality	<input type="checkbox"/>	<input type="checkbox"/> Odors <input type="checkbox"/> Colors <input type="checkbox"/> Floatables <input type="checkbox"/> Oil Sheen <input type="checkbox"/> Suds <input type="checkbox"/> Excessive Algae <input type="checkbox"/> Other:	
Pipe benthic growth	<input type="checkbox"/>	<input type="checkbox"/> Brown <input type="checkbox"/> Orange <input type="checkbox"/> Green <input type="checkbox"/> Other:	

Section 6: Overall Outfall Characterization

<input checked="" type="checkbox"/> Unlikely <input type="checkbox"/> Potential (presence of two or more indicators) <input type="checkbox"/> Suspect (one or more indicators with a severity of 3) <input type="checkbox"/> Obvious
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Section 7: Data Collection

1. Sample for the lab? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
2. If yes, collected from: <input type="checkbox"/> Flow <input type="checkbox"/> Pool
3. Intermittent flow trap set? <input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, type: <input type="checkbox"/> OBM <input type="checkbox"/> Caulk dam

Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?



## Photo Log

Photo No. 1: image.jpg





## OUTFALL RECONNAISSANCE INVENTORY/ SAMPLE COLLECTION FIELD SHEET

### Section 1: Background Data

Subwatershed:		Outfall ID: CC124	
Today's date: 06/16/17		Time (Military): 2:25PM	
Investigators: Lettice Brown		Form completed by: Lettice Brown	
Temperature (°F): 77		Rainfall (in.): Last 24 hours: 0 Last 48 hours: 0	
Latitude: 39.9531557	Longitude: -76.7335308	GPS Unit:	GPS LMK #:
Camera:		Photo #'s:	
Land Use in Drainage Area (Check all that apply): <input type="checkbox"/> Industrial <input type="checkbox"/> Ultra-Urban Residential <input type="checkbox"/> Suburban Residential <input type="checkbox"/> Commercial		<input type="checkbox"/> Open Space <input type="checkbox"/> Institutional Other: Known Industries:	
Notes (e.g., origin of outfall, if known): York City			

### Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE	DIMENSIONS (IN.)	SUBMERGED
<input checked="" type="checkbox"/> Closed Pipe	<input type="checkbox"/> RCP <input checked="" type="checkbox"/> CMP <input type="checkbox"/> PVC <input type="checkbox"/> HDPE <input type="checkbox"/> Steel <input type="checkbox"/> Other:	<input checked="" type="checkbox"/> Circular <input type="checkbox"/> Elliptical <input type="checkbox"/> Box <input type="checkbox"/> Other:	<input checked="" type="checkbox"/> Single <input type="checkbox"/> Double <input type="checkbox"/> Triple <input type="checkbox"/> Other:	Diameter/Dimensions: 24  In Water: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully With Sediment: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully
<input type="checkbox"/> Open drainage	<input type="checkbox"/> Concrete <input type="checkbox"/> Earthen <input type="checkbox"/> rip-rap <input type="checkbox"/> Other:	<input type="checkbox"/> Trapezoid <input type="checkbox"/> Parabolic <input type="checkbox"/> Other:	Depth:  Top Width:  Bottom Width:	
<input type="checkbox"/> In-Stream	(applicable when collecting samples)			
Flow Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <i>If No, Skip to Section 5</i>			
Flow Description (If present)	<input type="checkbox"/> Trickle <input type="checkbox"/> Moderate <input type="checkbox"/> Substantial			

### Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER	RESULT	UNIT	EQUIPMENT	
<input type="checkbox"/> Flow #1	Volume		Liter	Bottle
	Time to fill		Seconds	
<input type="checkbox"/> Flow #2	Flow depth		Inches	Tape measure
	Flow width		Inches	Tape measure
	Measured length		Inches	Tape measure
	Time of travel		Seconds	Stop watch
Temperature			°F	Thermometer
pH			pH Units	Test strip/Probe
Ammonia			mg/L	Test strip



Outfall Reconnaissance Inventory Field Sheet

Section 4: Physical Indicators for Flowing Outfalls Only

Are Any Physical Indicators Present in the flow? ☐ Yes ☐ No *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	<input type="checkbox"/>	<input type="checkbox"/> Sewage <input type="checkbox"/> Rancid/sour <input type="checkbox"/> Petroleum/gas <input type="checkbox"/> Sulfide <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint	<input type="checkbox"/> 2 - Easily detected	<input type="checkbox"/> 3 - Noticeable from a distance
Color	<input type="checkbox"/>	<input type="checkbox"/> Clear <input type="checkbox"/> Brown <input type="checkbox"/> Gray <input type="checkbox"/> Yellow <input type="checkbox"/> Green <input type="checkbox"/> Orange <input type="checkbox"/> Red <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint colors in sample bottle	<input type="checkbox"/> 2 - Clearly visible in sample bottle	<input type="checkbox"/> 3 - Clearly visible in outfall flow
Turbidity	<input type="checkbox"/>	See severity	<input type="checkbox"/> 1 - Slight cloudiness	<input type="checkbox"/> 2 - Cloudy	<input type="checkbox"/> 3 - Opaque
Floatables -Does Not Include Trash!!	<input type="checkbox"/>	<input type="checkbox"/> Sewage (Toilet Paper, etc.) <input type="checkbox"/> Suds <input type="checkbox"/> Petroleum (oil sheen) <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Few/slight; origin not obvious	<input type="checkbox"/> 2 - Some; indications of origin (e.g., possible suds or oil sheen)	<input type="checkbox"/> 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☐ Yes ☒ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	<input type="checkbox"/>	<input type="checkbox"/> Spalling, Cracking or Chipping <input type="checkbox"/> Peeling Paint <input type="checkbox"/> Corrosion	
Deposits/Stains	<input type="checkbox"/>	<input type="checkbox"/> Oily <input type="checkbox"/> Flow Line <input type="checkbox"/> Paint <input type="checkbox"/> Other:	
Abnormal Vegetation	<input type="checkbox"/>	<input type="checkbox"/> Excessive <input type="checkbox"/> Inhibited	
Poor pool quality	<input type="checkbox"/>	<input type="checkbox"/> Odors <input type="checkbox"/> Colors <input type="checkbox"/> Floatables <input type="checkbox"/> Oil Sheen <input type="checkbox"/> Suds <input type="checkbox"/> Excessive Algae <input type="checkbox"/> Other:	
Pipe benthic growth	<input type="checkbox"/>	<input type="checkbox"/> Brown <input type="checkbox"/> Orange <input type="checkbox"/> Green <input type="checkbox"/> Other:	

Section 6: Overall Outfall Characterization

<input checked="" type="checkbox"/> Unlikely	<input type="checkbox"/> Potential (presence of two or more indicators)	<input type="checkbox"/> Suspect (one or more indicators with a severity of 3)	<input type="checkbox"/> Obvious
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Section 7: Data Collection

1. Sample for the lab?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
2. If yes, collected from:	<input type="checkbox"/> Flow <input type="checkbox"/> Pool
3. Intermittent flow trap set?	<input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, type: <input type="checkbox"/> OBM <input type="checkbox"/> Caulk dam

Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?



## Photo Log

Photo No. 1: image.jpg





## OUTFALL RECONNAISSANCE INVENTORY/ SAMPLE COLLECTION FIELD SHEET

### Section 1: Background Data

Subwatershed:		Outfall ID: CC121	
Today's date: 06/16/17		Time (Military): 2:35PM	
Investigators: Lettice Brown		Form completed by: Lettice Brown	
Temperature (°F): 79		Rainfall (in.): Last 24 hours: 0 Last 48 hours: 0	
Latitude: 39.9535007	Longitude: -76.7326298	GPS Unit:	GPS LMK #:
Camera:		Photo #'s:	
Land Use in Drainage Area (Check all that apply): <input type="checkbox"/> Industrial <input type="checkbox"/> Ultra-Urban Residential <input type="checkbox"/> Suburban Residential <input type="checkbox"/> Commercial		<input type="checkbox"/> Open Space <input type="checkbox"/> Institutional Other: Known Industries:	
Notes (e.g., origin of outfall, if known): York City			

### Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE	DIMENSIONS (IN.)	SUBMERGED
<input checked="" type="checkbox"/> Closed Pipe	<input checked="" type="checkbox"/> RCP <input type="checkbox"/> CMP <input type="checkbox"/> PVC <input type="checkbox"/> HDPE <input type="checkbox"/> Steel <input type="checkbox"/> Other:	<input checked="" type="checkbox"/> Circular <input type="checkbox"/> Elliptical <input type="checkbox"/> Box <input type="checkbox"/> Other:	<input checked="" type="checkbox"/> Single <input type="checkbox"/> Double <input type="checkbox"/> Triple <input type="checkbox"/> Other:	Diameter/Dimensions: 24  In Water: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully With Sediment: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully
<input type="checkbox"/> Open drainage	<input type="checkbox"/> Concrete <input type="checkbox"/> Earthen <input type="checkbox"/> rip-rap <input type="checkbox"/> Other:	<input type="checkbox"/> Trapezoid <input type="checkbox"/> Parabolic <input type="checkbox"/> Other:	Depth:  Top Width:  Bottom Width:	
<input type="checkbox"/> In-Stream	(applicable when collecting samples)			
Flow Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <i>If No, Skip to Section 5</i>			
Flow Description (If present)	<input type="checkbox"/> Trickle <input type="checkbox"/> Moderate <input type="checkbox"/> Substantial			

### Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER		RESULT	UNIT	EQUIPMENT
<input type="checkbox"/> Flow #1	Volume		Liter	Bottle
	Time to fill		Seconds	
<input type="checkbox"/> Flow #2	Flow depth		Inches	Tape measure
	Flow width		Inches	Tape measure
	Measured length		Inches	Tape measure
	Time of travel		Seconds	Stop watch
Temperature			°F	Thermometer
pH			pH Units	Test strip/Probe
Ammonia			mg/L	Test strip



Outfall Reconnaissance Inventory Field Sheet

Section 4: Physical Indicators for Flowing Outfalls Only

Are Any Physical Indicators Present in the flow? ☐ Yes ☐ No *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	<input type="checkbox"/>	<input type="checkbox"/> Sewage <input type="checkbox"/> Rancid/sour <input type="checkbox"/> Petroleum/gas <input type="checkbox"/> Sulfide <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint	<input type="checkbox"/> 2 - Easily detected	<input type="checkbox"/> 3 - Noticeable from a distance
Color	<input type="checkbox"/>	<input type="checkbox"/> Clear <input type="checkbox"/> Brown <input type="checkbox"/> Gray <input type="checkbox"/> Yellow <input type="checkbox"/> Green <input type="checkbox"/> Orange <input type="checkbox"/> Red <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint colors in sample bottle	<input type="checkbox"/> 2 - Clearly visible in sample bottle	<input type="checkbox"/> 3 - Clearly visible in outfall flow
Turbidity	<input type="checkbox"/>	See severity	<input type="checkbox"/> 1 - Slight cloudiness	<input type="checkbox"/> 2 - Cloudy	<input type="checkbox"/> 3 - Opaque
Floatables -Does Not Include Trash!!	<input type="checkbox"/>	<input type="checkbox"/> Sewage (Toilet Paper, etc.) <input type="checkbox"/> Suds <input type="checkbox"/> Petroleum (oil sheen) <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Few/slight; origin not obvious	<input type="checkbox"/> 2 - Some; indications of origin (e.g., possible suds or oil sheen)	<input type="checkbox"/> 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☐ Yes ☒ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	<input type="checkbox"/>	<input type="checkbox"/> Spalling, Cracking or Chipping <input type="checkbox"/> Peeling Paint <input type="checkbox"/> Corrosion	
Deposits/Stains	<input type="checkbox"/>	<input type="checkbox"/> Oily <input type="checkbox"/> Flow Line <input type="checkbox"/> Paint <input type="checkbox"/> Other:	
Abnormal Vegetation	<input type="checkbox"/>	<input type="checkbox"/> Excessive <input type="checkbox"/> Inhibited	
Poor pool quality	<input type="checkbox"/>	<input type="checkbox"/> Odors <input type="checkbox"/> Colors <input type="checkbox"/> Floatables <input type="checkbox"/> Oil Sheen <input type="checkbox"/> Suds <input type="checkbox"/> Excessive Algae <input type="checkbox"/> Other:	
Pipe benthic growth	<input type="checkbox"/>	<input type="checkbox"/> Brown <input type="checkbox"/> Orange <input type="checkbox"/> Green <input type="checkbox"/> Other:	

Section 6: Overall Outfall Characterization

<input checked="" type="checkbox"/> Unlikely	<input type="checkbox"/> Potential (presence of two or more indicators)	<input type="checkbox"/> Suspect (one or more indicators with a severity of 3)	<input type="checkbox"/> Obvious
--	---	--	----------------------------------

Section 7: Data Collection

1. Sample for the lab?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
2. If yes, collected from:	<input type="checkbox"/> Flow <input type="checkbox"/> Pool
3. Intermittent flow trap set?	<input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, type: <input type="checkbox"/> OBM <input type="checkbox"/> Caulk dam

Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?



## Photo Log

Photo No. 1: image.jpg








## MS4 OUTFALL FIELD SCREENING REPORT

BACKGROUND INFORMATION				
Permittee Name: CITY OF YORK		NPDES Permit No.: PA		
Date of Inspection: 06/18/18		Outfall ID No.: TR33		
Land Use in Outfall Drainage Area (Select All): <input type="checkbox"/> Industrial <input type="checkbox"/> Urban Residential <input type="checkbox"/> Commercial <input type="checkbox"/> Suburban Residential <input type="checkbox"/> Open Space <input type="checkbox"/> Other:		Latitude: 39 ° 57 ' 7.1 "		
		Latitude: -76 ° 44 ' 3.5 "		
		Dry Weather Inspection? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		
		Date of Previous Precipitation:		
		Amount of Previous Precipitation: in		
Inspector Name(s): Lettice Brown		Were Photographs Taken? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		
		Are Photographs Attached? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		
OUTFALL DESCRIPTION				
TYPE	MATERIAL	SHAPE	DIMENSIONS	SUBMERGED
<input checked="" type="checkbox"/> Closed Pipe	<input type="checkbox"/> RCP <input checked="" type="checkbox"/> CMP <input type="checkbox"/> PVC <input type="checkbox"/> HDPE <input type="checkbox"/> Steel <input type="checkbox"/> Other	<input checked="" type="checkbox"/> Circular <input checked="" type="checkbox"/> Single <input type="checkbox"/> Elliptical <input type="checkbox"/> Double <input type="checkbox"/> Box <input type="checkbox"/> Triple <input type="checkbox"/> Other <input type="checkbox"/> Other	Diameter: 24 in	<input type="checkbox"/> In Water <input type="checkbox"/> With Sediment:
<input type="checkbox"/> Open Channel	<input type="checkbox"/> Concrete <input type="checkbox"/> Earthen <input type="checkbox"/> Rip-Rap <input type="checkbox"/> Other	<input type="checkbox"/> Trapezoid <input type="checkbox"/> Parabolic <input type="checkbox"/> Other	Depth: _____ in Top Width: _____ in Bottom Width: _____	
Dry Weather Flow Present at Outfall During Inspection? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No (If No, skip to Certification Section)				
Description of Flow Rate <input type="checkbox"/> Trickle <input type="checkbox"/> Moderate <input type="checkbox"/> Significant <input checked="" type="checkbox"/> N/A				
DRY WEATHER FLOW EVALUATION				
Does the dry weather flow contain color? <input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, provide a description below.				
Does the dry weather flow contain an odor? <input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, provide a description below.				
Is there an observed change in the receiving waters as a result of the discharge? <input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, provide a description below.				
Does the dry weather flow contain floating solids, scum, sheen or substances that result in deposits? <input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, provide a description below.				



Were sample(s) collected of the dry weather flow? <input type="checkbox"/> Yes <input type="checkbox"/> No (If Yes, No. Samples: _____)					
<b>FIELD / LABORATORY ANALYSIS</b>					
<b>PARAMETER</b>	<b>RESULTS</b>	<b>UNITS</b>	<b>PARAMETER</b>	<b>RESULTS</b>	<b>UNITS</b>
Flow Rate		GPM	Fecal Coliform		No./100 mL
pH		S.U.	COD		mg/L
Total Residual Chlorine (TRC)		mg/L	BOD5		mg/L
Conductivity		µmhos/cm	TSS		mg/L
Ammonia-Nitrogen		mg/L	TDS		mg/L
Other: _____			Oil and Grease		mg/L
Other: _____			Other: _____		
Indicate the parameters above that were analyzed by a DEP-certified laboratory:					
<b>ILLICIT DISCHARGES</b>					
Is the dry weather flow an illicit discharge? <input type="checkbox"/> Yes <input type="checkbox"/> No					
If Yes, describe efforts made to determine the source(s) of the illicit discharge.					
Describe corrective actions taken by the permittee in response to the finding of an illicit discharge.					
<b>Inspector Comments:</b> An observation point was used to screen this outfall due to safety reasons and not being able to access the creek in this location. (Permit Reference: Part C.1.B.3.D.6)					
<b>RESPONSIBLE OFFICIAL CERTIFICATION</b>					
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 gathered and evaluated 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 knowledge of violations. See 18 Pa. C.S. § 4904 (relating to unsworn falsification).					
Lettice Brown _____ <b>Responsible Official Name</b>			 _____ <b>Signature</b>		
(717)324-6532 _____ <b>Telephone No.</b>			06/19/2018 _____ <b>Date</b>		



## Photo Log

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## MS4 OUTFALL FIELD SCREENING REPORT

BACKGROUND INFORMATION				
Permittee Name: CITY OF YORK		NPDES Permit No.: PA		
Date of Inspection: 06/29/18		Outfall ID No.: TR32		
Land Use in Outfall Drainage Area (Select All): <input type="checkbox"/> Industrial <input type="checkbox"/> Urban Residential <input type="checkbox"/> Commercial <input type="checkbox"/> Suburban Residential <input type="checkbox"/> Open Space <input type="checkbox"/> Other:		Latitude: 39 ° 57 ' 7 "		
		Latitude: -76 ° 44 ' 2.7 "		
		Dry Weather Inspection? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
		Date of Previous Precipitation: 06/28/18		
Inspector Name(s): Lettice Brown		Amount of Previous Precipitation: .18 in		
		Were Photographs Taken? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		
		Are Photographs Attached? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		
OUTFALL DESCRIPTION				
TYPE	MATERIAL	SHAPE	DIMENSIONS	SUBMERGED
<input checked="" type="checkbox"/> Closed Pipe	<input type="checkbox"/> RCP <input type="checkbox"/> CMP <input type="checkbox"/> PVC <input type="checkbox"/> HDPE <input type="checkbox"/> Steel <input checked="" type="checkbox"/> Other	<input checked="" type="checkbox"/> Circular <input checked="" type="checkbox"/> Single <input type="checkbox"/> Elliptical <input type="checkbox"/> Double <input type="checkbox"/> Box <input type="checkbox"/> Triple <input type="checkbox"/> Other <input type="checkbox"/> Other	Diameter: 12 in	<input type="checkbox"/> In Water <input type="checkbox"/> With Sediment:
<input type="checkbox"/> Open Channel	<input type="checkbox"/> Concrete <input type="checkbox"/> Earthen <input type="checkbox"/> Rip-Rap <input type="checkbox"/> Other	<input type="checkbox"/> Trapezoid <input type="checkbox"/> Parabolic <input type="checkbox"/> Other	Depth: _____ in Top Width: _____ in Bottom Width: _____	
Dry Weather Flow Present at Outfall During Inspection? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No (If No, skip to Certification Section)				
Description of Flow Rate <input type="checkbox"/> Trickle <input type="checkbox"/> Moderate <input type="checkbox"/> Significant <input checked="" type="checkbox"/> N/A				
DRY WEATHER FLOW EVALUATION				
Does the dry weather flow contain color? <input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, provide a description below.				
Does the dry weather flow contain an odor? <input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, provide a description below.				
Is there an observed change in the receiving waters as a result of the discharge? <input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, provide a description below.				
Does the dry weather flow contain floating solids, scum, sheen or substances that result in deposits? <input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, provide a description below.				



Were sample(s) collected of the dry weather flow? <input type="checkbox"/> Yes <input type="checkbox"/> No (If Yes, No. Samples: _____)					
<b>FIELD / LABORATORY ANALYSIS</b>					
<b>PARAMETER</b>	<b>RESULTS</b>	<b>UNITS</b>	<b>PARAMETER</b>	<b>RESULTS</b>	<b>UNITS</b>
Flow Rate		GPM	Fecal Coliform		No./100 mL
pH		S.U.	COD		mg/L
Total Residual Chlorine (TRC)		mg/L	BOD5		mg/L
Conductivity		µmhos/cm	TSS		mg/L
Ammonia-Nitrogen		mg/L	TDS		mg/L
Other: _____			Oil and Grease		mg/L
Other: _____			Other: _____		
Indicate the parameters above that were analyzed by a DEP-certified laboratory:					
<b>ILLICIT DISCHARGES</b>					
Is the dry weather flow an illicit discharge? <input type="checkbox"/> Yes <input type="checkbox"/> No					
If Yes, describe efforts made to determine the source(s) of the illicit discharge.					
Describe corrective actions taken by the permittee in response to the finding of an illicit discharge.					
Inspector Comments:					
<b>RESPONSIBLE OFFICIAL CERTIFICATION</b>					
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 gathered and evaluated 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 knowledge of violations. See 18 Pa. C.S. § 4904 (relating to unsworn falsification).					
Lettice Brown					
Responsible Official Name					
(717)324-6532			06/29/2018		
Telephone No.			Date		



## Photo Log

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## MS4 OUTFALL FIELD SCREENING REPORT

BACKGROUND INFORMATION				
Permittee Name: CITY OF YORK		NPDES Permit No.: PA		
Date of Inspection: 06/29/18		Outfall ID No.: TR31		
Land Use in Outfall Drainage Area (Select All): <input type="checkbox"/> Industrial <input type="checkbox"/> Urban Residential <input type="checkbox"/> Commercial <input type="checkbox"/> Suburban Residential <input type="checkbox"/> Open Space <input type="checkbox"/> Other:		Latitude: 39 ° 57 ' 6.9 "		
		Latitude: -76 ° 44 ' 2.6 "		
		Dry Weather Inspection? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
		Date of Previous Precipitation: 06/28/18		
		Amount of Previous Precipitation: .18 in		
Inspector Name(s): Lettice Brown		Were Photographs Taken? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		
		Are Photographs Attached? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		
OUTFALL DESCRIPTION				
TYPE	MATERIAL	SHAPE	DIMENSIONS	SUBMERGED
<input checked="" type="checkbox"/> Closed Pipe	<input type="checkbox"/> RCP <input type="checkbox"/> CMP <input type="checkbox"/> PVC <input type="checkbox"/> HDPE <input type="checkbox"/> Steel <input checked="" type="checkbox"/> Other	<input checked="" type="checkbox"/> Circular <input checked="" type="checkbox"/> Single <input type="checkbox"/> Elliptical <input type="checkbox"/> Double <input type="checkbox"/> Box <input type="checkbox"/> Triple <input type="checkbox"/> Other <input type="checkbox"/> Other	Diameter: 12 in	<input type="checkbox"/> In Water <input type="checkbox"/> With Sediment:
<input type="checkbox"/> Open Channel	<input type="checkbox"/> Concrete <input type="checkbox"/> Earthen <input type="checkbox"/> Rip-Rap <input type="checkbox"/> Other	<input type="checkbox"/> Trapezoid <input type="checkbox"/> Parabolic <input type="checkbox"/> Other	Depth: _____ in Top Width: _____ in Bottom Width: _____	
Dry Weather Flow Present at Outfall During Inspection? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No (If No, skip to Certification Section)				
Description of Flow Rate <input type="checkbox"/> Trickle <input type="checkbox"/> Moderate <input type="checkbox"/> Significant <input checked="" type="checkbox"/> N/A				
DRY WEATHER FLOW EVALUATION				
Does the dry weather flow contain color? <input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, provide a description below.				
Does the dry weather flow contain an odor? <input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, provide a description below.				
Is there an observed change in the receiving waters as a result of the discharge? <input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, provide a description below.				
Does the dry weather flow contain floating solids, scum, sheen or substances that result in deposits? <input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, provide a description below.				



Were sample(s) collected of the dry weather flow? ☐ Yes ☐ No (If Yes, No. Samples: \_\_\_\_\_)

### FIELD / LABORATORY ANALYSIS

PARAMETER	RESULTS	UNITS	PARAMETER	RESULTS	UNITS
Flow Rate		GPM	Fecal Coliform		No./100 mL
pH		S.U.	COD		mg/L
Total Residual Chlorine (TRC)		mg/L	BOD5		mg/L
Conductivity		µmhos/cm	TSS		mg/L
Ammonia-Nitrogen		mg/L	TDS		mg/L
Other: _____			Oil and Grease		mg/L
Other: _____			Other: _____		

Indicate the parameters above that were analyzed by a DEP-certified laboratory:

### ILLICIT DISCHARGES

Is the dry weather flow an illicit discharge? ☐ Yes ☐ No

If Yes, describe efforts made to determine the source(s) of the illicit discharge.

Describe corrective actions taken by the permittee in response to the finding of an illicit discharge.

Inspector Comments:

### RESPONSIBLE OFFICIAL 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 gathered and evaluated 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 knowledge of violations. See 18 Pa. C.S. § 4904 (relating to unsworn falsification).

Lettice Brown

Responsible Official Name

(717)324-6532

Telephone No.



Signature

06/29/2018

Date



## Photo Log

Photo No. 1: image.jpg







## MS4 OUTFALL FIELD SCREENING REPORT

BACKGROUND INFORMATION				
Permittee Name: CITY OF YORK		NPDES Permit No.: PA		
Date of Inspection: 06/29/18		Outfall ID No.: TR30		
Land Use in Outfall Drainage Area (Select All): <input type="checkbox"/> Industrial <input type="checkbox"/> Urban Residential <input type="checkbox"/> Commercial <input type="checkbox"/> Suburban Residential <input type="checkbox"/> Open Space <input type="checkbox"/> Other:		Latitude: 39 ° 57 ' 6.9 "		
		Latitude: -76 ° 44 ' 2.5 "		
		Dry Weather Inspection? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
		Date of Previous Precipitation: 06/28/18		
Inspector Name(s): Lettice Brown		Amount of Previous Precipitation: .18 in		
		Were Photographs Taken? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		
		Are Photographs Attached? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		
OUTFALL DESCRIPTION				
TYPE	MATERIAL	SHAPE	DIMENSIONS	SUBMERGED
<input checked="" type="checkbox"/> Closed Pipe	<input type="checkbox"/> RCP <input type="checkbox"/> CMP <input type="checkbox"/> PVC <input type="checkbox"/> HDPE <input type="checkbox"/> Steel <input checked="" type="checkbox"/> Other	<input checked="" type="checkbox"/> Circular <input checked="" type="checkbox"/> Single <input type="checkbox"/> Elliptical <input type="checkbox"/> Double <input type="checkbox"/> Box <input type="checkbox"/> Triple <input type="checkbox"/> Other <input type="checkbox"/> Other	Diameter: 12 in	<input type="checkbox"/> In Water <input type="checkbox"/> With Sediment:
<input type="checkbox"/> Open Channel	<input type="checkbox"/> Concrete <input type="checkbox"/> Earthen <input type="checkbox"/> Rip-Rap <input type="checkbox"/> Other	<input type="checkbox"/> Trapezoid <input type="checkbox"/> Parabolic <input type="checkbox"/> Other	Depth: _____ in Top Width: _____ in Bottom Width: _____	
Dry Weather Flow Present at Outfall During Inspection? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No (If No, skip to Certification Section)				
Description of Flow Rate <input type="checkbox"/> Trickle <input type="checkbox"/> Moderate <input type="checkbox"/> Significant <input checked="" type="checkbox"/> N/A				
DRY WEATHER FLOW EVALUATION				
Does the dry weather flow contain color? <input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, provide a description below.				
Does the dry weather flow contain an odor? <input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, provide a description below.				
Is there an observed change in the receiving waters as a result of the discharge? <input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, provide a description below.				
Does the dry weather flow contain floating solids, scum, sheen or substances that result in deposits? <input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, provide a description below.				



Were sample(s) collected of the dry weather flow? ☐ Yes ☐ No (If Yes, No. Samples: \_\_\_\_\_)

### FIELD / LABORATORY ANALYSIS

PARAMETER	RESULTS	UNITS	PARAMETER	RESULTS	UNITS
Flow Rate		GPM	Fecal Coliform		No./100 mL
pH		S.U.	COD		mg/L
Total Residual Chlorine (TRC)		mg/L	BOD5		mg/L
Conductivity		µmhos/cm	TSS		mg/L
Ammonia-Nitrogen		mg/L	TDS		mg/L
Other: _____			Oil and Grease		mg/L
Other: _____			Other: _____		

Indicate the parameters above that were analyzed by a DEP-certified laboratory:

### ILLICIT DISCHARGES

Is the dry weather flow an illicit discharge? ☐ Yes ☐ No

If Yes, describe efforts made to determine the source(s) of the illicit discharge.

Describe corrective actions taken by the permittee in response to the finding of an illicit discharge.

Inspector Comments:

### RESPONSIBLE OFFICIAL 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 gathered and evaluated 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 knowledge of violations. See 18 Pa. C.S. § 4904 (relating to unsworn falsification).

Lettice Brown

Responsible Official Name

(717)324-6532

Telephone No.



Signature

06/29/2018

Date



## Photo Log

Photo No. 1: image.jpg





## OUTFALL RECONNAISSANCE INVENTORY/ SAMPLE COLLECTION FIELD SHEET

### Section 1: Background Data

Subwatershed:		Outfall ID: CC12	
Today's date: 07/05/17		Time (Military): 10:40AM	
Investigators: Lettice Brown		Form completed by: Lettice Brown	
Temperature (°F): 76		Rainfall (in.): Last 24 hours: 0 Last 48 hours: 0	
Latitude: 39.9682135	Longitude: -76.7305930	GPS Unit:	GPS LMK #:
Camera:		Photo #'s:	
Land Use in Drainage Area (Check all that apply): <input type="checkbox"/> Industrial <input type="checkbox"/> Ultra-Urban Residential <input type="checkbox"/> Suburban Residential <input type="checkbox"/> Commercial		<input type="checkbox"/> Open Space <input type="checkbox"/> Institutional Other: Known Industries:	
Notes (e.g., origin of outfall, if known): York City			

### Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE	DIMENSIONS (IN.)	SUBMERGED
<input checked="" type="checkbox"/> Closed Pipe	<input type="checkbox"/> RCP <input type="checkbox"/> CMP <input type="checkbox"/> PVC <input type="checkbox"/> HDPE <input type="checkbox"/> Steel <input checked="" type="checkbox"/> Other: steel+TCP	<input checked="" type="checkbox"/> Circular <input type="checkbox"/> Elliptical <input type="checkbox"/> Box <input type="checkbox"/> Other:	<input checked="" type="checkbox"/> Single <input type="checkbox"/> Double <input type="checkbox"/> Triple <input type="checkbox"/> Other:	Diameter/Dimensions: 36  In Water: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully With Sediment: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully
<input type="checkbox"/> Open drainage	<input type="checkbox"/> Concrete <input type="checkbox"/> Earthen <input type="checkbox"/> rip-rap <input type="checkbox"/> Other:	<input type="checkbox"/> Trapezoid <input type="checkbox"/> Parabolic <input type="checkbox"/> Other:	Depth:  Top Width:  Bottom Width:	
<input type="checkbox"/> In-Stream	(applicable when collecting samples)			
Flow Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <i>If No, Skip to Section 5</i>			
Flow Description (If present)	<input type="checkbox"/> Trickle <input type="checkbox"/> Moderate <input type="checkbox"/> Substantial			

### Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER	RESULT	UNIT	EQUIPMENT	
<input type="checkbox"/> Flow #1	Volume		Liter	Bottle
	Time to fill		Seconds	
<input type="checkbox"/> Flow #2	Flow depth		Inches	Tape measure
	Flow width		Inches	Tape measure
	Measured length		Inches	Tape measure
	Time of travel		Seconds	Stop watch
Temperature			°F	Thermometer
pH			pH Units	Test strip/Probe
Ammonia			mg/L	Test strip



Outfall Reconnaissance Inventory Field Sheet

Section 4: Physical Indicators for Flowing Outfalls Only

Are Any Physical Indicators Present in the flow? ☐ Yes ☐ No *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	<input type="checkbox"/>	<input type="checkbox"/> Sewage <input type="checkbox"/> Rancid/sour <input type="checkbox"/> Petroleum/gas <input type="checkbox"/> Sulfide <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint	<input type="checkbox"/> 2 - Easily detected	<input type="checkbox"/> 3 - Noticeable from a distance
Color	<input type="checkbox"/>	<input type="checkbox"/> Clear <input type="checkbox"/> Brown <input type="checkbox"/> Gray <input type="checkbox"/> Yellow <input type="checkbox"/> Green <input type="checkbox"/> Orange <input type="checkbox"/> Red <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint colors in sample bottle	<input type="checkbox"/> 2 - Clearly visible in sample bottle	<input type="checkbox"/> 3 - Clearly visible in outfall flow
Turbidity	<input type="checkbox"/>	See severity	<input type="checkbox"/> 1 - Slight cloudiness	<input type="checkbox"/> 2 - Cloudy	<input type="checkbox"/> 3 - Opaque
Floatables -Does Not Include Trash!!	<input type="checkbox"/>	<input type="checkbox"/> Sewage (Toilet Paper, etc.) <input type="checkbox"/> Suds <input type="checkbox"/> Petroleum (oil sheen) <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Few/slight; origin not obvious	<input type="checkbox"/> 2 - Some; indications of origin (e.g., possible suds or oil sheen)	<input type="checkbox"/> 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☐ Yes ☒ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	<input type="checkbox"/>	<input type="checkbox"/> Spalling, Cracking or Chipping <input type="checkbox"/> Peeling Paint <input type="checkbox"/> Corrosion	
Deposits/Stains	<input type="checkbox"/>	<input type="checkbox"/> Oily <input type="checkbox"/> Flow Line <input type="checkbox"/> Paint <input type="checkbox"/> Other:	
Abnormal Vegetation	<input type="checkbox"/>	<input type="checkbox"/> Excessive <input type="checkbox"/> Inhibited	
Poor pool quality	<input type="checkbox"/>	<input type="checkbox"/> Odors <input type="checkbox"/> Colors <input type="checkbox"/> Floatables <input type="checkbox"/> Oil Sheen <input type="checkbox"/> Suds <input type="checkbox"/> Excessive Algae <input type="checkbox"/> Other:	
Pipe benthic growth	<input type="checkbox"/>	<input type="checkbox"/> Brown <input type="checkbox"/> Orange <input type="checkbox"/> Green <input type="checkbox"/> Other:	

Section 6: Overall Outfall Characterization

<input checked="" type="checkbox"/> Unlikely	<input type="checkbox"/> Potential (presence of two or more indicators)	<input type="checkbox"/> Suspect (one or more indicators with a severity of 3)	<input type="checkbox"/> Obvious
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Section 7: Data Collection

1. Sample for the lab?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
2. If yes, collected from:	<input type="checkbox"/> Flow <input type="checkbox"/> Pool
3. Intermittent flow trap set?	<input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, type: <input type="checkbox"/> OBM <input type="checkbox"/> Caulk dam

Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?



## Photo Log

Photo No. 1: image.jpg





## OUTFALL RECONNAISSANCE INVENTORY/ SAMPLE COLLECTION FIELD SHEET

### Section 1: Background Data

Subwatershed:		Outfall ID: CC14	
Today's date: 07/05/17		Time (Military): 10:45AM	
Investigators: Lettice Brown		Form completed by: Lettice Brown	
Temperature (°F): 76		Rainfall (in.): Last 24 hours: 0 Last 48 hours: 0	
Latitude: 39.9680953	Longitude: -76.7307284	GPS Unit:	GPS LMK #:
Camera:		Photo #'s:	
Land Use in Drainage Area (Check all that apply):			
<input type="checkbox"/> Industrial <input type="checkbox"/> Ultra-Urban Residential <input type="checkbox"/> Suburban Residential <input type="checkbox"/> Commercial		<input type="checkbox"/> Open Space <input type="checkbox"/> Institutional Other: Known Industries:	
Notes (e.g., origin of outfall, if known): York City			

### Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
<input checked="" type="checkbox"/> Closed Pipe	<input type="checkbox"/> RCP <input type="checkbox"/> CMP <input type="checkbox"/> PVC <input type="checkbox"/> HDPE <input type="checkbox"/> Steel <input checked="" type="checkbox"/> Other: steel+TCP	<input checked="" type="checkbox"/> Circular <input type="checkbox"/> Elliptical <input type="checkbox"/> Box <input type="checkbox"/> Other:	<input checked="" type="checkbox"/> Single <input type="checkbox"/> Double <input type="checkbox"/> Triple <input type="checkbox"/> Other:	Diameter/Dimensions: 24	In Water: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully With Sediment: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully
<input type="checkbox"/> Open drainage	<input type="checkbox"/> Concrete <input type="checkbox"/> Earthen <input type="checkbox"/> rip-rap <input type="checkbox"/> Other:	<input type="checkbox"/> Trapezoid <input type="checkbox"/> Parabolic <input type="checkbox"/> Other:		Depth: Top Width: Bottom Width:	
<input type="checkbox"/> In-Stream	(applicable when collecting samples)				
Flow Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <i>If No, Skip to Section 5</i>				
Flow Description (If present)	<input type="checkbox"/> Trickle <input type="checkbox"/> Moderate <input type="checkbox"/> Substantial				

### Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER		RESULT	UNIT	EQUIPMENT
<input type="checkbox"/> Flow #1	Volume		Liter	Bottle
	Time to fill		Seconds	
<input type="checkbox"/> Flow #2	Flow depth		Inches	Tape measure
	Flow width		Inches	Tape measure
	Measured length		Inches	Tape measure
	Time of travel		Seconds	Stop watch
Temperature			°F	Thermometer
pH			pH Units	Test strip/Probe
Ammonia			mg/L	Test strip



Outfall Reconnaissance Inventory Field Sheet

Section 4: Physical Indicators for Flowing Outfalls Only

Are Any Physical Indicators Present in the flow? ☐ Yes ☐ No (If No, Skip to Section 5)

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	<input type="checkbox"/>	<input type="checkbox"/> Sewage <input type="checkbox"/> Rancid/sour <input type="checkbox"/> Petroleum/gas <input type="checkbox"/> Sulfide <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint	<input type="checkbox"/> 2 - Easily detected	<input type="checkbox"/> 3 - Noticeable from a distance
Color	<input type="checkbox"/>	<input type="checkbox"/> Clear <input type="checkbox"/> Brown <input type="checkbox"/> Gray <input type="checkbox"/> Yellow <input type="checkbox"/> Green <input type="checkbox"/> Orange <input type="checkbox"/> Red <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint colors in sample bottle	<input type="checkbox"/> 2 - Clearly visible in sample bottle	<input type="checkbox"/> 3 - Clearly visible in outfall flow
Turbidity	<input type="checkbox"/>	See severity	<input type="checkbox"/> 1 - Slight cloudiness	<input type="checkbox"/> 2 - Cloudy	<input type="checkbox"/> 3 - Opaque
Floatables -Does Not Include Trash!!	<input type="checkbox"/>	<input type="checkbox"/> Sewage (Toilet Paper, etc.) <input type="checkbox"/> Suds <input type="checkbox"/> Petroleum (oil sheen) <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Few/slight; origin not obvious	<input type="checkbox"/> 2 - Some; indications of origin (e.g., possible suds or oil sheen)	<input type="checkbox"/> 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☐ Yes ☒ No (If No, Skip to Section 6)

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	<input type="checkbox"/>	<input type="checkbox"/> Spalling, Cracking or Chipping <input type="checkbox"/> Peeling Paint <input type="checkbox"/> Corrosion	
Deposits/Stains	<input type="checkbox"/>	<input type="checkbox"/> Oily <input type="checkbox"/> Flow Line <input type="checkbox"/> Paint <input type="checkbox"/> Other:	
Abnormal Vegetation	<input type="checkbox"/>	<input type="checkbox"/> Excessive <input type="checkbox"/> Inhibited	
Poor pool quality	<input type="checkbox"/>	<input type="checkbox"/> Odors <input type="checkbox"/> Colors <input type="checkbox"/> Floatables <input type="checkbox"/> Oil Sheen <input type="checkbox"/> Suds <input type="checkbox"/> Excessive Algae <input type="checkbox"/> Other:	
Pipe benthic growth	<input type="checkbox"/>	<input type="checkbox"/> Brown <input type="checkbox"/> Orange <input type="checkbox"/> Green <input type="checkbox"/> Other:	

Section 6: Overall Outfall Characterization

<input checked="" type="checkbox"/> Unlikely	<input type="checkbox"/> Potential (presence of two or more indicators)	<input type="checkbox"/> Suspect (one or more indicators with a severity of 3)	<input type="checkbox"/> Obvious
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Section 7: Data Collection

1. Sample for the lab?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
2. If yes, collected from:	<input type="checkbox"/> Flow <input type="checkbox"/> Pool
3. Intermittent flow trap set?	<input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, type: <input type="checkbox"/> OBM <input type="checkbox"/> Caulk dam

Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?



## Photo Log

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## OUTFALL RECONNAISSANCE INVENTORY/ SAMPLE COLLECTION FIELD SHEET

### Section 1: Background Data

Subwatershed:		Outfall ID: CC16	
Today's date: 07/05/17		Time (Military): 10:45AM	
Investigators: Lettice Brown		Form completed by: Lettice Brown	
Temperature (°F): 76		Rainfall (in.): Last 24 hours: 0 Last 48 hours: 0	
Latitude: 39.9680461	Longitude: -76.7307520	GPS Unit:	GPS LMK #:
Camera:		Photo #'s:	
Land Use in Drainage Area (Check all that apply):			
<input type="checkbox"/> Industrial <input type="checkbox"/> Ultra-Urban Residential <input type="checkbox"/> Suburban Residential <input type="checkbox"/> Commercial		<input type="checkbox"/> Open Space <input type="checkbox"/> Institutional Other: Known Industries:	
Notes (e.g., origin of outfall, if known): York City			

### Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
<input checked="" type="checkbox"/> Closed Pipe	<input type="checkbox"/> RCP <input type="checkbox"/> PVC <input type="checkbox"/> Steel <input type="checkbox"/> Other:	<input checked="" type="checkbox"/> Circular <input type="checkbox"/> Elliptical <input type="checkbox"/> Box <input type="checkbox"/> Other:	<input checked="" type="checkbox"/> Single <input type="checkbox"/> Double <input type="checkbox"/> Triple <input type="checkbox"/> Other:	Diameter/Dimensions: 18	In Water: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully With Sediment: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully
<input type="checkbox"/> Open drainage	<input type="checkbox"/> Concrete <input type="checkbox"/> Earthen <input type="checkbox"/> rip-rap <input type="checkbox"/> Other:	<input type="checkbox"/> Trapezoid <input type="checkbox"/> Parabolic <input type="checkbox"/> Other:		Depth: Top Width: Bottom Width:	
<input type="checkbox"/> In-Stream	(applicable when collecting samples)				
Flow Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <i>If No, Skip to Section 5</i>				
Flow Description (If present)	<input type="checkbox"/> Trickle <input type="checkbox"/> Moderate <input type="checkbox"/> Substantial				

### Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER		RESULT	UNIT	EQUIPMENT
<input type="checkbox"/> Flow #1	Volume		Liter	Bottle
	Time to fill		Seconds	
<input type="checkbox"/> Flow #2	Flow depth		Inches	Tape measure
	Flow width		Inches	Tape measure
	Measured length		Inches	Tape measure
	Time of travel		Seconds	Stop watch
Temperature			°F	Thermometer
pH			pH Units	Test strip/Probe
Ammonia			mg/L	Test strip



Outfall Reconnaissance Inventory Field Sheet

Section 4: Physical Indicators for Flowing Outfalls Only

Are Any Physical Indicators Present in the flow? ☐ Yes ☐ No *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	<input type="checkbox"/>	<input type="checkbox"/> Sewage <input type="checkbox"/> Rancid/sour <input type="checkbox"/> Petroleum/gas <input type="checkbox"/> Sulfide <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint	<input type="checkbox"/> 2 - Easily detected	<input type="checkbox"/> 3 - Noticeable from a distance
Color	<input type="checkbox"/>	<input type="checkbox"/> Clear <input type="checkbox"/> Brown <input type="checkbox"/> Gray <input type="checkbox"/> Yellow <input type="checkbox"/> Green <input type="checkbox"/> Orange <input type="checkbox"/> Red <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint colors in sample bottle	<input type="checkbox"/> 2 - Clearly visible in sample bottle	<input type="checkbox"/> 3 - Clearly visible in outfall flow
Turbidity	<input type="checkbox"/>	See severity	<input type="checkbox"/> 1 - Slight cloudiness	<input type="checkbox"/> 2 - Cloudy	<input type="checkbox"/> 3 - Opaque
Floatables -Does Not Include Trash!!	<input type="checkbox"/>	<input type="checkbox"/> Sewage (Toilet Paper, etc.) <input type="checkbox"/> Suds <input type="checkbox"/> Petroleum (oil sheen) <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Few/slight; origin not obvious	<input type="checkbox"/> 2 - Some; indications of origin (e.g., possible suds or oil sheen)	<input type="checkbox"/> 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☐ Yes ☒ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	<input type="checkbox"/>	<input type="checkbox"/> Spalling, Cracking or Chipping <input type="checkbox"/> Peeling Paint <input type="checkbox"/> Corrosion	
Deposits/Stains	<input type="checkbox"/>	<input type="checkbox"/> Oily <input type="checkbox"/> Flow Line <input type="checkbox"/> Paint <input type="checkbox"/> Other:	
Abnormal Vegetation	<input type="checkbox"/>	<input type="checkbox"/> Excessive <input type="checkbox"/> Inhibited	
Poor pool quality	<input type="checkbox"/>	<input type="checkbox"/> Odors <input type="checkbox"/> Colors <input type="checkbox"/> Floatables <input type="checkbox"/> Oil Sheen <input type="checkbox"/> Suds <input type="checkbox"/> Excessive Algae <input type="checkbox"/> Other:	
Pipe benthic growth	<input type="checkbox"/>	<input type="checkbox"/> Brown <input type="checkbox"/> Orange <input type="checkbox"/> Green <input type="checkbox"/> Other:	

Section 6: Overall Outfall Characterization

<input checked="" type="checkbox"/> Unlikely	<input type="checkbox"/> Potential (presence of two or more indicators)	<input type="checkbox"/> Suspect (one or more indicators with a severity of 3)	<input type="checkbox"/> Obvious
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Section 7: Data Collection

1. Sample for the lab?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
2. If yes, collected from:	<input type="checkbox"/> Flow <input type="checkbox"/> Pool
3. Intermittent flow trap set?	<input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, type: <input type="checkbox"/> OBM <input type="checkbox"/> Caulk dam

Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?



## Photo Log

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## OUTFALL RECONNAISSANCE INVENTORY/ SAMPLE COLLECTION FIELD SHEET

### Section 1: Background Data

Subwatershed:		Outfall ID: CC17	
Today's date: 07/05/17		Time (Military): 10:45AM	
Investigators: Lettice Brown		Form completed by: Lettice Brown	
Temperature (°F): 76		Rainfall (in.): Last 24 hours: 0 Last 48 hours: 0	
Latitude: 39.9679775	Longitude: -76.7308693	GPS Unit:	GPS LMK #:
Camera:		Photo #'s:	
Land Use in Drainage Area (Check all that apply): <input type="checkbox"/> Industrial <input type="checkbox"/> Ultra-Urban Residential <input type="checkbox"/> Suburban Residential <input type="checkbox"/> Commercial		<input type="checkbox"/> Open Space <input type="checkbox"/> Institutional Other: Known Industries:	
Notes (e.g., origin of outfall, if known): York City			

### Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE	DIMENSIONS (IN.)	SUBMERGED
<input checked="" type="checkbox"/> Closed Pipe	<input type="checkbox"/> RCP <input type="checkbox"/> CMP <input type="checkbox"/> PVC <input type="checkbox"/> HDPE <input type="checkbox"/> Steel <input type="checkbox"/> Other:	<input checked="" type="checkbox"/> Circular <input type="checkbox"/> Elliptical <input type="checkbox"/> Box <input type="checkbox"/> Other:	<input checked="" type="checkbox"/> Single <input type="checkbox"/> Double <input type="checkbox"/> Triple <input type="checkbox"/> Other:	Diameter/Dimensions: 8  In Water: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully With Sediment: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully
<input type="checkbox"/> Open drainage	<input type="checkbox"/> Concrete <input type="checkbox"/> Earthen <input type="checkbox"/> rip-rap <input type="checkbox"/> Other:	<input type="checkbox"/> Trapezoid <input type="checkbox"/> Parabolic <input type="checkbox"/> Other:	Depth:  Top Width:  Bottom Width:	
<input type="checkbox"/> In-Stream	(applicable when collecting samples)			
Flow Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <i>If No, Skip to Section 5</i>			
Flow Description (If present)	<input type="checkbox"/> Trickle <input type="checkbox"/> Moderate <input type="checkbox"/> Substantial			

### Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER		RESULT	UNIT	EQUIPMENT
<input type="checkbox"/> Flow #1	Volume		Liter	Bottle
	Time to fill		Seconds	
<input type="checkbox"/> Flow #2	Flow depth		Inches	Tape measure
	Flow width		Inches	Tape measure
	Measured length		Inches	Tape measure
	Time of travel		Seconds	Stop watch
Temperature			°F	Thermometer
pH			pH Units	Test strip/Probe
Ammonia			mg/L	Test strip



Outfall Reconnaissance Inventory Field Sheet

Section 4: Physical Indicators for Flowing Outfalls Only

Are Any Physical Indicators Present in the flow? ☐ Yes ☐ No *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	<input type="checkbox"/>	<input type="checkbox"/> Sewage <input type="checkbox"/> Rancid/sour <input type="checkbox"/> Petroleum/gas <input type="checkbox"/> Sulfide <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint	<input type="checkbox"/> 2 - Easily detected	<input type="checkbox"/> 3 - Noticeable from a distance
Color	<input type="checkbox"/>	<input type="checkbox"/> Clear <input type="checkbox"/> Brown <input type="checkbox"/> Gray <input type="checkbox"/> Yellow <input type="checkbox"/> Green <input type="checkbox"/> Orange <input type="checkbox"/> Red <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint colors in sample bottle	<input type="checkbox"/> 2 - Clearly visible in sample bottle	<input type="checkbox"/> 3 - Clearly visible in outfall flow
Turbidity	<input type="checkbox"/>	See severity	<input type="checkbox"/> 1 - Slight cloudiness	<input type="checkbox"/> 2 - Cloudy	<input type="checkbox"/> 3 - Opaque
Floatables -Does Not Include Trash!!	<input type="checkbox"/>	<input type="checkbox"/> Sewage (Toilet Paper, etc.) <input type="checkbox"/> Suds <input type="checkbox"/> Petroleum (oil sheen) <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Few/slight; origin not obvious	<input type="checkbox"/> 2 - Some; indications of origin (e.g., possible suds or oil sheen)	<input type="checkbox"/> 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☐ Yes ☒ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	<input type="checkbox"/>	<input type="checkbox"/> Spalling, Cracking or Chipping <input type="checkbox"/> Peeling Paint <input type="checkbox"/> Corrosion	
Deposits/Stains	<input type="checkbox"/>	<input type="checkbox"/> Oily <input type="checkbox"/> Flow Line <input type="checkbox"/> Paint <input type="checkbox"/> Other:	
Abnormal Vegetation	<input type="checkbox"/>	<input type="checkbox"/> Excessive <input type="checkbox"/> Inhibited	
Poor pool quality	<input type="checkbox"/>	<input type="checkbox"/> Odors <input type="checkbox"/> Colors <input type="checkbox"/> Floatables <input type="checkbox"/> Oil Sheen <input type="checkbox"/> Suds <input type="checkbox"/> Excessive Algae <input type="checkbox"/> Other:	
Pipe benthic growth	<input type="checkbox"/>	<input type="checkbox"/> Brown <input type="checkbox"/> Orange <input type="checkbox"/> Green <input type="checkbox"/> Other:	

Section 6: Overall Outfall Characterization

<input checked="" type="checkbox"/> Unlikely	<input type="checkbox"/> Potential (presence of two or more indicators)	<input type="checkbox"/> Suspect (one or more indicators with a severity of 3)	<input type="checkbox"/> Obvious
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Section 7: Data Collection

1. Sample for the lab?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
2. If yes, collected from:	<input type="checkbox"/> Flow <input type="checkbox"/> Pool
3. Intermittent flow trap set?	<input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, type: <input type="checkbox"/> OBM <input type="checkbox"/> Caulk dam

Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

Looks like pipe is clogged with debris. A trickle of water coming out, I'm assuming just backlog draining from behind clog.



## Photo Log

Photo No. 1: image.jpg





## OUTFALL RECONNAISSANCE INVENTORY/ SAMPLE COLLECTION FIELD SHEET

### Section 1: Background Data

Subwatershed:		Outfall ID: CC25	
Today's date: 07/05/17		Time (Military): 10:55AM	
Investigators: Lettice Brown		Form completed by: Lettice Brown	
Temperature (°F): 76		Rainfall (in.): Last 24 hours: 0 Last 48 hours: 0	
Latitude: 39.9669026	Longitude: -76.7322002	GPS Unit:	GPS LMK #:
Camera:		Photo #'s:	
Land Use in Drainage Area (Check all that apply): <input type="checkbox"/> Industrial <input type="checkbox"/> Ultra-Urban Residential <input type="checkbox"/> Suburban Residential <input type="checkbox"/> Commercial		<input type="checkbox"/> Open Space <input type="checkbox"/> Institutional Other: Known Industries:	
Notes (e.g., origin of outfall, if known): York City			

### Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE	DIMENSIONS (IN.)	SUBMERGED	
<input checked="" type="checkbox"/> Closed Pipe	<input type="checkbox"/> RCP <input type="checkbox"/> PVC <input type="checkbox"/> Steel <input type="checkbox"/> Other:	<input checked="" type="checkbox"/> Circular <input type="checkbox"/> Elliptical <input type="checkbox"/> Box <input type="checkbox"/> Other:	<input checked="" type="checkbox"/> Single <input type="checkbox"/> Double <input type="checkbox"/> Triple <input type="checkbox"/> Other:	Diameter/Dimensions: 12	In Water: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully With Sediment: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully
	<input type="checkbox"/> Concrete <input type="checkbox"/> Earthen <input type="checkbox"/> rip-rap <input type="checkbox"/> Other:	<input type="checkbox"/> Trapezoid <input type="checkbox"/> Parabolic <input type="checkbox"/> Other:	Depth: Top Width: Bottom Width:		
<input type="checkbox"/> Open drainage					
<input type="checkbox"/> In-Stream	(applicable when collecting samples)				
Flow Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <i>If No, Skip to Section 5</i>				
Flow Description (If present)	<input type="checkbox"/> Trickle <input type="checkbox"/> Moderate <input type="checkbox"/> Substantial				

### Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER	RESULT	UNIT	EQUIPMENT	
<input type="checkbox"/> Flow #1	Volume		Liter	Bottle
	Time to fill		Seconds	
<input type="checkbox"/> Flow #2	Flow depth		Inches	Tape measure
	Flow width		Inches	Tape measure
	Measured length		Inches	Tape measure
	Time of travel		Seconds	Stop watch
Temperature			°F	Thermometer
pH			pH Units	Test strip/Probe
Ammonia			mg/L	Test strip



Outfall Reconnaissance Inventory Field Sheet

Section 4: Physical Indicators for Flowing Outfalls Only

Are Any Physical Indicators Present in the flow? ☐ Yes ☐ No (If No, Skip to Section 5)

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	<input type="checkbox"/>	<input type="checkbox"/> Sewage <input type="checkbox"/> Rancid/sour <input type="checkbox"/> Petroleum/gas <input type="checkbox"/> Sulfide <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint	<input type="checkbox"/> 2 - Easily detected	<input type="checkbox"/> 3 - Noticeable from a distance
Color	<input type="checkbox"/>	<input type="checkbox"/> Clear <input type="checkbox"/> Brown <input type="checkbox"/> Gray <input type="checkbox"/> Yellow <input type="checkbox"/> Green <input type="checkbox"/> Orange <input type="checkbox"/> Red <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint colors in sample bottle	<input type="checkbox"/> 2 - Clearly visible in sample bottle	<input type="checkbox"/> 3 - Clearly visible in outfall flow
Turbidity	<input type="checkbox"/>	See severity	<input type="checkbox"/> 1 - Slight cloudiness	<input type="checkbox"/> 2 - Cloudy	<input type="checkbox"/> 3 - Opaque
Floatables -Does Not Include Trash!!	<input type="checkbox"/>	<input type="checkbox"/> Sewage (Toilet Paper, etc.) <input type="checkbox"/> Suds <input type="checkbox"/> Petroleum (oil sheen) <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Few/slight; origin not obvious	<input type="checkbox"/> 2 - Some; indications of origin (e.g., possible suds or oil sheen)	<input type="checkbox"/> 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☒ Yes ☐ No (If No, Skip to Section 6)

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	<input checked="" type="checkbox"/>	<input type="checkbox"/> Spalling, Cracking or Chipping <input type="checkbox"/> Peeling Paint <input checked="" type="checkbox"/> Corrosion	Looks like part of the pipe is hanging off, but not impeding water flow
Deposits/Stains	<input type="checkbox"/>	<input type="checkbox"/> Oily <input type="checkbox"/> Flow Line <input type="checkbox"/> Paint <input type="checkbox"/> Other:	
Abnormal Vegetation	<input type="checkbox"/>	<input type="checkbox"/> Excessive <input type="checkbox"/> Inhibited	
Poor pool quality	<input type="checkbox"/>	<input type="checkbox"/> Odors <input type="checkbox"/> Colors <input type="checkbox"/> Floatables <input type="checkbox"/> Oil Sheen <input type="checkbox"/> Suds <input type="checkbox"/> Excessive Algae <input type="checkbox"/> Other:	
Pipe benthic growth	<input type="checkbox"/>	<input type="checkbox"/> Brown <input type="checkbox"/> Orange <input type="checkbox"/> Green <input type="checkbox"/> Other:	

Section 6: Overall Outfall Characterization

<input checked="" type="checkbox"/> Unlikely <input type="checkbox"/> Potential (presence of two or more indicators) <input type="checkbox"/> Suspect (one or more indicators with a severity of 3) <input type="checkbox"/> Obvious
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Section 7: Data Collection

1. Sample for the lab? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
2. If yes, collected from: <input type="checkbox"/> Flow <input type="checkbox"/> Pool
3. Intermittent flow trap set? <input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, type: <input type="checkbox"/> OBM <input type="checkbox"/> Caulk dam

Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?



## Photo Log

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## OUTFALL RECONNAISSANCE INVENTORY/ SAMPLE COLLECTION FIELD SHEET

### Section 1: Background Data

Subwatershed:		Outfall ID: CC28	
Today's date: 07/05/17		Time (Military): 10:55AM	
Investigators: Lettice Brown		Form completed by: Lettice Brown	
Temperature (°F): 76		Rainfall (in.): Last 24 hours: 0 Last 48 hours: 0	
Latitude: 39.9668524	Longitude: -76.7322774	GPS Unit:	GPS LMK #:
Camera:		Photo #'s:	
Land Use in Drainage Area (Check all that apply): <input type="checkbox"/> Industrial <input type="checkbox"/> Ultra-Urban Residential <input type="checkbox"/> Suburban Residential <input type="checkbox"/> Commercial		<input type="checkbox"/> Open Space <input type="checkbox"/> Institutional Other: Known Industries:	
Notes (e.g., origin of outfall, if known): York City			

### Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE	DIMENSIONS (IN.)	SUBMERGED
<input checked="" type="checkbox"/> Closed Pipe	<input type="checkbox"/> RCP <input type="checkbox"/> PVC <input type="checkbox"/> Steel <input type="checkbox"/> Other:	<input checked="" type="checkbox"/> Circular <input type="checkbox"/> Elliptical <input type="checkbox"/> Box <input type="checkbox"/> Other:	<input checked="" type="checkbox"/> Single <input type="checkbox"/> Double <input type="checkbox"/> Triple <input type="checkbox"/> Other:	Diameter/Dimensions: 21
	<input checked="" type="checkbox"/> CMP <input type="checkbox"/> HDPE			In Water: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully With Sediment: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully
<input type="checkbox"/> Open drainage	<input type="checkbox"/> Concrete <input type="checkbox"/> Earthen <input type="checkbox"/> rip-rap <input type="checkbox"/> Other:	<input type="checkbox"/> Trapezoid <input type="checkbox"/> Parabolic <input type="checkbox"/> Other:	Depth:  Top Width:  Bottom Width:	
<input type="checkbox"/> In-Stream	(applicable when collecting samples)			
Flow Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <i>If No, Skip to Section 5</i>			
Flow Description (If present)	<input type="checkbox"/> Trickle <input type="checkbox"/> Moderate <input type="checkbox"/> Substantial			

### Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER		RESULT	UNIT	EQUIPMENT
<input type="checkbox"/> Flow #1	Volume		Liter	Bottle
	Time to fill		Seconds	
<input type="checkbox"/> Flow #2	Flow depth		Inches	Tape measure
	Flow width		Inches	Tape measure
	Measured length		Inches	Tape measure
	Time of travel		Seconds	Stop watch
Temperature			°F	Thermometer
pH			pH Units	Test strip/Probe
Ammonia			mg/L	Test strip



Outfall Reconnaissance Inventory Field Sheet

Section 4: Physical Indicators for Flowing Outfalls Only

Are Any Physical Indicators Present in the flow? ☐ Yes ☐ No (If No, Skip to Section 5)

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	<input type="checkbox"/>	<input type="checkbox"/> Sewage <input type="checkbox"/> Rancid/sour <input type="checkbox"/> Petroleum/gas <input type="checkbox"/> Sulfide <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint	<input type="checkbox"/> 2 - Easily detected	<input type="checkbox"/> 3 - Noticeable from a distance
Color	<input type="checkbox"/>	<input type="checkbox"/> Clear <input type="checkbox"/> Brown <input type="checkbox"/> Gray <input type="checkbox"/> Yellow <input type="checkbox"/> Green <input type="checkbox"/> Orange <input type="checkbox"/> Red <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint colors in sample bottle	<input type="checkbox"/> 2 - Clearly visible in sample bottle	<input type="checkbox"/> 3 - Clearly visible in outfall flow
Turbidity	<input type="checkbox"/>	See severity	<input type="checkbox"/> 1 - Slight cloudiness	<input type="checkbox"/> 2 - Cloudy	<input type="checkbox"/> 3 - Opaque
Floatables -Does Not Include Trash!!	<input type="checkbox"/>	<input type="checkbox"/> Sewage (Toilet Paper, etc.) <input type="checkbox"/> Suds <input type="checkbox"/> Petroleum (oil sheen) <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Few/slight; origin not obvious	<input type="checkbox"/> 2 - Some; indications of origin (e.g., possible suds or oil sheen)	<input type="checkbox"/> 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☐ Yes ☒ No (If No, Skip to Section 6)

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	<input type="checkbox"/>	<input type="checkbox"/> Spalling, Cracking or Chipping <input type="checkbox"/> Peeling Paint <input type="checkbox"/> Corrosion	
Deposits/Stains	<input type="checkbox"/>	<input type="checkbox"/> Oily <input type="checkbox"/> Flow Line <input type="checkbox"/> Paint <input type="checkbox"/> Other:	
Abnormal Vegetation	<input type="checkbox"/>	<input type="checkbox"/> Excessive <input type="checkbox"/> Inhibited	
Poor pool quality	<input type="checkbox"/>	<input type="checkbox"/> Odors <input type="checkbox"/> Colors <input type="checkbox"/> Floatables <input type="checkbox"/> Oil Sheen <input type="checkbox"/> Suds <input type="checkbox"/> Excessive Algae <input type="checkbox"/> Other:	
Pipe benthic growth	<input type="checkbox"/>	<input type="checkbox"/> Brown <input type="checkbox"/> Orange <input type="checkbox"/> Green <input type="checkbox"/> Other:	

Section 6: Overall Outfall Characterization

<input checked="" type="checkbox"/> Unlikely	<input type="checkbox"/> Potential (presence of two or more indicators)	<input type="checkbox"/> Suspect (one or more indicators with a severity of 3)	<input type="checkbox"/> Obvious
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Section 7: Data Collection

1. Sample for the lab?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
2. If yes, collected from:	<input type="checkbox"/> Flow <input type="checkbox"/> Pool
3. Intermittent flow trap set?	<input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, type: <input type="checkbox"/> OBM <input type="checkbox"/> Caulk dam

Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?



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## OUTFALL RECONNAISSANCE INVENTORY/ SAMPLE COLLECTION FIELD SHEET

### Section 1: Background Data

Subwatershed:		Outfall ID: CC30	
Today's date: 07/05/17		Time (Military): 11:00AM	
Investigators: Lettice Brown		Form completed by: Lettice Brown	
Temperature (°F): 76		Rainfall (in.): Last 24 hours: 0 Last 48 hours: 0	
Latitude: 39.9666813	Longitude: -76.7325195	GPS Unit:	GPS LMK #:
Camera:		Photo #'s:	
Land Use in Drainage Area (Check all that apply): <input type="checkbox"/> Industrial <input type="checkbox"/> Ultra-Urban Residential <input type="checkbox"/> Suburban Residential <input type="checkbox"/> Commercial		<input type="checkbox"/> Open Space <input type="checkbox"/> Institutional Other: Known Industries:	
Notes (e.g., origin of outfall, if known): York City			

### Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE	DIMENSIONS (IN.)	SUBMERGED
<input checked="" type="checkbox"/> Closed Pipe	<input type="checkbox"/> RCP <input type="checkbox"/> CMP <input type="checkbox"/> PVC <input type="checkbox"/> HDPE <input type="checkbox"/> Steel <input checked="" type="checkbox"/> Other: TCP	<input checked="" type="checkbox"/> Circular <input type="checkbox"/> Elliptical <input type="checkbox"/> Box <input type="checkbox"/> Other:	<input checked="" type="checkbox"/> Single <input type="checkbox"/> Double <input type="checkbox"/> Triple <input type="checkbox"/> Other:	Diameter/Dimensions: 18  In Water: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully With Sediment: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully
<input type="checkbox"/> Open drainage	<input type="checkbox"/> Concrete <input type="checkbox"/> Earthen <input type="checkbox"/> rip-rap <input type="checkbox"/> Other:	<input type="checkbox"/> Trapezoid <input type="checkbox"/> Parabolic <input type="checkbox"/> Other:	Depth:  Top Width:  Bottom Width:	
<input type="checkbox"/> In-Stream	(applicable when collecting samples)			
Flow Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <i>If No, Skip to Section 5</i>			
Flow Description (If present)	<input type="checkbox"/> Trickle <input type="checkbox"/> Moderate <input type="checkbox"/> Substantial			

### Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER		RESULT	UNIT	EQUIPMENT
<input type="checkbox"/> Flow #1	Volume		Liter	Bottle
	Time to fill		Seconds	
<input type="checkbox"/> Flow #2	Flow depth		Inches	Tape measure
	Flow width		Inches	Tape measure
	Measured length		Inches	Tape measure
	Time of travel		Seconds	Stop watch
Temperature			°F	Thermometer
pH			pH Units	Test strip/Probe
Ammonia			mg/L	Test strip



Outfall Reconnaissance Inventory Field Sheet

Section 4: Physical Indicators for Flowing Outfalls Only

Are Any Physical Indicators Present in the flow? ☐ Yes ☐ No (If No, Skip to Section 5)

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	<input type="checkbox"/>	<input type="checkbox"/> Sewage <input type="checkbox"/> Rancid/sour <input type="checkbox"/> Petroleum/gas <input type="checkbox"/> Sulfide <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint	<input type="checkbox"/> 2 - Easily detected	<input type="checkbox"/> 3 - Noticeable from a distance
Color	<input type="checkbox"/>	<input type="checkbox"/> Clear <input type="checkbox"/> Brown <input type="checkbox"/> Gray <input type="checkbox"/> Yellow <input type="checkbox"/> Green <input type="checkbox"/> Orange <input type="checkbox"/> Red <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint colors in sample bottle	<input type="checkbox"/> 2 - Clearly visible in sample bottle	<input type="checkbox"/> 3 - Clearly visible in outfall flow
Turbidity	<input type="checkbox"/>	See severity	<input type="checkbox"/> 1 - Slight cloudiness	<input type="checkbox"/> 2 - Cloudy	<input type="checkbox"/> 3 - Opaque
Floatables -Does Not Include Trash!!	<input type="checkbox"/>	<input type="checkbox"/> Sewage (Toilet Paper, etc.) <input type="checkbox"/> Suds <input type="checkbox"/> Petroleum (oil sheen) <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Few/slight; origin not obvious	<input type="checkbox"/> 2 - Some; indications of origin (e.g., possible suds or oil sheen)	<input type="checkbox"/> 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☐ Yes ☒ No (If No, Skip to Section 6)

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	<input type="checkbox"/>	<input type="checkbox"/> Spalling, Cracking or Chipping <input type="checkbox"/> Peeling Paint <input type="checkbox"/> Corrosion	
Deposits/Stains	<input type="checkbox"/>	<input type="checkbox"/> Oily <input type="checkbox"/> Flow Line <input type="checkbox"/> Paint <input type="checkbox"/> Other:	
Abnormal Vegetation	<input type="checkbox"/>	<input type="checkbox"/> Excessive <input type="checkbox"/> Inhibited	
Poor pool quality	<input type="checkbox"/>	<input type="checkbox"/> Odors <input type="checkbox"/> Colors <input type="checkbox"/> Floatables <input type="checkbox"/> Oil Sheen <input type="checkbox"/> Suds <input type="checkbox"/> Excessive Algae <input type="checkbox"/> Other:	
Pipe benthic growth	<input type="checkbox"/>	<input type="checkbox"/> Brown <input type="checkbox"/> Orange <input type="checkbox"/> Green <input type="checkbox"/> Other:	

Section 6: Overall Outfall Characterization

<input checked="" type="checkbox"/> Unlikely	<input type="checkbox"/> Potential (presence of two or more indicators)	<input type="checkbox"/> Suspect (one or more indicators with a severity of 3)	<input type="checkbox"/> Obvious
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Section 7: Data Collection

1. Sample for the lab?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
2. If yes, collected from:	<input type="checkbox"/> Flow <input type="checkbox"/> Pool
3. Intermittent flow trap set?	<input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, type: <input type="checkbox"/> OBM <input type="checkbox"/> Caulk dam

Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?



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## OUTFALL RECONNAISSANCE INVENTORY/ SAMPLE COLLECTION FIELD SHEET

### Section 1: Background Data

Subwatershed:		Outfall ID: CC31	
Today's date: 07/05/17		Time (Military): 11:05AM	
Investigators: Lettice Brown		Form completed by: Lettice Brown	
Temperature (°F): 77		Rainfall (in.): Last 24 hours: 0 Last 48 hours: 0	
Latitude: 39.9666419	Longitude: -76.7325687	GPS Unit:	GPS LMK #:
Camera:		Photo #'s:	
Land Use in Drainage Area (Check all that apply): <input type="checkbox"/> Industrial <input type="checkbox"/> Ultra-Urban Residential <input type="checkbox"/> Suburban Residential <input type="checkbox"/> Commercial		<input type="checkbox"/> Open Space <input type="checkbox"/> Institutional Other: Known Industries:	
Notes (e.g., origin of outfall, if known): York City			

### Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE	DIMENSIONS (IN.)	SUBMERGED
<input checked="" type="checkbox"/> Closed Pipe	<input type="checkbox"/> RCP <input type="checkbox"/> CMP <input checked="" type="checkbox"/> PVC <input type="checkbox"/> HDPE <input type="checkbox"/> Steel <input type="checkbox"/> Other:	<input checked="" type="checkbox"/> Circular <input type="checkbox"/> Elliptical <input type="checkbox"/> Box <input type="checkbox"/> Other:	<input checked="" type="checkbox"/> Single <input type="checkbox"/> Double <input type="checkbox"/> Triple <input type="checkbox"/> Other:	Diameter/Dimensions: 24  In Water: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully With Sediment: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully
<input type="checkbox"/> Open drainage	<input type="checkbox"/> Concrete <input type="checkbox"/> Earthen <input type="checkbox"/> rip-rap <input type="checkbox"/> Other:	<input type="checkbox"/> Trapezoid <input type="checkbox"/> Parabolic <input type="checkbox"/> Other:	Depth:  Top Width:  Bottom Width:	
<input type="checkbox"/> In-Stream	(applicable when collecting samples)			
Flow Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <i>If No, Skip to Section 5</i>			
Flow Description (If present)	<input type="checkbox"/> Trickle <input type="checkbox"/> Moderate <input type="checkbox"/> Substantial			

### Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER	RESULT	UNIT	EQUIPMENT	
<input type="checkbox"/> Flow #1	Volume		Liter	Bottle
	Time to fill		Seconds	
<input type="checkbox"/> Flow #2	Flow depth		Inches	Tape measure
	Flow width		Inches	Tape measure
	Measured length		Inches	Tape measure
	Time of travel		Seconds	Stop watch
Temperature			°F	Thermometer
pH			pH Units	Test strip/Probe
Ammonia			mg/L	Test strip



Outfall Reconnaissance Inventory Field Sheet

Section 4: Physical Indicators for Flowing Outfalls Only

Are Any Physical Indicators Present in the flow? ☐ Yes ☐ No (If No, Skip to Section 5)

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	<input type="checkbox"/>	<input type="checkbox"/> Sewage <input type="checkbox"/> Rancid/sour <input type="checkbox"/> Petroleum/gas <input type="checkbox"/> Sulfide <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint	<input type="checkbox"/> 2 - Easily detected	<input type="checkbox"/> 3 - Noticeable from a distance
Color	<input type="checkbox"/>	<input type="checkbox"/> Clear <input type="checkbox"/> Brown <input type="checkbox"/> Gray <input type="checkbox"/> Yellow <input type="checkbox"/> Green <input type="checkbox"/> Orange <input type="checkbox"/> Red <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint colors in sample bottle	<input type="checkbox"/> 2 - Clearly visible in sample bottle	<input type="checkbox"/> 3 - Clearly visible in outfall flow
Turbidity	<input type="checkbox"/>	See severity	<input type="checkbox"/> 1 - Slight cloudiness	<input type="checkbox"/> 2 - Cloudy	<input type="checkbox"/> 3 - Opaque
Floatables -Does Not Include Trash!!	<input type="checkbox"/>	<input type="checkbox"/> Sewage (Toilet Paper, etc.) <input type="checkbox"/> Suds <input type="checkbox"/> Petroleum (oil sheen) <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Few/slight; origin not obvious	<input type="checkbox"/> 2 - Some; indications of origin (e.g., possible suds or oil sheen)	<input type="checkbox"/> 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☒ Yes ☐ No (If No, Skip to Section 6)

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	<input type="checkbox"/>	<input type="checkbox"/> Spalling, Cracking or Chipping <input type="checkbox"/> Peeling Paint <input type="checkbox"/> Corrosion	
Deposits/Stains	<input checked="" type="checkbox"/>	<input type="checkbox"/> Oily <input type="checkbox"/> Flow Line <input type="checkbox"/> Paint <input checked="" type="checkbox"/> Other: Dark	Dark stain under outfall
Abnormal Vegetation	<input type="checkbox"/>	<input type="checkbox"/> Excessive <input type="checkbox"/> Inhibited	
Poor pool quality	<input type="checkbox"/>	<input type="checkbox"/> Odors <input type="checkbox"/> Colors <input type="checkbox"/> Floatables <input type="checkbox"/> Oil Sheen <input type="checkbox"/> Suds <input type="checkbox"/> Excessive Algae <input type="checkbox"/> Other:	
Pipe benthic growth	<input type="checkbox"/>	<input type="checkbox"/> Brown <input type="checkbox"/> Orange <input type="checkbox"/> Green <input type="checkbox"/> Other:	

Section 6: Overall Outfall Characterization

<input checked="" type="checkbox"/> Unlikely <input type="checkbox"/> Potential (presence of two or more indicators) <input type="checkbox"/> Suspect (one or more indicators with a severity of 3) <input type="checkbox"/> Obvious
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Section 7: Data Collection

1. Sample for the lab? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
2. If yes, collected from: <input type="checkbox"/> Flow <input type="checkbox"/> Pool
3. Intermittent flow trap set? <input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, type: <input type="checkbox"/> OBM <input type="checkbox"/> Caulk dam

Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?



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## OUTFALL RECONNAISSANCE INVENTORY/ SAMPLE COLLECTION FIELD SHEET

### Section 1: Background Data

Subwatershed:		Outfall ID: CC38	
Today's date: 07/05/17		Time (Military): 11:15AM	
Investigators: Lettice Brown		Form completed by: Lettice Brown	
Temperature (°F): 77		Rainfall (in.): Last 24 hours: 0 Last 48 hours: 0	
Latitude: 39.9659079	Longitude: -76.7337172	GPS Unit:	GPS LMK #:
Camera:		Photo #'s:	
Land Use in Drainage Area (Check all that apply): <input type="checkbox"/> Industrial <input type="checkbox"/> Ultra-Urban Residential <input type="checkbox"/> Suburban Residential <input type="checkbox"/> Commercial		<input type="checkbox"/> Open Space <input type="checkbox"/> Institutional Other: Known Industries:	
Notes (e.g., origin of outfall, if known): York City			

### Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE	DIMENSIONS (IN.)	SUBMERGED
<input checked="" type="checkbox"/> Closed Pipe	<input type="checkbox"/> RCP <input type="checkbox"/> CMP <input type="checkbox"/> PVC <input type="checkbox"/> HDPE <input type="checkbox"/> Steel <input checked="" type="checkbox"/> Other: TCP	<input checked="" type="checkbox"/> Circular <input type="checkbox"/> Elliptical <input type="checkbox"/> Box <input type="checkbox"/> Other:	<input checked="" type="checkbox"/> Single <input type="checkbox"/> Double <input type="checkbox"/> Triple <input type="checkbox"/> Other:	Diameter/Dimensions: 18  In Water: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully With Sediment: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully
<input type="checkbox"/> Open drainage	<input type="checkbox"/> Concrete <input type="checkbox"/> Earthen <input type="checkbox"/> rip-rap <input type="checkbox"/> Other:	<input type="checkbox"/> Trapezoid <input type="checkbox"/> Parabolic <input type="checkbox"/> Other:	Depth:  Top Width:  Bottom Width:	
<input type="checkbox"/> In-Stream	(applicable when collecting samples)			
Flow Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <i>If No, Skip to Section 5</i>			
Flow Description (If present)	<input type="checkbox"/> Trickle <input type="checkbox"/> Moderate <input type="checkbox"/> Substantial			

### Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER	RESULT	UNIT	EQUIPMENT	
<input type="checkbox"/> Flow #1	Volume		Liter	Bottle
	Time to fill		Seconds	
<input type="checkbox"/> Flow #2	Flow depth		Inches	Tape measure
	Flow width		Inches	Tape measure
	Measured length		Inches	Tape measure
	Time of travel		Seconds	Stop watch
Temperature			°F	Thermometer
pH			pH Units	Test strip/Probe
Ammonia			mg/L	Test strip



Outfall Reconnaissance Inventory Field Sheet

Section 4: Physical Indicators for Flowing Outfalls Only

Are Any Physical Indicators Present in the flow? ☐ Yes ☐ No *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	<input type="checkbox"/>	<input type="checkbox"/> Sewage <input type="checkbox"/> Rancid/sour <input type="checkbox"/> Petroleum/gas <input type="checkbox"/> Sulfide <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint	<input type="checkbox"/> 2 - Easily detected	<input type="checkbox"/> 3 - Noticeable from a distance
Color	<input type="checkbox"/>	<input type="checkbox"/> Clear <input type="checkbox"/> Brown <input type="checkbox"/> Gray <input type="checkbox"/> Yellow <input type="checkbox"/> Green <input type="checkbox"/> Orange <input type="checkbox"/> Red <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint colors in sample bottle	<input type="checkbox"/> 2 - Clearly visible in sample bottle	<input type="checkbox"/> 3 - Clearly visible in outfall flow
Turbidity	<input type="checkbox"/>	See severity	<input type="checkbox"/> 1 - Slight cloudiness	<input type="checkbox"/> 2 - Cloudy	<input type="checkbox"/> 3 - Opaque
Floatables -Does Not Include Trash!!	<input type="checkbox"/>	<input type="checkbox"/> Sewage (Toilet Paper, etc.) <input type="checkbox"/> Suds <input type="checkbox"/> Petroleum (oil sheen) <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Few/slight; origin not obvious	<input type="checkbox"/> 2 - Some; indications of origin (e.g., possible suds or oil sheen)	<input type="checkbox"/> 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☐ Yes ☒ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	<input type="checkbox"/>	<input type="checkbox"/> Spalling, Cracking or Chipping <input type="checkbox"/> Peeling Paint <input type="checkbox"/> Corrosion	
Deposits/Stains	<input type="checkbox"/>	<input type="checkbox"/> Oily <input type="checkbox"/> Flow Line <input type="checkbox"/> Paint <input type="checkbox"/> Other:	
Abnormal Vegetation	<input type="checkbox"/>	<input type="checkbox"/> Excessive <input type="checkbox"/> Inhibited	
Poor pool quality	<input type="checkbox"/>	<input type="checkbox"/> Odors <input type="checkbox"/> Colors <input type="checkbox"/> Floatables <input type="checkbox"/> Oil Sheen <input type="checkbox"/> Suds <input type="checkbox"/> Excessive Algae <input type="checkbox"/> Other:	
Pipe benthic growth	<input type="checkbox"/>	<input type="checkbox"/> Brown <input type="checkbox"/> Orange <input type="checkbox"/> Green <input type="checkbox"/> Other:	

Section 6: Overall Outfall Characterization

<input checked="" type="checkbox"/> Unlikely	<input type="checkbox"/> Potential (presence of two or more indicators)	<input type="checkbox"/> Suspect (one or more indicators with a severity of 3)	<input type="checkbox"/> Obvious
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Section 7: Data Collection

1. Sample for the lab?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
2. If yes, collected from:	<input type="checkbox"/> Flow <input type="checkbox"/> Pool
3. Intermittent flow trap set?	<input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, type: <input type="checkbox"/> OBM <input type="checkbox"/> Caulk dam

Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?



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## OUTFALL RECONNAISSANCE INVENTORY/ SAMPLE COLLECTION FIELD SHEET

### Section 1: Background Data

Subwatershed:		Outfall ID: CC39	
Today's date: 07/05/17		Time (Military): 11:15AM	
Investigators: Lettice Brown		Form completed by: Lettice Brown	
Temperature (°F): 77		Rainfall (in.): Last 24 hours: 0 Last 48 hours: 0	
Latitude: 39.9658833	Longitude: -76.7337631	GPS Unit:	GPS LMK #:
Camera:		Photo #'s:	
Land Use in Drainage Area (Check all that apply): <input type="checkbox"/> Industrial <input type="checkbox"/> Ultra-Urban Residential <input type="checkbox"/> Suburban Residential <input type="checkbox"/> Commercial		<input type="checkbox"/> Open Space <input type="checkbox"/> Institutional Other: Known Industries:	
Notes (e.g., origin of outfall, if known): York City			

### Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE	DIMENSIONS (IN.)	SUBMERGED
<input checked="" type="checkbox"/> Closed Pipe	<input type="checkbox"/> RCP <input type="checkbox"/> CMP <input type="checkbox"/> PVC <input type="checkbox"/> HDPE <input type="checkbox"/> Steel <input checked="" type="checkbox"/> Other: stone	<input type="checkbox"/> Circular <input type="checkbox"/> Elliptical <input checked="" type="checkbox"/> Box <input type="checkbox"/> Other:	<input checked="" type="checkbox"/> Single <input type="checkbox"/> Double <input type="checkbox"/> Triple <input type="checkbox"/> Other:	Diameter/Dimensions: 12 x 24  In Water: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully With Sediment: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully
<input type="checkbox"/> Open drainage	<input type="checkbox"/> Concrete <input type="checkbox"/> Earthen <input type="checkbox"/> rip-rap <input type="checkbox"/> Other:	<input type="checkbox"/> Trapezoid <input type="checkbox"/> Parabolic <input type="checkbox"/> Other:	Depth:  Top Width:  Bottom Width:	
<input type="checkbox"/> In-Stream	(applicable when collecting samples)			
Flow Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <i>If No, Skip to Section 5</i>			
Flow Description (If present)	<input type="checkbox"/> Trickle <input type="checkbox"/> Moderate <input type="checkbox"/> Substantial			

### Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER	RESULT	UNIT	EQUIPMENT	
<input type="checkbox"/> Flow #1	Volume	Liter	Bottle	
	Time to fill	Seconds		
<input type="checkbox"/> Flow #2	Flow depth	Inches	Tape measure	
	Flow width	Inches	Tape measure	
	Measured length	Inches	Tape measure	
	Time of travel	Seconds	Stop watch	
Temperature		°F	Thermometer	
pH		pH Units	Test strip/Probe	
Ammonia		mg/L	Test strip	



Outfall Reconnaissance Inventory Field Sheet

Section 4: Physical Indicators for Flowing Outfalls Only

Are Any Physical Indicators Present in the flow? ☐ Yes ☐ No (If No, Skip to Section 5)

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	<input type="checkbox"/>	<input type="checkbox"/> Sewage <input type="checkbox"/> Rancid/sour <input type="checkbox"/> Petroleum/gas <input type="checkbox"/> Sulfide <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint	<input type="checkbox"/> 2 - Easily detected	<input type="checkbox"/> 3 - Noticeable from a distance
Color	<input type="checkbox"/>	<input type="checkbox"/> Clear <input type="checkbox"/> Brown <input type="checkbox"/> Gray <input type="checkbox"/> Yellow <input type="checkbox"/> Green <input type="checkbox"/> Orange <input type="checkbox"/> Red <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint colors in sample bottle	<input type="checkbox"/> 2 - Clearly visible in sample bottle	<input type="checkbox"/> 3 - Clearly visible in outfall flow
Turbidity	<input type="checkbox"/>	See severity	<input type="checkbox"/> 1 - Slight cloudiness	<input type="checkbox"/> 2 - Cloudy	<input type="checkbox"/> 3 - Opaque
Floatables -Does Not Include Trash!!	<input type="checkbox"/>	<input type="checkbox"/> Sewage (Toilet Paper, etc.) <input type="checkbox"/> Suds <input type="checkbox"/> Petroleum (oil sheen) <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Few/slight; origin not obvious	<input type="checkbox"/> 2 - Some; indications of origin (e.g., possible suds or oil sheen)	<input type="checkbox"/> 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☐ Yes ☒ No (If No, Skip to Section 6)

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	<input type="checkbox"/>	<input type="checkbox"/> Spalling, Cracking or Chipping <input type="checkbox"/> Peeling Paint <input type="checkbox"/> Corrosion	
Deposits/Stains	<input type="checkbox"/>	<input type="checkbox"/> Oily <input type="checkbox"/> Flow Line <input type="checkbox"/> Paint <input type="checkbox"/> Other:	
Abnormal Vegetation	<input type="checkbox"/>	<input type="checkbox"/> Excessive <input type="checkbox"/> Inhibited	
Poor pool quality	<input type="checkbox"/>	<input type="checkbox"/> Odors <input type="checkbox"/> Colors <input type="checkbox"/> Floatables <input type="checkbox"/> Oil Sheen <input type="checkbox"/> Suds <input type="checkbox"/> Excessive Algae <input type="checkbox"/> Other:	
Pipe benthic growth	<input type="checkbox"/>	<input type="checkbox"/> Brown <input type="checkbox"/> Orange <input type="checkbox"/> Green <input type="checkbox"/> Other:	

Section 6: Overall Outfall Characterization

<input checked="" type="checkbox"/> Unlikely	<input type="checkbox"/> Potential (presence of two or more indicators)	<input type="checkbox"/> Suspect (one or more indicators with a severity of 3)	<input type="checkbox"/> Obvious
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Section 7: Data Collection

1. Sample for the lab?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
2. If yes, collected from:	<input type="checkbox"/> Flow <input type="checkbox"/> Pool
3. Intermittent flow trap set?	<input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, type: <input type="checkbox"/> OBM <input type="checkbox"/> Caulk dam

Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?



## Photo Log

Photo No. 1: image.jpg





## OUTFALL RECONNAISSANCE INVENTORY/ SAMPLE COLLECTION FIELD SHEET

### Section 1: Background Data

Subwatershed:		Outfall ID: CC40	
Today's date: 07/05/17		Time (Military): 11:20AM	
Investigators: Lettice Brown		Form completed by: Lettice Brown	
Temperature (°F): 77		Rainfall (in.): Last 24 hours: 0 Last 48 hours: 0	
Latitude: 39.9658841	Longitude: -76.7337516	GPS Unit:	GPS LMK #:
Camera:		Photo #'s:	
Land Use in Drainage Area (Check all that apply): <input type="checkbox"/> Industrial <input type="checkbox"/> Ultra-Urban Residential <input type="checkbox"/> Suburban Residential <input type="checkbox"/> Commercial		<input type="checkbox"/> Open Space <input type="checkbox"/> Institutional Other: Known Industries:	
Notes (e.g., origin of outfall, if known): York City			

### Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE	DIMENSIONS (IN.)	SUBMERGED
<input checked="" type="checkbox"/> Closed Pipe	<input type="checkbox"/> RCP <input type="checkbox"/> CMP <input type="checkbox"/> PVC <input type="checkbox"/> HDPE <input type="checkbox"/> Steel <input checked="" type="checkbox"/> Other: TCP	<input checked="" type="checkbox"/> Circular <input type="checkbox"/> Elliptical <input type="checkbox"/> Box <input type="checkbox"/> Other:	<input checked="" type="checkbox"/> Single <input type="checkbox"/> Double <input type="checkbox"/> Triple <input type="checkbox"/> Other:	Diameter/Dimensions: 15  In Water: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully With Sediment: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully
<input type="checkbox"/> Open drainage	<input type="checkbox"/> Concrete <input type="checkbox"/> Earthen <input type="checkbox"/> rip-rap <input type="checkbox"/> Other:	<input type="checkbox"/> Trapezoid <input type="checkbox"/> Parabolic <input type="checkbox"/> Other:	Depth:  Top Width:  Bottom Width:	
<input type="checkbox"/> In-Stream	(applicable when collecting samples)			
Flow Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <i>If No, Skip to Section 5</i>			
Flow Description (If present)	<input type="checkbox"/> Trickle <input type="checkbox"/> Moderate <input type="checkbox"/> Substantial			

### Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER	RESULT	UNIT	EQUIPMENT	
<input type="checkbox"/> Flow #1	Volume		Liter	Bottle
	Time to fill		Seconds	
<input type="checkbox"/> Flow #2	Flow depth		Inches	Tape measure
	Flow width		Inches	Tape measure
	Measured length		Inches	Tape measure
	Time of travel		Seconds	Stop watch
Temperature			°F	Thermometer
pH			pH Units	Test strip/Probe
Ammonia			mg/L	Test strip



Outfall Reconnaissance Inventory Field Sheet

Section 4: Physical Indicators for Flowing Outfalls Only

Are Any Physical Indicators Present in the flow? ☐ Yes ☐ No *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	<input type="checkbox"/>	<input type="checkbox"/> Sewage <input type="checkbox"/> Rancid/sour <input type="checkbox"/> Petroleum/gas <input type="checkbox"/> Sulfide <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint	<input type="checkbox"/> 2 - Easily detected	<input type="checkbox"/> 3 - Noticeable from a distance
Color	<input type="checkbox"/>	<input type="checkbox"/> Clear <input type="checkbox"/> Brown <input type="checkbox"/> Gray <input type="checkbox"/> Yellow <input type="checkbox"/> Green <input type="checkbox"/> Orange <input type="checkbox"/> Red <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint colors in sample bottle	<input type="checkbox"/> 2 - Clearly visible in sample bottle	<input type="checkbox"/> 3 - Clearly visible in outfall flow
Turbidity	<input type="checkbox"/>	See severity	<input type="checkbox"/> 1 - Slight cloudiness	<input type="checkbox"/> 2 - Cloudy	<input type="checkbox"/> 3 - Opaque
Floatables -Does Not Include Trash!!	<input type="checkbox"/>	<input type="checkbox"/> Sewage (Toilet Paper, etc.) <input type="checkbox"/> Suds <input type="checkbox"/> Petroleum (oil sheen) <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Few/slight; origin not obvious	<input type="checkbox"/> 2 - Some; indications of origin (e.g., possible suds or oil sheen)	<input type="checkbox"/> 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☐ Yes ☒ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	<input type="checkbox"/>	<input type="checkbox"/> Spalling, Cracking or Chipping <input type="checkbox"/> Peeling Paint <input type="checkbox"/> Corrosion	
Deposits/Stains	<input type="checkbox"/>	<input type="checkbox"/> Oily <input type="checkbox"/> Flow Line <input type="checkbox"/> Paint <input type="checkbox"/> Other:	
Abnormal Vegetation	<input type="checkbox"/>	<input type="checkbox"/> Excessive <input type="checkbox"/> Inhibited	
Poor pool quality	<input type="checkbox"/>	<input type="checkbox"/> Odors <input type="checkbox"/> Colors <input type="checkbox"/> Floatables <input type="checkbox"/> Oil Sheen <input type="checkbox"/> Suds <input type="checkbox"/> Excessive Algae <input type="checkbox"/> Other:	
Pipe benthic growth	<input type="checkbox"/>	<input type="checkbox"/> Brown <input type="checkbox"/> Orange <input type="checkbox"/> Green <input type="checkbox"/> Other:	

Section 6: Overall Outfall Characterization

<input checked="" type="checkbox"/> Unlikely	<input type="checkbox"/> Potential (presence of two or more indicators)	<input type="checkbox"/> Suspect (one or more indicators with a severity of 3)	<input type="checkbox"/> Obvious
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Section 7: Data Collection

1. Sample for the lab?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
2. If yes, collected from:	<input type="checkbox"/> Flow <input type="checkbox"/> Pool
3. Intermittent flow trap set?	<input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, type: <input type="checkbox"/> OBM <input type="checkbox"/> Caulk dam

Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?



## Photo Log

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## OUTFALL RECONNAISSANCE INVENTORY/ SAMPLE COLLECTION FIELD SHEET

### Section 1: Background Data

Subwatershed:		Outfall ID: CC51	
Today's date: 07/10/17		Time (Military): 10:20AM	
Investigators: Lettice Brown		Form completed by: Lettice Brown	
Temperature (°F): 79		Rainfall (in.): Last 24 hours: 0 Last 48 hours: 0	
Latitude: 39.9624313	Longitude: -76.7332999	GPS Unit:	GPS LMK #:
Camera:		Photo #'s:	
Land Use in Drainage Area (Check all that apply): <input type="checkbox"/> Industrial <input type="checkbox"/> Ultra-Urban Residential <input type="checkbox"/> Suburban Residential <input type="checkbox"/> Commercial		<input type="checkbox"/> Open Space <input type="checkbox"/> Institutional Other: Known Industries:	
Notes (e.g., origin of outfall, if known): York City			

### Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE	DIMENSIONS (IN.)	SUBMERGED
<input checked="" type="checkbox"/> Closed Pipe	<input type="checkbox"/> RCP <input type="checkbox"/> CMP <input type="checkbox"/> PVC <input type="checkbox"/> HDPE <input type="checkbox"/> Steel <input checked="" type="checkbox"/> Other: stone	<input type="checkbox"/> Circular <input type="checkbox"/> Elliptical <input checked="" type="checkbox"/> Box <input type="checkbox"/> Other:	<input checked="" type="checkbox"/> Single <input type="checkbox"/> Double <input type="checkbox"/> Triple <input type="checkbox"/> Other:	Diameter/Dimensions: 48 x 48  In Water: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully With Sediment: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully
<input type="checkbox"/> Open drainage	<input type="checkbox"/> Concrete <input type="checkbox"/> Earthen <input type="checkbox"/> rip-rap <input type="checkbox"/> Other:	<input type="checkbox"/> Trapezoid <input type="checkbox"/> Parabolic <input type="checkbox"/> Other:	Depth:  Top Width:  Bottom Width:	
<input type="checkbox"/> In-Stream	(applicable when collecting samples)			
Flow Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <i>If No, Skip to Section 5</i>			
Flow Description (If present)	<input type="checkbox"/> Trickle <input type="checkbox"/> Moderate <input type="checkbox"/> Substantial			

### Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER	RESULT	UNIT	EQUIPMENT	
<input type="checkbox"/> Flow #1	Volume		Liter	Bottle
	Time to fill		Seconds	
<input type="checkbox"/> Flow #2	Flow depth		Inches	Tape measure
	Flow width		Inches	Tape measure
	Measured length		Inches	Tape measure
	Time of travel		Seconds	Stop watch
Temperature			°F	Thermometer
pH			pH Units	Test strip/Probe
Ammonia			mg/L	Test strip



Outfall Reconnaissance Inventory Field Sheet

Section 4: Physical Indicators for Flowing Outfalls Only

Are Any Physical Indicators Present in the flow? ☐ Yes ☐ No (If No, Skip to Section 5)

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	<input type="checkbox"/>	<input type="checkbox"/> Sewage <input type="checkbox"/> Rancid/sour <input type="checkbox"/> Petroleum/gas <input type="checkbox"/> Sulfide <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint	<input type="checkbox"/> 2 - Easily detected	<input type="checkbox"/> 3 - Noticeable from a distance
Color	<input type="checkbox"/>	<input type="checkbox"/> Clear <input type="checkbox"/> Brown <input type="checkbox"/> Gray <input type="checkbox"/> Yellow <input type="checkbox"/> Green <input type="checkbox"/> Orange <input type="checkbox"/> Red <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint colors in sample bottle	<input type="checkbox"/> 2 - Clearly visible in sample bottle	<input type="checkbox"/> 3 - Clearly visible in outfall flow
Turbidity	<input type="checkbox"/>	See severity	<input type="checkbox"/> 1 - Slight cloudiness	<input type="checkbox"/> 2 - Cloudy	<input type="checkbox"/> 3 - Opaque
Floatables -Does Not Include Trash!!	<input type="checkbox"/>	<input type="checkbox"/> Sewage (Toilet Paper, etc.) <input type="checkbox"/> Suds <input type="checkbox"/> Petroleum (oil sheen) <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Few/slight; origin not obvious	<input type="checkbox"/> 2 - Some; indications of origin (e.g., possible suds or oil sheen)	<input type="checkbox"/> 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☒ Yes ☐ No (If No, Skip to Section 6)

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	<input type="checkbox"/>	<input type="checkbox"/> Spalling, Cracking or Chipping <input type="checkbox"/> Peeling Paint <input type="checkbox"/> Corrosion	
Deposits/Stains	<input checked="" type="checkbox"/>	<input type="checkbox"/> Oily <input type="checkbox"/> Flow Line <input type="checkbox"/> Paint <input checked="" type="checkbox"/> Other: Debris/trash	Lots of trash and debris blocking the outfall
Abnormal Vegetation	<input type="checkbox"/>	<input type="checkbox"/> Excessive <input type="checkbox"/> Inhibited	
Poor pool quality	<input type="checkbox"/>	<input type="checkbox"/> Odors <input type="checkbox"/> Colors <input type="checkbox"/> Floatables <input type="checkbox"/> Oil Sheen <input type="checkbox"/> Suds <input type="checkbox"/> Excessive Algae <input type="checkbox"/> Other:	
Pipe benthic growth	<input type="checkbox"/>	<input type="checkbox"/> Brown <input type="checkbox"/> Orange <input type="checkbox"/> Green <input type="checkbox"/> Other:	

Section 6: Overall Outfall Characterization

<input checked="" type="checkbox"/> Unlikely <input type="checkbox"/> Potential (presence of two or more indicators) <input type="checkbox"/> Suspect (one or more indicators with a severity of 3) <input type="checkbox"/> Obvious
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Section 7: Data Collection

1. Sample for the lab? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
2. If yes, collected from: <input type="checkbox"/> Flow <input type="checkbox"/> Pool
3. Intermittent flow trap set? <input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, type: <input type="checkbox"/> OBM <input type="checkbox"/> Caulk dam

Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

Trash and debris blocking the outfall, will need cleaned up.



## Photo Log

Photo No. 1: image.jpg





## OUTFALL RECONNAISSANCE INVENTORY/ SAMPLE COLLECTION FIELD SHEET

### Section 1: Background Data

Subwatershed:		Outfall ID: CC53	
Today's date: 07/10/17		Time (Military): 10:20AM	
Investigators: Lettice Brown		Form completed by: Lettice Brown	
Temperature (°F): 79		Rainfall (in.): Last 24 hours: 0 Last 48 hours: 0	
Latitude: 39.9623386	Longitude: -76.7332975	GPS Unit:	GPS LMK #:
Camera:		Photo #'s:	
Land Use in Drainage Area (Check all that apply): <input type="checkbox"/> Industrial <input type="checkbox"/> Ultra-Urban Residential <input type="checkbox"/> Suburban Residential <input type="checkbox"/> Commercial		<input type="checkbox"/> Open Space <input type="checkbox"/> Institutional Other: Known Industries:	
Notes (e.g., origin of outfall, if known): York City			

### Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE	DIMENSIONS (IN.)	SUBMERGED
<input checked="" type="checkbox"/> Closed Pipe	<input type="checkbox"/> RCP <input type="checkbox"/> CMP <input type="checkbox"/> PVC <input type="checkbox"/> HDPE <input checked="" type="checkbox"/> Steel <input type="checkbox"/> Other:	<input checked="" type="checkbox"/> Circular <input type="checkbox"/> Elliptical <input type="checkbox"/> Box <input type="checkbox"/> Other:	<input checked="" type="checkbox"/> Single <input type="checkbox"/> Double <input type="checkbox"/> Triple <input type="checkbox"/> Other:	Diameter/Dimensions: 8  In Water: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully With Sediment: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully
<input type="checkbox"/> Open drainage	<input type="checkbox"/> Concrete <input type="checkbox"/> Earthen <input type="checkbox"/> rip-rap <input type="checkbox"/> Other:	<input type="checkbox"/> Trapezoid <input type="checkbox"/> Parabolic <input type="checkbox"/> Other:	Depth:  Top Width:  Bottom Width:	
<input type="checkbox"/> In-Stream	(applicable when collecting samples)			
Flow Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <i>If No, Skip to Section 5</i>			
Flow Description (If present)	<input type="checkbox"/> Trickle <input type="checkbox"/> Moderate <input type="checkbox"/> Substantial			

### Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER		RESULT	UNIT	EQUIPMENT
<input type="checkbox"/> Flow #1	Volume		Liter	Bottle
	Time to fill		Seconds	
<input type="checkbox"/> Flow #2	Flow depth		Inches	Tape measure
	Flow width		Inches	Tape measure
	Measured length		Inches	Tape measure
	Time of travel		Seconds	Stop watch
Temperature			°F	Thermometer
pH			pH Units	Test strip/Probe
Ammonia			mg/L	Test strip



Outfall Reconnaissance Inventory Field Sheet

Section 4: Physical Indicators for Flowing Outfalls Only

Are Any Physical Indicators Present in the flow? ☐ Yes ☐ No *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	<input type="checkbox"/>	<input type="checkbox"/> Sewage <input type="checkbox"/> Rancid/sour <input type="checkbox"/> Petroleum/gas <input type="checkbox"/> Sulfide <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint	<input type="checkbox"/> 2 - Easily detected	<input type="checkbox"/> 3 - Noticeable from a distance
Color	<input type="checkbox"/>	<input type="checkbox"/> Clear <input type="checkbox"/> Brown <input type="checkbox"/> Gray <input type="checkbox"/> Yellow <input type="checkbox"/> Green <input type="checkbox"/> Orange <input type="checkbox"/> Red <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint colors in sample bottle	<input type="checkbox"/> 2 - Clearly visible in sample bottle	<input type="checkbox"/> 3 - Clearly visible in outfall flow
Turbidity	<input type="checkbox"/>	See severity	<input type="checkbox"/> 1 - Slight cloudiness	<input type="checkbox"/> 2 - Cloudy	<input type="checkbox"/> 3 - Opaque
Floatables -Does Not Include Trash!!	<input type="checkbox"/>	<input type="checkbox"/> Sewage (Toilet Paper, etc.) <input type="checkbox"/> Suds <input type="checkbox"/> Petroleum (oil sheen) <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Few/slight; origin not obvious	<input type="checkbox"/> 2 - Some; indications of origin (e.g., possible suds or oil sheen)	<input type="checkbox"/> 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☐ Yes ☒ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	<input type="checkbox"/>	<input type="checkbox"/> Spalling, Cracking or Chipping <input type="checkbox"/> Peeling Paint <input type="checkbox"/> Corrosion	
Deposits/Stains	<input type="checkbox"/>	<input type="checkbox"/> Oily <input type="checkbox"/> Flow Line <input type="checkbox"/> Paint <input type="checkbox"/> Other:	
Abnormal Vegetation	<input type="checkbox"/>	<input type="checkbox"/> Excessive <input type="checkbox"/> Inhibited	
Poor pool quality	<input type="checkbox"/>	<input type="checkbox"/> Odors <input type="checkbox"/> Colors <input type="checkbox"/> Floatables <input type="checkbox"/> Oil Sheen <input type="checkbox"/> Suds <input type="checkbox"/> Excessive Algae <input type="checkbox"/> Other:	
Pipe benthic growth	<input type="checkbox"/>	<input type="checkbox"/> Brown <input type="checkbox"/> Orange <input type="checkbox"/> Green <input type="checkbox"/> Other:	

Section 6: Overall Outfall Characterization

<input checked="" type="checkbox"/> Unlikely	<input type="checkbox"/> Potential (presence of two or more indicators)	<input type="checkbox"/> Suspect (one or more indicators with a severity of 3)	<input type="checkbox"/> Obvious
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Section 7: Data Collection

1. Sample for the lab?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
2. If yes, collected from:	<input type="checkbox"/> Flow <input type="checkbox"/> Pool
3. Intermittent flow trap set?	<input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, type: <input type="checkbox"/> OBM <input type="checkbox"/> Caulk dam

Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?



## Photo Log

Photo No. 1: image.jpg





## OUTFALL RECONNAISSANCE INVENTORY/ SAMPLE COLLECTION FIELD SHEET

### Section 1: Background Data

Subwatershed:		Outfall ID: CC54	
Today's date: 07/10/17		Time (Military): 10:25AM	
Investigators: Lettice Brown		Form completed by: Lettice Brown	
Temperature (°F): 79		Rainfall (in.): Last 24 hours: 0 Last 48 hours: 0	
Latitude: 39.9623350	Longitude: -76.7332436	GPS Unit:	GPS LMK #:
Camera:		Photo #'s:	
Land Use in Drainage Area (Check all that apply): <input type="checkbox"/> Industrial <input type="checkbox"/> Ultra-Urban Residential <input type="checkbox"/> Suburban Residential <input type="checkbox"/> Commercial		<input type="checkbox"/> Open Space <input type="checkbox"/> Institutional Other: Known Industries:	
Notes (e.g., origin of outfall, if known): York City			

### Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE	DIMENSIONS (IN.)	SUBMERGED
<input checked="" type="checkbox"/> Closed Pipe	<input type="checkbox"/> RCP <input type="checkbox"/> CMP <input type="checkbox"/> PVC <input type="checkbox"/> HDPE <input type="checkbox"/> Steel <input checked="" type="checkbox"/> Other: stone	<input type="checkbox"/> Circular <input type="checkbox"/> Elliptical <input checked="" type="checkbox"/> Box <input type="checkbox"/> Other:	<input checked="" type="checkbox"/> Single <input type="checkbox"/> Double <input type="checkbox"/> Triple <input type="checkbox"/> Other:	Diameter/Dimensions: 48 x 32  In Water: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully With Sediment: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully
<input type="checkbox"/> Open drainage	<input type="checkbox"/> Concrete <input type="checkbox"/> Earthen <input type="checkbox"/> rip-rap <input type="checkbox"/> Other:	<input type="checkbox"/> Trapezoid <input type="checkbox"/> Parabolic <input type="checkbox"/> Other:	Depth:  Top Width:  Bottom Width:	
<input type="checkbox"/> In-Stream	(applicable when collecting samples)			
Flow Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <i>If No, Skip to Section 5</i>			
Flow Description (If present)	<input type="checkbox"/> Trickle <input type="checkbox"/> Moderate <input type="checkbox"/> Substantial			

### Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER	RESULT	UNIT	EQUIPMENT	
<input type="checkbox"/> Flow #1	Volume	Liter	Bottle	
	Time to fill	Seconds		
<input type="checkbox"/> Flow #2	Flow depth	Inches	Tape measure	
	Flow width	Inches	Tape measure	
	Measured length	Inches	Tape measure	
	Time of travel	Seconds	Stop watch	
Temperature		°F	Thermometer	
pH		pH Units	Test strip/Probe	
Ammonia		mg/L	Test strip	



Outfall Reconnaissance Inventory Field Sheet

Section 4: Physical Indicators for Flowing Outfalls Only

Are Any Physical Indicators Present in the flow? ☐ Yes ☐ No (If No, Skip to Section 5)

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	<input type="checkbox"/>	<input type="checkbox"/> Sewage <input type="checkbox"/> Rancid/sour <input type="checkbox"/> Petroleum/gas <input type="checkbox"/> Sulfide <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint	<input type="checkbox"/> 2 - Easily detected	<input type="checkbox"/> 3 - Noticeable from a distance
Color	<input type="checkbox"/>	<input type="checkbox"/> Clear <input type="checkbox"/> Brown <input type="checkbox"/> Gray <input type="checkbox"/> Yellow <input type="checkbox"/> Green <input type="checkbox"/> Orange <input type="checkbox"/> Red <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint colors in sample bottle	<input type="checkbox"/> 2 - Clearly visible in sample bottle	<input type="checkbox"/> 3 - Clearly visible in outfall flow
Turbidity	<input type="checkbox"/>	See severity	<input type="checkbox"/> 1 - Slight cloudiness	<input type="checkbox"/> 2 - Cloudy	<input type="checkbox"/> 3 - Opaque
Floatables -Does Not Include Trash!!	<input type="checkbox"/>	<input type="checkbox"/> Sewage (Toilet Paper, etc.) <input type="checkbox"/> Suds <input type="checkbox"/> Petroleum (oil sheen) <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Few/slight; origin not obvious	<input type="checkbox"/> 2 - Some; indications of origin (e.g., possible suds or oil sheen)	<input type="checkbox"/> 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☐ Yes ☒ No (If No, Skip to Section 6)

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	<input type="checkbox"/>	<input type="checkbox"/> Spalling, Cracking or Chipping <input type="checkbox"/> Peeling Paint <input type="checkbox"/> Corrosion	
Deposits/Stains	<input type="checkbox"/>	<input type="checkbox"/> Oily <input type="checkbox"/> Flow Line <input type="checkbox"/> Paint <input type="checkbox"/> Other:	
Abnormal Vegetation	<input type="checkbox"/>	<input type="checkbox"/> Excessive <input type="checkbox"/> Inhibited	
Poor pool quality	<input type="checkbox"/>	<input type="checkbox"/> Odors <input type="checkbox"/> Colors <input type="checkbox"/> Floatables <input type="checkbox"/> Oil Sheen <input type="checkbox"/> Suds <input type="checkbox"/> Excessive Algae <input type="checkbox"/> Other:	
Pipe benthic growth	<input type="checkbox"/>	<input type="checkbox"/> Brown <input type="checkbox"/> Orange <input type="checkbox"/> Green <input type="checkbox"/> Other:	

Section 6: Overall Outfall Characterization

<input checked="" type="checkbox"/> Unlikely	<input type="checkbox"/> Potential (presence of two or more indicators)	<input type="checkbox"/> Suspect (one or more indicators with a severity of 3)	<input type="checkbox"/> Obvious
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Section 7: Data Collection

1. Sample for the lab?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
2. If yes, collected from:	<input type="checkbox"/> Flow <input type="checkbox"/> Pool
3. Intermittent flow trap set?	<input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, type: <input type="checkbox"/> OBM <input type="checkbox"/> Caulk dam

Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?



## Photo Log

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## OUTFALL RECONNAISSANCE INVENTORY/ SAMPLE COLLECTION FIELD SHEET

### Section 1: Background Data

Subwatershed:		Outfall ID: CC55A	
Today's date: 07/10/17		Time (Military): 10:25AM	
Investigators: Lettice Brown		Form completed by: Lettice Brown	
Temperature (°F): 79		Rainfall (in.): Last 24 hours: 0 Last 48 hours: 0	
Latitude: 39.9617894	Longitude: -76.7330746	GPS Unit:	GPS LMK #:
Camera:		Photo #'s:	
Land Use in Drainage Area (Check all that apply): <input type="checkbox"/> Industrial <input type="checkbox"/> Ultra-Urban Residential <input type="checkbox"/> Suburban Residential <input type="checkbox"/> Commercial		<input type="checkbox"/> Open Space <input type="checkbox"/> Institutional Other: Known Industries:	
Notes (e.g., origin of outfall, if known): York City			

### Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE	DIMENSIONS (IN.)	SUBMERGED
<input checked="" type="checkbox"/> Closed Pipe	<input type="checkbox"/> RCP <input type="checkbox"/> PVC <input type="checkbox"/> Steel <input type="checkbox"/> Other:	<input checked="" type="checkbox"/> Circular <input type="checkbox"/> Elliptical <input type="checkbox"/> Box <input type="checkbox"/> Other:	<input checked="" type="checkbox"/> Single <input type="checkbox"/> Double <input type="checkbox"/> Triple <input type="checkbox"/> Other:	Diameter/Dimensions: 8
	<input type="checkbox"/> CMP <input type="checkbox"/> HDPE			In Water: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully With Sediment: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully
<input type="checkbox"/> Open drainage	<input type="checkbox"/> Concrete <input type="checkbox"/> Earthen <input type="checkbox"/> rip-rap <input type="checkbox"/> Other:	<input type="checkbox"/> Trapezoid <input type="checkbox"/> Parabolic <input type="checkbox"/> Other:	Depth:  Top Width:  Bottom Width:	
<input type="checkbox"/> In-Stream	(applicable when collecting samples)			
Flow Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <i>If No, Skip to Section 5</i>			
Flow Description (If present)	<input type="checkbox"/> Trickle <input type="checkbox"/> Moderate <input type="checkbox"/> Substantial			

### Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER		RESULT	UNIT	EQUIPMENT
<input type="checkbox"/> Flow #1	Volume		Liter	Bottle
	Time to fill		Seconds	
<input type="checkbox"/> Flow #2	Flow depth		Inches	Tape measure
	Flow width		Inches	Tape measure
	Measured length		Inches	Tape measure
	Time of travel		Seconds	Stop watch
Temperature			°F	Thermometer
pH			pH Units	Test strip/Probe
Ammonia			mg/L	Test strip



Outfall Reconnaissance Inventory Field Sheet

Section 4: Physical Indicators for Flowing Outfalls Only

Are Any Physical Indicators Present in the flow? ☐ Yes ☐ No (If No, Skip to Section 5)

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	<input type="checkbox"/>	<input type="checkbox"/> Sewage <input type="checkbox"/> Rancid/sour <input type="checkbox"/> Petroleum/gas <input type="checkbox"/> Sulfide <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint	<input type="checkbox"/> 2 - Easily detected	<input type="checkbox"/> 3 - Noticeable from a distance
Color	<input type="checkbox"/>	<input type="checkbox"/> Clear <input type="checkbox"/> Brown <input type="checkbox"/> Gray <input type="checkbox"/> Yellow <input type="checkbox"/> Green <input type="checkbox"/> Orange <input type="checkbox"/> Red <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint colors in sample bottle	<input type="checkbox"/> 2 - Clearly visible in sample bottle	<input type="checkbox"/> 3 - Clearly visible in outfall flow
Turbidity	<input type="checkbox"/>	See severity	<input type="checkbox"/> 1 - Slight cloudiness	<input type="checkbox"/> 2 - Cloudy	<input type="checkbox"/> 3 - Opaque
Floatables -Does Not Include Trash!!	<input type="checkbox"/>	<input type="checkbox"/> Sewage (Toilet Paper, etc.) <input type="checkbox"/> Suds <input type="checkbox"/> Petroleum (oil sheen) <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Few/slight; origin not obvious	<input type="checkbox"/> 2 - Some; indications of origin (e.g., possible suds or oil sheen)	<input type="checkbox"/> 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☐ Yes ☒ No (If No, Skip to Section 6)

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	<input type="checkbox"/>	<input type="checkbox"/> Spalling, Cracking or Chipping <input type="checkbox"/> Peeling Paint <input type="checkbox"/> Corrosion	
Deposits/Stains	<input type="checkbox"/>	<input type="checkbox"/> Oily <input type="checkbox"/> Flow Line <input type="checkbox"/> Paint <input type="checkbox"/> Other:	
Abnormal Vegetation	<input type="checkbox"/>	<input type="checkbox"/> Excessive <input type="checkbox"/> Inhibited	
Poor pool quality	<input type="checkbox"/>	<input type="checkbox"/> Odors <input type="checkbox"/> Colors <input type="checkbox"/> Floatables <input type="checkbox"/> Oil Sheen <input type="checkbox"/> Suds <input type="checkbox"/> Excessive Algae <input type="checkbox"/> Other:	
Pipe benthic growth	<input type="checkbox"/>	<input type="checkbox"/> Brown <input type="checkbox"/> Orange <input type="checkbox"/> Green <input type="checkbox"/> Other:	

Section 6: Overall Outfall Characterization

<input checked="" type="checkbox"/> Unlikely <input type="checkbox"/> Potential (presence of two or more indicators) <input type="checkbox"/> Suspect (one or more indicators with a severity of 3) <input type="checkbox"/> Obvious
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Section 7: Data Collection

1. Sample for the lab? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
2. If yes, collected from: <input type="checkbox"/> Flow <input type="checkbox"/> Pool
3. Intermittent flow trap set? <input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, type: <input type="checkbox"/> OBM <input type="checkbox"/> Caulk dam

Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?



## Photo Log

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## OUTFALL RECONNAISSANCE INVENTORY/ SAMPLE COLLECTION FIELD SHEET

### Section 1: Background Data

Subwatershed:		Outfall ID: CC62	
Today's date: 07/10/17		Time (Military): 10:30AM	
Investigators: Lettice Brown		Form completed by: Lettice Brown	
Temperature (°F): 82		Rainfall (in.): Last 24 hours: 0 Last 48 hours: 0	
Latitude: 39.9617068	Longitude: -76.7330540	GPS Unit:	GPS LMK #:
Camera:		Photo #'s:	
Land Use in Drainage Area (Check all that apply): <input type="checkbox"/> Industrial <input type="checkbox"/> Ultra-Urban Residential <input type="checkbox"/> Suburban Residential <input type="checkbox"/> Commercial		<input type="checkbox"/> Open Space <input type="checkbox"/> Institutional Other: Known Industries:	
Notes (e.g., origin of outfall, if known): York City			

### Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE	DIMENSIONS (IN.)	SUBMERGED
<input checked="" type="checkbox"/> Closed Pipe	<input checked="" type="checkbox"/> RCP <input type="checkbox"/> CMP <input type="checkbox"/> PVC <input type="checkbox"/> HDPE <input type="checkbox"/> Steel <input type="checkbox"/> Other:	<input checked="" type="checkbox"/> Circular <input type="checkbox"/> Elliptical <input type="checkbox"/> Box <input type="checkbox"/> Other:	<input checked="" type="checkbox"/> Single <input type="checkbox"/> Double <input type="checkbox"/> Triple <input type="checkbox"/> Other:	Diameter/Dimensions: 24  Depth:  Top Width:  Bottom Width:
<input type="checkbox"/> Open drainage	<input type="checkbox"/> Concrete <input type="checkbox"/> Earthen <input type="checkbox"/> rip-rap <input type="checkbox"/> Other:	<input type="checkbox"/> Trapezoid <input type="checkbox"/> Parabolic <input type="checkbox"/> Other:		
<input type="checkbox"/> In-Stream	(applicable when collecting samples)			
Flow Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <i>If No, Skip to Section 5</i>			
Flow Description (If present)	<input type="checkbox"/> Trickle <input type="checkbox"/> Moderate <input type="checkbox"/> Substantial			

### Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER	RESULT	UNIT	EQUIPMENT	
<input type="checkbox"/> Flow #1	Volume		Liter	Bottle
	Time to fill		Seconds	
<input type="checkbox"/> Flow #2	Flow depth		Inches	Tape measure
	Flow width		Inches	Tape measure
	Measured length		Inches	Tape measure
	Time of travel		Seconds	Stop watch
Temperature			°F	Thermometer
pH			pH Units	Test strip/Probe
Ammonia			mg/L	Test strip



Outfall Reconnaissance Inventory Field Sheet

Section 4: Physical Indicators for Flowing Outfalls Only

Are Any Physical Indicators Present in the flow? ☐ Yes ☐ No *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	<input type="checkbox"/>	<input type="checkbox"/> Sewage <input type="checkbox"/> Rancid/sour <input type="checkbox"/> Petroleum/gas <input type="checkbox"/> Sulfide <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint	<input type="checkbox"/> 2 - Easily detected	<input type="checkbox"/> 3 - Noticeable from a distance
Color	<input type="checkbox"/>	<input type="checkbox"/> Clear <input type="checkbox"/> Brown <input type="checkbox"/> Gray <input type="checkbox"/> Yellow <input type="checkbox"/> Green <input type="checkbox"/> Orange <input type="checkbox"/> Red <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint colors in sample bottle	<input type="checkbox"/> 2 - Clearly visible in sample bottle	<input type="checkbox"/> 3 - Clearly visible in outfall flow
Turbidity	<input type="checkbox"/>	See severity	<input type="checkbox"/> 1 - Slight cloudiness	<input type="checkbox"/> 2 - Cloudy	<input type="checkbox"/> 3 - Opaque
Floatables -Does Not Include Trash!!	<input type="checkbox"/>	<input type="checkbox"/> Sewage (Toilet Paper, etc.) <input type="checkbox"/> Suds <input type="checkbox"/> Petroleum (oil sheen) <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Few/slight; origin not obvious	<input type="checkbox"/> 2 - Some; indications of origin (e.g., possible suds or oil sheen)	<input type="checkbox"/> 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☐ Yes ☒ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	<input type="checkbox"/>	<input type="checkbox"/> Spalling, Cracking or Chipping <input type="checkbox"/> Peeling Paint <input type="checkbox"/> Corrosion	
Deposits/Stains	<input type="checkbox"/>	<input type="checkbox"/> Oily <input type="checkbox"/> Flow Line <input type="checkbox"/> Paint <input type="checkbox"/> Other:	
Abnormal Vegetation	<input type="checkbox"/>	<input type="checkbox"/> Excessive <input type="checkbox"/> Inhibited	
Poor pool quality	<input type="checkbox"/>	<input type="checkbox"/> Odors <input type="checkbox"/> Colors <input type="checkbox"/> Floatables <input type="checkbox"/> Oil Sheen <input type="checkbox"/> Suds <input type="checkbox"/> Excessive Algae <input type="checkbox"/> Other:	
Pipe benthic growth	<input type="checkbox"/>	<input type="checkbox"/> Brown <input type="checkbox"/> Orange <input type="checkbox"/> Green <input type="checkbox"/> Other:	

Section 6: Overall Outfall Characterization

<input checked="" type="checkbox"/> Unlikely	<input type="checkbox"/> Potential (presence of two or more indicators)	<input type="checkbox"/> Suspect (one or more indicators with a severity of 3)	<input type="checkbox"/> Obvious
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Section 7: Data Collection

1. Sample for the lab?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
2. If yes, collected from:	<input type="checkbox"/> Flow <input type="checkbox"/> Pool
3. Intermittent flow trap set?	<input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, type: <input type="checkbox"/> OBM <input type="checkbox"/> Caulk dam

Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?



## Photo Log

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## OUTFALL RECONNAISSANCE INVENTORY/ SAMPLE COLLECTION FIELD SHEET

### Section 1: Background Data

Subwatershed:		Outfall ID: CC63	
Today's date: 07/10/17		Time (Military): 10:30AM	
Investigators: Lettice Brown		Form completed by: Lettice Brown	
Temperature (°F): 82		Rainfall (in.): Last 24 hours: 0 Last 48 hours: 0	
Latitude: 39.9616923	Longitude: -76.7330483	GPS Unit:	GPS LMK #:
Camera:		Photo #'s:	
Land Use in Drainage Area (Check all that apply): <input type="checkbox"/> Industrial <input type="checkbox"/> Ultra-Urban Residential <input type="checkbox"/> Suburban Residential <input type="checkbox"/> Commercial		<input type="checkbox"/> Open Space <input type="checkbox"/> Institutional Other: Known Industries:	
Notes (e.g., origin of outfall, if known): York City			

### Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE	DIMENSIONS (IN.)	SUBMERGED
<input checked="" type="checkbox"/> Closed Pipe	<input checked="" type="checkbox"/> RCP <input type="checkbox"/> CMP <input type="checkbox"/> PVC <input type="checkbox"/> HDPE <input type="checkbox"/> Steel <input type="checkbox"/> Other:	<input checked="" type="checkbox"/> Circular <input checked="" type="checkbox"/> Single <input type="checkbox"/> Elliptical <input type="checkbox"/> Double <input type="checkbox"/> Box <input type="checkbox"/> Triple <input type="checkbox"/> Other: <input type="checkbox"/> Other:	Diameter/Dimensions: 18	In Water: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully With Sediment: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully
<input type="checkbox"/> Open drainage	<input type="checkbox"/> Concrete <input type="checkbox"/> Earthen <input type="checkbox"/> rip-rap <input type="checkbox"/> Other:	<input type="checkbox"/> Trapezoid <input type="checkbox"/> Parabolic <input type="checkbox"/> Other:	Depth:  Top Width:  Bottom Width:	
<input type="checkbox"/> In-Stream	(applicable when collecting samples)			
Flow Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <i>If No, Skip to Section 5</i>			
Flow Description (If present)	<input type="checkbox"/> Trickle <input type="checkbox"/> Moderate <input type="checkbox"/> Substantial			

### Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER	RESULT	UNIT	EQUIPMENT	
<input type="checkbox"/> Flow #1	Volume	Liter	Bottle	
	Time to fill	Seconds		
<input type="checkbox"/> Flow #2	Flow depth	Inches	Tape measure	
	Flow width	Inches	Tape measure	
	Measured length	Inches	Tape measure	
	Time of travel	Seconds	Stop watch	
Temperature		°F	Thermometer	
pH		pH Units	Test strip/Probe	
Ammonia		mg/L	Test strip	



Outfall Reconnaissance Inventory Field Sheet

Section 4: Physical Indicators for Flowing Outfalls Only

Are Any Physical Indicators Present in the flow? ☐ Yes ☐ No (If No, Skip to Section 5)

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	<input type="checkbox"/>	<input type="checkbox"/> Sewage <input type="checkbox"/> Rancid/sour <input type="checkbox"/> Petroleum/gas <input type="checkbox"/> Sulfide <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint	<input type="checkbox"/> 2 - Easily detected	<input type="checkbox"/> 3 - Noticeable from a distance
Color	<input type="checkbox"/>	<input type="checkbox"/> Clear <input type="checkbox"/> Brown <input type="checkbox"/> Gray <input type="checkbox"/> Yellow <input type="checkbox"/> Green <input type="checkbox"/> Orange <input type="checkbox"/> Red <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint colors in sample bottle	<input type="checkbox"/> 2 - Clearly visible in sample bottle	<input type="checkbox"/> 3 - Clearly visible in outfall flow
Turbidity	<input type="checkbox"/>	See severity	<input type="checkbox"/> 1 - Slight cloudiness	<input type="checkbox"/> 2 - Cloudy	<input type="checkbox"/> 3 - Opaque
Floatables -Does Not Include Trash!!	<input type="checkbox"/>	<input type="checkbox"/> Sewage (Toilet Paper, etc.) <input type="checkbox"/> Suds <input type="checkbox"/> Petroleum (oil sheen) <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Few/slight; origin not obvious	<input type="checkbox"/> 2 - Some; indications of origin (e.g., possible suds or oil sheen)	<input type="checkbox"/> 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☐ Yes ☒ No (If No, Skip to Section 6)

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	<input type="checkbox"/>	<input type="checkbox"/> Spalling, Cracking or Chipping <input type="checkbox"/> Peeling Paint <input type="checkbox"/> Corrosion	
Deposits/Stains	<input type="checkbox"/>	<input type="checkbox"/> Oily <input type="checkbox"/> Flow Line <input type="checkbox"/> Paint <input type="checkbox"/> Other:	
Abnormal Vegetation	<input type="checkbox"/>	<input type="checkbox"/> Excessive <input type="checkbox"/> Inhibited	
Poor pool quality	<input type="checkbox"/>	<input type="checkbox"/> Odors <input type="checkbox"/> Colors <input type="checkbox"/> Floatables <input type="checkbox"/> Oil Sheen <input type="checkbox"/> Suds <input type="checkbox"/> Excessive Algae <input type="checkbox"/> Other:	
Pipe benthic growth	<input type="checkbox"/>	<input type="checkbox"/> Brown <input type="checkbox"/> Orange <input type="checkbox"/> Green <input type="checkbox"/> Other:	

Section 6: Overall Outfall Characterization

<input checked="" type="checkbox"/> Unlikely	<input type="checkbox"/> Potential (presence of two or more indicators)	<input type="checkbox"/> Suspect (one or more indicators with a severity of 3)	<input type="checkbox"/> Obvious
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Section 7: Data Collection

1. Sample for the lab?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
2. If yes, collected from:	<input type="checkbox"/> Flow <input type="checkbox"/> Pool
3. Intermittent flow trap set?	<input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, type: <input type="checkbox"/> OBM <input type="checkbox"/> Caulk dam

Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?



## Photo Log

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## OUTFALL RECONNAISSANCE INVENTORY/ SAMPLE COLLECTION FIELD SHEET

### Section 1: Background Data

Subwatershed:		Outfall ID: CC65	
Today's date: 07/10/17		Time (Military): 10:35AM	
Investigators: Lettice Brown		Form completed by: Lettice Brown	
Temperature (°F): 82		Rainfall (in.): Last 24 hours: 0 Last 48 hours: 0	
Latitude: 39.9616723	Longitude: -76.7330290	GPS Unit:	GPS LMK #:
Camera:		Photo #'s:	
Land Use in Drainage Area (Check all that apply): <input type="checkbox"/> Industrial <input type="checkbox"/> Ultra-Urban Residential <input type="checkbox"/> Suburban Residential <input type="checkbox"/> Commercial		<input type="checkbox"/> Open Space <input type="checkbox"/> Institutional Other: Known Industries:	
Notes (e.g., origin of outfall, if known): York City			

### Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE	DIMENSIONS (IN.)	SUBMERGED
<input checked="" type="checkbox"/> Closed Pipe	<input type="checkbox"/> RCP <input type="checkbox"/> CMP <input type="checkbox"/> PVC <input type="checkbox"/> HDPE <input type="checkbox"/> Steel <input checked="" type="checkbox"/> Other: stone	<input type="checkbox"/> Circular <input type="checkbox"/> Elliptical <input checked="" type="checkbox"/> Box <input type="checkbox"/> Other:	<input checked="" type="checkbox"/> Single <input type="checkbox"/> Double <input type="checkbox"/> Triple <input type="checkbox"/> Other:	Diameter/Dimensions: 36 x 36  In Water: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully With Sediment: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully
<input type="checkbox"/> Open drainage	<input type="checkbox"/> Concrete <input type="checkbox"/> Earthen <input type="checkbox"/> rip-rap <input type="checkbox"/> Other:	<input type="checkbox"/> Trapezoid <input type="checkbox"/> Parabolic <input type="checkbox"/> Other:	Depth:  Top Width:  Bottom Width:	
<input type="checkbox"/> In-Stream	(applicable when collecting samples)			
Flow Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <i>If No, Skip to Section 5</i>			
Flow Description (If present)	<input type="checkbox"/> Trickle <input type="checkbox"/> Moderate <input type="checkbox"/> Substantial			

### Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER	RESULT	UNIT	EQUIPMENT	
<input type="checkbox"/> Flow #1	Volume		Liter	Bottle
	Time to fill		Seconds	
<input type="checkbox"/> Flow #2	Flow depth		Inches	Tape measure
	Flow width		Inches	Tape measure
	Measured length		Inches	Tape measure
	Time of travel		Seconds	Stop watch
Temperature			°F	Thermometer
pH			pH Units	Test strip/Probe
Ammonia			mg/L	Test strip



Outfall Reconnaissance Inventory Field Sheet

Section 4: Physical Indicators for Flowing Outfalls Only

Are Any Physical Indicators Present in the flow? ☐ Yes ☐ No *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	<input type="checkbox"/>	<input type="checkbox"/> Sewage <input type="checkbox"/> Rancid/sour <input type="checkbox"/> Petroleum/gas <input type="checkbox"/> Sulfide <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint	<input type="checkbox"/> 2 - Easily detected	<input type="checkbox"/> 3 - Noticeable from a distance
Color	<input type="checkbox"/>	<input type="checkbox"/> Clear <input type="checkbox"/> Brown <input type="checkbox"/> Gray <input type="checkbox"/> Yellow <input type="checkbox"/> Green <input type="checkbox"/> Orange <input type="checkbox"/> Red <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint colors in sample bottle	<input type="checkbox"/> 2 - Clearly visible in sample bottle	<input type="checkbox"/> 3 - Clearly visible in outfall flow
Turbidity	<input type="checkbox"/>	See severity	<input type="checkbox"/> 1 - Slight cloudiness	<input type="checkbox"/> 2 - Cloudy	<input type="checkbox"/> 3 - Opaque
Floatables -Does Not Include Trash!!	<input type="checkbox"/>	<input type="checkbox"/> Sewage (Toilet Paper, etc.) <input type="checkbox"/> Suds <input type="checkbox"/> Petroleum (oil sheen) <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Few/slight; origin not obvious	<input type="checkbox"/> 2 - Some; indications of origin (e.g., possible suds or oil sheen)	<input type="checkbox"/> 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☐ Yes ☒ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	<input type="checkbox"/>	<input type="checkbox"/> Spalling, Cracking or Chipping <input type="checkbox"/> Peeling Paint <input type="checkbox"/> Corrosion	
Deposits/Stains	<input type="checkbox"/>	<input type="checkbox"/> Oily <input type="checkbox"/> Flow Line <input type="checkbox"/> Paint <input type="checkbox"/> Other:	
Abnormal Vegetation	<input type="checkbox"/>	<input type="checkbox"/> Excessive <input type="checkbox"/> Inhibited	
Poor pool quality	<input type="checkbox"/>	<input type="checkbox"/> Odors <input type="checkbox"/> Colors <input type="checkbox"/> Floatables <input type="checkbox"/> Oil Sheen <input type="checkbox"/> Suds <input type="checkbox"/> Excessive Algae <input type="checkbox"/> Other:	
Pipe benthic growth	<input type="checkbox"/>	<input type="checkbox"/> Brown <input type="checkbox"/> Orange <input type="checkbox"/> Green <input type="checkbox"/> Other:	

Section 6: Overall Outfall Characterization

<input checked="" type="checkbox"/> Unlikely	<input type="checkbox"/> Potential (presence of two or more indicators)	<input type="checkbox"/> Suspect (one or more indicators with a severity of 3)	<input type="checkbox"/> Obvious
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Section 7: Data Collection

1. Sample for the lab?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
2. If yes, collected from:	<input type="checkbox"/> Flow <input type="checkbox"/> Pool
3. Intermittent flow trap set?	<input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, type: <input type="checkbox"/> OBM <input type="checkbox"/> Caulk dam

Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?



## Photo Log

Photo No. 1: image.jpg





## OUTFALL RECONNAISSANCE INVENTORY/ SAMPLE COLLECTION FIELD SHEET

### Section 1: Background Data

Subwatershed:		Outfall ID: CC66	
Today's date: 07/10/17		Time (Military): 10:35AM	
Investigators: Lettice Brown		Form completed by: Lettice Brown	
Temperature (°F): 82		Rainfall (in.): Last 24 hours: 0 Last 48 hours: 0	
Latitude: 39.9616635	Longitude: -76.7330257	GPS Unit:	GPS LMK #:
Camera:		Photo #'s:	
Land Use in Drainage Area (Check all that apply): <input type="checkbox"/> Industrial <input type="checkbox"/> Ultra-Urban Residential <input type="checkbox"/> Suburban Residential <input type="checkbox"/> Commercial		<input type="checkbox"/> Open Space <input type="checkbox"/> Institutional Other: Known Industries:	
Notes (e.g., origin of outfall, if known): York City			

### Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE	DIMENSIONS (IN.)	SUBMERGED
<input checked="" type="checkbox"/> Closed Pipe	<input type="checkbox"/> RCP <input type="checkbox"/> CMP <input type="checkbox"/> PVC <input type="checkbox"/> HDPE <input type="checkbox"/> Steel <input checked="" type="checkbox"/> Other: TCP	<input checked="" type="checkbox"/> Circular <input type="checkbox"/> Elliptical <input type="checkbox"/> Box <input type="checkbox"/> Other:	<input checked="" type="checkbox"/> Single <input type="checkbox"/> Double <input type="checkbox"/> Triple <input type="checkbox"/> Other:	Diameter/Dimensions: 12  In Water: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully With Sediment: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully
<input type="checkbox"/> Open drainage	<input type="checkbox"/> Concrete <input type="checkbox"/> Earthen <input type="checkbox"/> rip-rap <input type="checkbox"/> Other:	<input type="checkbox"/> Trapezoid <input type="checkbox"/> Parabolic <input type="checkbox"/> Other:	Depth:  Top Width:  Bottom Width:	
<input type="checkbox"/> In-Stream	(applicable when collecting samples)			
Flow Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <i>If No, Skip to Section 5</i>			
Flow Description (If present)	<input type="checkbox"/> Trickle <input type="checkbox"/> Moderate <input type="checkbox"/> Substantial			

### Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER	RESULT	UNIT	EQUIPMENT	
<input type="checkbox"/> Flow #1	Volume		Liter	Bottle
	Time to fill		Seconds	
<input type="checkbox"/> Flow #2	Flow depth		Inches	Tape measure
	Flow width		Inches	Tape measure
	Measured length		Inches	Tape measure
	Time of travel		Seconds	Stop watch
Temperature			°F	Thermometer
pH			pH Units	Test strip/Probe
Ammonia			mg/L	Test strip



Outfall Reconnaissance Inventory Field Sheet

Section 4: Physical Indicators for Flowing Outfalls Only

Are Any Physical Indicators Present in the flow? ☐ Yes ☐ No *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	<input type="checkbox"/>	<input type="checkbox"/> Sewage <input type="checkbox"/> Rancid/sour <input type="checkbox"/> Petroleum/gas <input type="checkbox"/> Sulfide <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint	<input type="checkbox"/> 2 - Easily detected	<input type="checkbox"/> 3 - Noticeable from a distance
Color	<input type="checkbox"/>	<input type="checkbox"/> Clear <input type="checkbox"/> Brown <input type="checkbox"/> Gray <input type="checkbox"/> Yellow <input type="checkbox"/> Green <input type="checkbox"/> Orange <input type="checkbox"/> Red <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint colors in sample bottle	<input type="checkbox"/> 2 - Clearly visible in sample bottle	<input type="checkbox"/> 3 - Clearly visible in outfall flow
Turbidity	<input type="checkbox"/>	See severity	<input type="checkbox"/> 1 - Slight cloudiness	<input type="checkbox"/> 2 - Cloudy	<input type="checkbox"/> 3 - Opaque
Floatables -Does Not Include Trash!!	<input type="checkbox"/>	<input type="checkbox"/> Sewage (Toilet Paper, etc.) <input type="checkbox"/> Suds <input type="checkbox"/> Petroleum (oil sheen) <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Few/slight; origin not obvious	<input type="checkbox"/> 2 - Some; indications of origin (e.g., possible suds or oil sheen)	<input type="checkbox"/> 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☐ Yes ☒ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	<input type="checkbox"/>	<input type="checkbox"/> Spalling, Cracking or Chipping <input type="checkbox"/> Peeling Paint <input type="checkbox"/> Corrosion	
Deposits/Stains	<input type="checkbox"/>	<input type="checkbox"/> Oily <input type="checkbox"/> Flow Line <input type="checkbox"/> Paint <input type="checkbox"/> Other:	
Abnormal Vegetation	<input type="checkbox"/>	<input type="checkbox"/> Excessive <input type="checkbox"/> Inhibited	
Poor pool quality	<input type="checkbox"/>	<input type="checkbox"/> Odors <input type="checkbox"/> Colors <input type="checkbox"/> Floatables <input type="checkbox"/> Oil Sheen <input type="checkbox"/> Suds <input type="checkbox"/> Excessive Algae <input type="checkbox"/> Other:	
Pipe benthic growth	<input type="checkbox"/>	<input type="checkbox"/> Brown <input type="checkbox"/> Orange <input type="checkbox"/> Green <input type="checkbox"/> Other:	

Section 6: Overall Outfall Characterization

<input checked="" type="checkbox"/> Unlikely	<input type="checkbox"/> Potential (presence of two or more indicators)	<input type="checkbox"/> Suspect (one or more indicators with a severity of 3)	<input type="checkbox"/> Obvious
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Section 7: Data Collection

1. Sample for the lab?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
2. If yes, collected from:	<input type="checkbox"/> Flow <input type="checkbox"/> Pool
3. Intermittent flow trap set?	<input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, type: <input type="checkbox"/> OBM <input type="checkbox"/> Caulk dam

Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?



## Photo Log

Photo No. 1: image.jpg





## OUTFALL RECONNAISSANCE INVENTORY/ SAMPLE COLLECTION FIELD SHEET

### Section 1: Background Data

Subwatershed:		Outfall ID: CC72	
Today's date: 07/10/17		Time (Military): 10:40AM	
Investigators: Lettice Brown		Form completed by: Lettice Brown	
Temperature (°F): 81		Rainfall (in.): Last 24 hours: 0 Last 48 hours: 0	
Latitude: 39.9609474	Longitude: -76.7328175	GPS Unit:	GPS LMK #:
Camera:		Photo #'s:	
Land Use in Drainage Area (Check all that apply):			
<input type="checkbox"/> Industrial <input type="checkbox"/> Ultra-Urban Residential <input type="checkbox"/> Suburban Residential <input type="checkbox"/> Commercial		<input type="checkbox"/> Open Space <input type="checkbox"/> Institutional Other: Known Industries:	
Notes (e.g., origin of outfall, if known): York City			

### Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
<input checked="" type="checkbox"/> Closed Pipe	<input type="checkbox"/> RCP <input type="checkbox"/> CMP <input type="checkbox"/> PVC <input type="checkbox"/> HDPE <input type="checkbox"/> Steel <input checked="" type="checkbox"/> Other: TCP	<input checked="" type="checkbox"/> Circular <input type="checkbox"/> Elliptical <input type="checkbox"/> Box <input type="checkbox"/> Other:	<input checked="" type="checkbox"/> Single <input type="checkbox"/> Double <input type="checkbox"/> Triple <input type="checkbox"/> Other:	Diameter/Dimensions: 27	In Water: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully With Sediment: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully
<input type="checkbox"/> Open drainage	<input type="checkbox"/> Concrete <input type="checkbox"/> Earthen <input type="checkbox"/> rip-rap <input type="checkbox"/> Other:	<input type="checkbox"/> Trapezoid <input type="checkbox"/> Parabolic <input type="checkbox"/> Other:		Depth: Top Width: Bottom Width:	
<input type="checkbox"/> In-Stream	(applicable when collecting samples)				
Flow Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <i>If No, Skip to Section 5</i>				
Flow Description (If present)	<input type="checkbox"/> Trickle <input type="checkbox"/> Moderate <input type="checkbox"/> Substantial				

### Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER		RESULT	UNIT	EQUIPMENT
<input type="checkbox"/> Flow #1	Volume		Liter	Bottle
	Time to fill		Seconds	
<input type="checkbox"/> Flow #2	Flow depth		Inches	Tape measure
	Flow width		Inches	Tape measure
	Measured length		Inches	Tape measure
	Time of travel		Seconds	Stop watch
Temperature			°F	Thermometer
pH			pH Units	Test strip/Probe
Ammonia			mg/L	Test strip



Outfall Reconnaissance Inventory Field Sheet

Section 4: Physical Indicators for Flowing Outfalls Only

Are Any Physical Indicators Present in the flow? ☐ Yes ☐ No *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	<input type="checkbox"/>	<input type="checkbox"/> Sewage <input type="checkbox"/> Rancid/sour <input type="checkbox"/> Petroleum/gas <input type="checkbox"/> Sulfide <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint	<input type="checkbox"/> 2 - Easily detected	<input type="checkbox"/> 3 - Noticeable from a distance
Color	<input type="checkbox"/>	<input type="checkbox"/> Clear <input type="checkbox"/> Brown <input type="checkbox"/> Gray <input type="checkbox"/> Yellow <input type="checkbox"/> Green <input type="checkbox"/> Orange <input type="checkbox"/> Red <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint colors in sample bottle	<input type="checkbox"/> 2 - Clearly visible in sample bottle	<input type="checkbox"/> 3 - Clearly visible in outfall flow
Turbidity	<input type="checkbox"/>	See severity	<input type="checkbox"/> 1 - Slight cloudiness	<input type="checkbox"/> 2 - Cloudy	<input type="checkbox"/> 3 - Opaque
Floatables -Does Not Include Trash!!	<input type="checkbox"/>	<input type="checkbox"/> Sewage (Toilet Paper, etc.) <input type="checkbox"/> Suds <input type="checkbox"/> Petroleum (oil sheen) <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Few/slight; origin not obvious	<input type="checkbox"/> 2 - Some; indications of origin (e.g., possible suds or oil sheen)	<input type="checkbox"/> 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☐ Yes ☒ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	<input type="checkbox"/>	<input type="checkbox"/> Spalling, Cracking or Chipping <input type="checkbox"/> Peeling Paint <input type="checkbox"/> Corrosion	
Deposits/Stains	<input type="checkbox"/>	<input type="checkbox"/> Oily <input type="checkbox"/> Flow Line <input type="checkbox"/> Paint <input type="checkbox"/> Other:	
Abnormal Vegetation	<input type="checkbox"/>	<input type="checkbox"/> Excessive <input type="checkbox"/> Inhibited	
Poor pool quality	<input type="checkbox"/>	<input type="checkbox"/> Odors <input type="checkbox"/> Colors <input type="checkbox"/> Floatables <input type="checkbox"/> Oil Sheen <input type="checkbox"/> Suds <input type="checkbox"/> Excessive Algae <input type="checkbox"/> Other:	
Pipe benthic growth	<input type="checkbox"/>	<input type="checkbox"/> Brown <input type="checkbox"/> Orange <input type="checkbox"/> Green <input type="checkbox"/> Other:	

Section 6: Overall Outfall Characterization

<input checked="" type="checkbox"/> Unlikely	<input type="checkbox"/> Potential (presence of two or more indicators)	<input type="checkbox"/> Suspect (one or more indicators with a severity of 3)	<input type="checkbox"/> Obvious
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Section 7: Data Collection

1. Sample for the lab?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
2. If yes, collected from:	<input type="checkbox"/> Flow <input type="checkbox"/> Pool
3. Intermittent flow trap set?	<input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, type: <input type="checkbox"/> OBM <input type="checkbox"/> Caulk dam

Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?



## Photo Log

Photo No. 1: image.jpg





## OUTFALL RECONNAISSANCE INVENTORY/ SAMPLE COLLECTION FIELD SHEET

### Section 1: Background Data

Subwatershed:		Outfall ID: CC74	
Today's date: 07/10/17		Time (Military): 10:45AM	
Investigators: Lettice Brown		Form completed by: Lettice Brown	
Temperature (°F): 81		Rainfall (in.): Last 24 hours: 0 Last 48 hours: 0	
Latitude: 39.9608311	Longitude: -76.7327764	GPS Unit:	GPS LMK #:
Camera:		Photo #'s:	
Land Use in Drainage Area (Check all that apply): <input type="checkbox"/> Industrial <input type="checkbox"/> Ultra-Urban Residential <input type="checkbox"/> Suburban Residential <input type="checkbox"/> Commercial		<input type="checkbox"/> Open Space <input type="checkbox"/> Institutional Other: Known Industries:	
Notes (e.g., origin of outfall, if known): York City			

### Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE	DIMENSIONS (IN.)	SUBMERGED
<input checked="" type="checkbox"/> Closed Pipe	<input type="checkbox"/> RCP <input type="checkbox"/> CMP <input type="checkbox"/> PVC <input type="checkbox"/> HDPE <input type="checkbox"/> Steel <input checked="" type="checkbox"/> Other: Stone	<input type="checkbox"/> Circular <input type="checkbox"/> Elliptical <input checked="" type="checkbox"/> Box <input type="checkbox"/> Other:	<input checked="" type="checkbox"/> Single <input type="checkbox"/> Double <input type="checkbox"/> Triple <input type="checkbox"/> Other:	Diameter/Dimensions: 48 x 32  In Water: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully With Sediment: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully
<input type="checkbox"/> Open drainage	<input type="checkbox"/> Concrete <input type="checkbox"/> Earthen <input type="checkbox"/> rip-rap <input type="checkbox"/> Other:	<input type="checkbox"/> Trapezoid <input type="checkbox"/> Parabolic <input type="checkbox"/> Other:	Depth:  Top Width:  Bottom Width:	
<input type="checkbox"/> In-Stream	(applicable when collecting samples)			
Flow Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <i>If No, Skip to Section 5</i>			
Flow Description (If present)	<input type="checkbox"/> Trickle <input type="checkbox"/> Moderate <input type="checkbox"/> Substantial			

### Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER	RESULT	UNIT	EQUIPMENT	
<input type="checkbox"/> Flow #1	Volume		Liter	Bottle
	Time to fill		Seconds	
<input type="checkbox"/> Flow #2	Flow depth		Inches	Tape measure
	Flow width		Inches	Tape measure
	Measured length		Inches	Tape measure
	Time of travel		Seconds	Stop watch
Temperature			°F	Thermometer
pH			pH Units	Test strip/Probe
Ammonia			mg/L	Test strip



Outfall Reconnaissance Inventory Field Sheet

Section 4: Physical Indicators for Flowing Outfalls Only

Are Any Physical Indicators Present in the flow? ☐ Yes ☐ No *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	<input type="checkbox"/>	<input type="checkbox"/> Sewage <input type="checkbox"/> Rancid/sour <input type="checkbox"/> Petroleum/gas <input type="checkbox"/> Sulfide <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint	<input type="checkbox"/> 2 - Easily detected	<input type="checkbox"/> 3 - Noticeable from a distance
Color	<input type="checkbox"/>	<input type="checkbox"/> Clear <input type="checkbox"/> Brown <input type="checkbox"/> Gray <input type="checkbox"/> Yellow <input type="checkbox"/> Green <input type="checkbox"/> Orange <input type="checkbox"/> Red <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint colors in sample bottle	<input type="checkbox"/> 2 - Clearly visible in sample bottle	<input type="checkbox"/> 3 - Clearly visible in outfall flow
Turbidity	<input type="checkbox"/>	See severity	<input type="checkbox"/> 1 - Slight cloudiness	<input type="checkbox"/> 2 - Cloudy	<input type="checkbox"/> 3 - Opaque
Floatables -Does Not Include Trash!!	<input type="checkbox"/>	<input type="checkbox"/> Sewage (Toilet Paper, etc.) <input type="checkbox"/> Suds <input type="checkbox"/> Petroleum (oil sheen) <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Few/slight; origin not obvious	<input type="checkbox"/> 2 - Some; indications of origin (e.g., possible suds or oil sheen)	<input type="checkbox"/> 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☐ Yes ☒ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	<input type="checkbox"/>	<input type="checkbox"/> Spalling, Cracking or Chipping <input type="checkbox"/> Peeling Paint <input type="checkbox"/> Corrosion	
Deposits/Stains	<input type="checkbox"/>	<input type="checkbox"/> Oily <input type="checkbox"/> Flow Line <input type="checkbox"/> Paint <input type="checkbox"/> Other:	
Abnormal Vegetation	<input type="checkbox"/>	<input type="checkbox"/> Excessive <input type="checkbox"/> Inhibited	
Poor pool quality	<input type="checkbox"/>	<input type="checkbox"/> Odors <input type="checkbox"/> Colors <input type="checkbox"/> Floatables <input type="checkbox"/> Oil Sheen <input type="checkbox"/> Suds <input type="checkbox"/> Excessive Algae <input type="checkbox"/> Other:	
Pipe benthic growth	<input type="checkbox"/>	<input type="checkbox"/> Brown <input type="checkbox"/> Orange <input type="checkbox"/> Green <input type="checkbox"/> Other:	

Section 6: Overall Outfall Characterization

<input checked="" type="checkbox"/> Unlikely	<input type="checkbox"/> Potential (presence of two or more indicators)	<input type="checkbox"/> Suspect (one or more indicators with a severity of 3)	<input type="checkbox"/> Obvious
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Section 7: Data Collection

1. Sample for the lab?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
2. If yes, collected from:	<input type="checkbox"/> Flow <input type="checkbox"/> Pool
3. Intermittent flow trap set?	<input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, type: <input type="checkbox"/> OBM <input type="checkbox"/> Caulk dam

Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

Water flowing from under the concrete outfall into the Codorus. Photo attached



## Photo Log

Photo No. 1: image.jpg



Photo No. 2: image.jpg





## OUTFALL RECONNAISSANCE INVENTORY/ SAMPLE COLLECTION FIELD SHEET

### Section 1: Background Data

Subwatershed:		Outfall ID: CC78	
Today's date: 07/10/17		Time (Military): 11:05AM	
Investigators: Lettice Brown		Form completed by: Lettice Brown	
Temperature (°F): 81		Rainfall (in.): Last 24 hours: 0 Last 48 hours: 0	
Latitude: 39.9601674	Longitude: -76.7325382	GPS Unit:	GPS LMK #:
Camera:		Photo #'s:	
Land Use in Drainage Area (Check all that apply):			
<input type="checkbox"/> Industrial <input type="checkbox"/> Ultra-Urban Residential <input type="checkbox"/> Suburban Residential <input type="checkbox"/> Commercial		<input type="checkbox"/> Open Space <input type="checkbox"/> Institutional Other: Known Industries:	
Notes (e.g., origin of outfall, if known): York City			

### Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
<input checked="" type="checkbox"/> Closed Pipe	<input type="checkbox"/> RCP <input type="checkbox"/> PVC <input type="checkbox"/> Steel <input type="checkbox"/> Other:	<input checked="" type="checkbox"/> Circular <input type="checkbox"/> Elliptical <input type="checkbox"/> Box <input type="checkbox"/> Other:	<input checked="" type="checkbox"/> Single <input type="checkbox"/> Double <input type="checkbox"/> Triple <input type="checkbox"/> Other:	Diameter/Dimensions: 8	In Water: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully With Sediment: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully
<input type="checkbox"/> Open drainage	<input type="checkbox"/> Concrete <input type="checkbox"/> Earthen <input type="checkbox"/> rip-rap <input type="checkbox"/> Other:	<input type="checkbox"/> Trapezoid <input type="checkbox"/> Parabolic <input type="checkbox"/> Other:		Depth: Top Width: Bottom Width:	
<input type="checkbox"/> In-Stream	(applicable when collecting samples)				
Flow Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <i>If No, Skip to Section 5</i>				
Flow Description (If present)	<input type="checkbox"/> Trickle <input type="checkbox"/> Moderate <input type="checkbox"/> Substantial				

### Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER		RESULT	UNIT	EQUIPMENT
<input type="checkbox"/> Flow #1	Volume		Liter	Bottle
	Time to fill		Seconds	
<input type="checkbox"/> Flow #2	Flow depth		Inches	Tape measure
	Flow width		Inches	Tape measure
	Measured length		Inches	Tape measure
	Time of travel		Seconds	Stop watch
Temperature			°F	Thermometer
pH			pH Units	Test strip/Probe
Ammonia			mg/L	Test strip



Outfall Reconnaissance Inventory Field Sheet

Section 4: Physical Indicators for Flowing Outfalls Only

Are Any Physical Indicators Present in the flow? ☐ Yes ☐ No *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	<input type="checkbox"/>	<input type="checkbox"/> Sewage <input type="checkbox"/> Rancid/sour <input type="checkbox"/> Petroleum/gas <input type="checkbox"/> Sulfide <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint	<input type="checkbox"/> 2 - Easily detected	<input type="checkbox"/> 3 - Noticeable from a distance
Color	<input type="checkbox"/>	<input type="checkbox"/> Clear <input type="checkbox"/> Brown <input type="checkbox"/> Gray <input type="checkbox"/> Yellow <input type="checkbox"/> Green <input type="checkbox"/> Orange <input type="checkbox"/> Red <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint colors in sample bottle	<input type="checkbox"/> 2 - Clearly visible in sample bottle	<input type="checkbox"/> 3 - Clearly visible in outfall flow
Turbidity	<input type="checkbox"/>	See severity	<input type="checkbox"/> 1 - Slight cloudiness	<input type="checkbox"/> 2 - Cloudy	<input type="checkbox"/> 3 - Opaque
Floatables -Does Not Include Trash!!	<input type="checkbox"/>	<input type="checkbox"/> Sewage (Toilet Paper, etc.) <input type="checkbox"/> Suds <input type="checkbox"/> Petroleum (oil sheen) <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Few/slight; origin not obvious	<input type="checkbox"/> 2 - Some; indications of origin (e.g., possible suds or oil sheen)	<input type="checkbox"/> 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☐ Yes ☒ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	<input type="checkbox"/>	<input type="checkbox"/> Spalling, Cracking or Chipping <input type="checkbox"/> Peeling Paint <input type="checkbox"/> Corrosion	
Deposits/Stains	<input type="checkbox"/>	<input type="checkbox"/> Oily <input type="checkbox"/> Flow Line <input type="checkbox"/> Paint <input type="checkbox"/> Other:	
Abnormal Vegetation	<input type="checkbox"/>	<input type="checkbox"/> Excessive <input type="checkbox"/> Inhibited	
Poor pool quality	<input type="checkbox"/>	<input type="checkbox"/> Odors <input type="checkbox"/> Colors <input type="checkbox"/> Floatables <input type="checkbox"/> Oil Sheen <input type="checkbox"/> Suds <input type="checkbox"/> Excessive Algae <input type="checkbox"/> Other:	
Pipe benthic growth	<input type="checkbox"/>	<input type="checkbox"/> Brown <input type="checkbox"/> Orange <input type="checkbox"/> Green <input type="checkbox"/> Other:	

Section 6: Overall Outfall Characterization

<input checked="" type="checkbox"/> Unlikely	<input type="checkbox"/> Potential (presence of two or more indicators)	<input type="checkbox"/> Suspect (one or more indicators with a severity of 3)	<input type="checkbox"/> Obvious
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Section 7: Data Collection

1. Sample for the lab?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
2. If yes, collected from:	<input type="checkbox"/> Flow <input type="checkbox"/> Pool
3. Intermittent flow trap set?	<input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, type: <input type="checkbox"/> OBM <input type="checkbox"/> Caulk dam

Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?



## Photo Log

Photo No. 1: image.jpg





## OUTFALL RECONNAISSANCE INVENTORY/ SAMPLE COLLECTION FIELD SHEET

### Section 1: Background Data

Subwatershed:		Outfall ID: CC79	
Today's date: 07/10/17		Time (Military): 11:05AM	
Investigators: Lettice Brown		Form completed by: Lettice Brown	
Temperature (°F): 81		Rainfall (in.): Last 24 hours: 0 Last 48 hours: 0	
Latitude: 39.9601385	Longitude: -76.7325351	GPS Unit:	GPS LMK #:
Camera:		Photo #'s:	
Land Use in Drainage Area (Check all that apply):			
<input type="checkbox"/> Industrial <input type="checkbox"/> Ultra-Urban Residential <input type="checkbox"/> Suburban Residential <input type="checkbox"/> Commercial		<input type="checkbox"/> Open Space <input type="checkbox"/> Institutional Other: Known Industries:	
Notes (e.g., origin of outfall, if known): York City			

### Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE		DIMENSIONS (IN.)	SUBMERGED
<input checked="" type="checkbox"/> Closed Pipe	<input type="checkbox"/> RCP <input type="checkbox"/> PVC <input type="checkbox"/> Steel <input type="checkbox"/> Other:	<input checked="" type="checkbox"/> Circular <input type="checkbox"/> Elliptical <input type="checkbox"/> Box <input type="checkbox"/> Other:	<input checked="" type="checkbox"/> Single <input type="checkbox"/> Double <input type="checkbox"/> Triple <input type="checkbox"/> Other:	Diameter/Dimensions: 8	In Water: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully With Sediment: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully
<input type="checkbox"/> Open drainage	<input type="checkbox"/> Concrete <input type="checkbox"/> Earthen <input type="checkbox"/> rip-rap <input type="checkbox"/> Other:	<input type="checkbox"/> Trapezoid <input type="checkbox"/> Parabolic <input type="checkbox"/> Other:		Depth: Top Width: Bottom Width:	
<input type="checkbox"/> In-Stream	(applicable when collecting samples)				
Flow Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <i>If No, Skip to Section 5</i>				
Flow Description (If present)	<input type="checkbox"/> Trickle <input type="checkbox"/> Moderate <input type="checkbox"/> Substantial				

### Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER		RESULT	UNIT	EQUIPMENT
<input type="checkbox"/> Flow #1	Volume		Liter	Bottle
	Time to fill		Seconds	
<input type="checkbox"/> Flow #2	Flow depth		Inches	Tape measure
	Flow width		Inches	Tape measure
	Measured length		Inches	Tape measure
	Time of travel		Seconds	Stop watch
Temperature			°F	Thermometer
pH			pH Units	Test strip/Probe
Ammonia			mg/L	Test strip



Outfall Reconnaissance Inventory Field Sheet

Section 4: Physical Indicators for Flowing Outfalls Only

Are Any Physical Indicators Present in the flow? ☐ Yes ☐ No *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	<input type="checkbox"/>	<input type="checkbox"/> Sewage <input type="checkbox"/> Rancid/sour <input type="checkbox"/> Petroleum/gas <input type="checkbox"/> Sulfide <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint	<input type="checkbox"/> 2 - Easily detected	<input type="checkbox"/> 3 - Noticeable from a distance
Color	<input type="checkbox"/>	<input type="checkbox"/> Clear <input type="checkbox"/> Brown <input type="checkbox"/> Gray <input type="checkbox"/> Yellow <input type="checkbox"/> Green <input type="checkbox"/> Orange <input type="checkbox"/> Red <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint colors in sample bottle	<input type="checkbox"/> 2 - Clearly visible in sample bottle	<input type="checkbox"/> 3 - Clearly visible in outfall flow
Turbidity	<input type="checkbox"/>	See severity	<input type="checkbox"/> 1 - Slight cloudiness	<input type="checkbox"/> 2 - Cloudy	<input type="checkbox"/> 3 - Opaque
Floatables -Does Not Include Trash!!	<input type="checkbox"/>	<input type="checkbox"/> Sewage (Toilet Paper, etc.) <input type="checkbox"/> Suds <input type="checkbox"/> Petroleum (oil sheen) <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Few/slight; origin not obvious	<input type="checkbox"/> 2 - Some; indications of origin (e.g., possible suds or oil sheen)	<input type="checkbox"/> 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☐ Yes ☒ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	<input type="checkbox"/>	<input type="checkbox"/> Spalling, Cracking or Chipping <input type="checkbox"/> Peeling Paint <input type="checkbox"/> Corrosion	
Deposits/Stains	<input type="checkbox"/>	<input type="checkbox"/> Oily <input type="checkbox"/> Flow Line <input type="checkbox"/> Paint <input type="checkbox"/> Other:	
Abnormal Vegetation	<input type="checkbox"/>	<input type="checkbox"/> Excessive <input type="checkbox"/> Inhibited	
Poor pool quality	<input type="checkbox"/>	<input type="checkbox"/> Odors <input type="checkbox"/> Colors <input type="checkbox"/> Floatables <input type="checkbox"/> Oil Sheen <input type="checkbox"/> Suds <input type="checkbox"/> Excessive Algae <input type="checkbox"/> Other:	
Pipe benthic growth	<input type="checkbox"/>	<input type="checkbox"/> Brown <input type="checkbox"/> Orange <input type="checkbox"/> Green <input type="checkbox"/> Other:	

Section 6: Overall Outfall Characterization

<input checked="" type="checkbox"/> Unlikely	<input type="checkbox"/> Potential (presence of two or more indicators)	<input type="checkbox"/> Suspect (one or more indicators with a severity of 3)	<input type="checkbox"/> Obvious
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Section 7: Data Collection

1. Sample for the lab?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
2. If yes, collected from:	<input type="checkbox"/> Flow <input type="checkbox"/> Pool
3. Intermittent flow trap set?	<input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, type: <input type="checkbox"/> OBM <input type="checkbox"/> Caulk dam

Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?



## Photo Log

Photo No. 1: image.jpg





## OUTFALL RECONNAISSANCE INVENTORY/ SAMPLE COLLECTION FIELD SHEET

### Section 1: Background Data

Subwatershed:		Outfall ID: CC80	
Today's date: 07/10/17		Time (Military): 11:10AM	
Investigators: Lettice Brown		Form completed by: Lettice Brown	
Temperature (°F): 81		Rainfall (in.): Last 24 hours: 0 Last 48 hours: 0	
Latitude: 39.9601709	Longitude: -76.7325059	GPS Unit:	GPS LMK #:
Camera:		Photo #'s:	
Land Use in Drainage Area (Check all that apply): <input type="checkbox"/> Industrial <input type="checkbox"/> Ultra-Urban Residential <input type="checkbox"/> Suburban Residential <input type="checkbox"/> Commercial		<input type="checkbox"/> Open Space <input type="checkbox"/> Institutional Other: Known Industries:	
Notes (e.g., origin of outfall, if known): York City			

### Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE	DIMENSIONS (IN.)	SUBMERGED
<input checked="" type="checkbox"/> Closed Pipe	<input type="checkbox"/> RCP <input type="checkbox"/> PVC <input type="checkbox"/> Steel <input type="checkbox"/> Other:	<input checked="" type="checkbox"/> Circular <input type="checkbox"/> Elliptical <input type="checkbox"/> Box <input type="checkbox"/> Other:	<input checked="" type="checkbox"/> Single <input type="checkbox"/> Double <input type="checkbox"/> Triple <input type="checkbox"/> Other:	Diameter/Dimensions: 12
	<input checked="" type="checkbox"/> CMP <input type="checkbox"/> HDPE			In Water: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully With Sediment: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully
<input type="checkbox"/> Open drainage	<input type="checkbox"/> Concrete <input type="checkbox"/> Earthen <input type="checkbox"/> rip-rap <input type="checkbox"/> Other:	<input type="checkbox"/> Trapezoid <input type="checkbox"/> Parabolic <input type="checkbox"/> Other:	Depth: Top Width: Bottom Width:	
<input type="checkbox"/> In-Stream	(applicable when collecting samples)			
Flow Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <i>If No, Skip to Section 5</i>			
Flow Description (If present)	<input type="checkbox"/> Trickle <input type="checkbox"/> Moderate <input type="checkbox"/> Substantial			

### Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER	RESULT	UNIT	EQUIPMENT	
<input type="checkbox"/> Flow #1	Volume	Liter	Bottle	
	Time to fill	Seconds		
<input type="checkbox"/> Flow #2	Flow depth	Inches	Tape measure	
	Flow width	Inches	Tape measure	
	Measured length	Inches	Tape measure	
	Time of travel	Seconds	Stop watch	
Temperature		°F	Thermometer	
pH		pH Units	Test strip/Probe	
Ammonia		mg/L	Test strip	



Outfall Reconnaissance Inventory Field Sheet

Section 4: Physical Indicators for Flowing Outfalls Only

Are Any Physical Indicators Present in the flow? ☐ Yes ☐ No (If No, Skip to Section 5)

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	<input type="checkbox"/>	<input type="checkbox"/> Sewage <input type="checkbox"/> Rancid/sour <input type="checkbox"/> Petroleum/gas <input type="checkbox"/> Sulfide <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint	<input type="checkbox"/> 2 - Easily detected	<input type="checkbox"/> 3 - Noticeable from a distance
Color	<input type="checkbox"/>	<input type="checkbox"/> Clear <input type="checkbox"/> Brown <input type="checkbox"/> Gray <input type="checkbox"/> Yellow <input type="checkbox"/> Green <input type="checkbox"/> Orange <input type="checkbox"/> Red <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint colors in sample bottle	<input type="checkbox"/> 2 - Clearly visible in sample bottle	<input type="checkbox"/> 3 - Clearly visible in outfall flow
Turbidity	<input type="checkbox"/>	See severity	<input type="checkbox"/> 1 - Slight cloudiness	<input type="checkbox"/> 2 - Cloudy	<input type="checkbox"/> 3 - Opaque
Floatables -Does Not Include Trash!!	<input type="checkbox"/>	<input type="checkbox"/> Sewage (Toilet Paper, etc.) <input type="checkbox"/> Suds <input type="checkbox"/> Petroleum (oil sheen) <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Few/slight; origin not obvious	<input type="checkbox"/> 2 - Some; indications of origin (e.g., possible suds or oil sheen)	<input type="checkbox"/> 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☒ Yes ☐ No (If No, Skip to Section 6)

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	<input type="checkbox"/>	<input type="checkbox"/> Spalling, Cracking or Chipping <input type="checkbox"/> Peeling Paint <input type="checkbox"/> Corrosion	
Deposits/Stains	<input checked="" type="checkbox"/>	<input type="checkbox"/> Oily <input type="checkbox"/> Flow Line <input type="checkbox"/> Paint <input checked="" type="checkbox"/> Other: Sediment	There's a large pile of dirt in front of the outfall, the outfall may be clogged or inoperable due to the sediment. Needs removed
Abnormal Vegetation	<input type="checkbox"/>	<input type="checkbox"/> Excessive <input type="checkbox"/> Inhibited	
Poor pool quality	<input checked="" type="checkbox"/>	<input type="checkbox"/> Odors <input type="checkbox"/> Colors <input type="checkbox"/> Floatables <input type="checkbox"/> Oil Sheen <input type="checkbox"/> Suds <input type="checkbox"/> Excessive Algae <input checked="" type="checkbox"/> Other: Sediment	Water cannot flow out of outfall
Pipe benthic growth	<input type="checkbox"/>	<input type="checkbox"/> Brown <input type="checkbox"/> Orange <input type="checkbox"/> Green <input type="checkbox"/> Other:	

Section 6: Overall Outfall Characterization

<input type="checkbox"/> Unlikely	<input checked="" type="checkbox"/> Potential (presence of two or more indicators)	<input type="checkbox"/> Suspect (one or more indicators with a severity of 3)	<input type="checkbox"/> Obvious
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Section 7: Data Collection

1. Sample for the lab?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
2. If yes, collected from:	<input type="checkbox"/> Flow <input type="checkbox"/> Pool
3. Intermittent flow trap set?	<input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, type: <input type="checkbox"/> OBM <input type="checkbox"/> Caulk dam

Section 8: Any Non-Illlicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

Sediment buildup in front of and beside outfall impeding water flow



## Photo Log

Photo No. 1: image.jpg



Photo No. 2: image.jpg





## OUTFALL RECONNAISSANCE INVENTORY/ SAMPLE COLLECTION FIELD SHEET

### Section 1: Background Data

Subwatershed:		Outfall ID: CC81	
Today's date: 07/10/17		Time (Military): 11:15AM	
Investigators: Lettice Brown		Form completed by: Lettice Brown	
Temperature (°F): 81		Rainfall (in.): Last 24 hours: 0 Last 48 hours: 0	
Latitude: 39.9601582	Longitude: -76.7325042	GPS Unit:	GPS LMK #:
Camera:		Photo #'s:	
Land Use in Drainage Area (Check all that apply): <input type="checkbox"/> Industrial <input type="checkbox"/> Ultra-Urban Residential <input type="checkbox"/> Suburban Residential <input type="checkbox"/> Commercial		<input type="checkbox"/> Open Space <input type="checkbox"/> Institutional Other: Known Industries:	
Notes (e.g., origin of outfall, if known): York City			

### Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE	DIMENSIONS (IN.)	SUBMERGED
<input checked="" type="checkbox"/> Closed Pipe	<input type="checkbox"/> RCP <input type="checkbox"/> CMP <input type="checkbox"/> PVC <input type="checkbox"/> HDPE <input type="checkbox"/> Steel <input checked="" type="checkbox"/> Other: TCP	<input checked="" type="checkbox"/> Circular <input type="checkbox"/> Elliptical <input type="checkbox"/> Box <input type="checkbox"/> Other:	<input checked="" type="checkbox"/> Single <input type="checkbox"/> Double <input type="checkbox"/> Triple <input type="checkbox"/> Other:	Diameter/Dimensions: 18  In Water: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully With Sediment: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully
<input type="checkbox"/> Open drainage	<input type="checkbox"/> Concrete <input type="checkbox"/> Earthen <input type="checkbox"/> rip-rap <input type="checkbox"/> Other:	<input type="checkbox"/> Trapezoid <input type="checkbox"/> Parabolic <input type="checkbox"/> Other:	Depth:  Top Width:  Bottom Width:	
<input type="checkbox"/> In-Stream	(applicable when collecting samples)			
Flow Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <i>If No, Skip to Section 5</i>			
Flow Description (If present)	<input type="checkbox"/> Trickle <input type="checkbox"/> Moderate <input type="checkbox"/> Substantial			

### Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER		RESULT	UNIT	EQUIPMENT
<input type="checkbox"/> Flow #1	Volume		Liter	Bottle
	Time to fill		Seconds	
<input type="checkbox"/> Flow #2	Flow depth		Inches	Tape measure
	Flow width		Inches	Tape measure
	Measured length		Inches	Tape measure
	Time of travel		Seconds	Stop watch
Temperature			°F	Thermometer
pH			pH Units	Test strip/Probe
Ammonia			mg/L	Test strip



Outfall Reconnaissance Inventory Field Sheet

Section 4: Physical Indicators for Flowing Outfalls Only

Are Any Physical Indicators Present in the flow? ☐ Yes ☐ No (If No, Skip to Section 5)

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	<input type="checkbox"/>	<input type="checkbox"/> Sewage <input type="checkbox"/> Rancid/sour <input type="checkbox"/> Petroleum/gas <input type="checkbox"/> Sulfide <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint	<input type="checkbox"/> 2 - Easily detected	<input type="checkbox"/> 3 - Noticeable from a distance
Color	<input type="checkbox"/>	<input type="checkbox"/> Clear <input type="checkbox"/> Brown <input type="checkbox"/> Gray <input type="checkbox"/> Yellow <input type="checkbox"/> Green <input type="checkbox"/> Orange <input type="checkbox"/> Red <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint colors in sample bottle	<input type="checkbox"/> 2 - Clearly visible in sample bottle	<input type="checkbox"/> 3 - Clearly visible in outfall flow
Turbidity	<input type="checkbox"/>	See severity	<input type="checkbox"/> 1 - Slight cloudiness	<input type="checkbox"/> 2 - Cloudy	<input type="checkbox"/> 3 - Opaque
Floatables -Does Not Include Trash!!	<input type="checkbox"/>	<input type="checkbox"/> Sewage (Toilet Paper, etc.) <input type="checkbox"/> Suds <input type="checkbox"/> Petroleum (oil sheen) <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Few/slight; origin not obvious	<input type="checkbox"/> 2 - Some; indications of origin (e.g., possible suds or oil sheen)	<input type="checkbox"/> 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☐ Yes ☒ No (If No, Skip to Section 6)

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	<input type="checkbox"/>	<input type="checkbox"/> Spalling, Cracking or Chipping <input type="checkbox"/> Peeling Paint <input type="checkbox"/> Corrosion	
Deposits/Stains	<input type="checkbox"/>	<input type="checkbox"/> Oily <input type="checkbox"/> Flow Line <input type="checkbox"/> Paint <input type="checkbox"/> Other:	
Abnormal Vegetation	<input type="checkbox"/>	<input type="checkbox"/> Excessive <input type="checkbox"/> Inhibited	
Poor pool quality	<input type="checkbox"/>	<input type="checkbox"/> Odors <input type="checkbox"/> Colors <input type="checkbox"/> Floatables <input type="checkbox"/> Oil Sheen <input type="checkbox"/> Suds <input type="checkbox"/> Excessive Algae <input type="checkbox"/> Other:	
Pipe benthic growth	<input type="checkbox"/>	<input type="checkbox"/> Brown <input type="checkbox"/> Orange <input type="checkbox"/> Green <input type="checkbox"/> Other:	

Section 6: Overall Outfall Characterization

<input checked="" type="checkbox"/> Unlikely	<input type="checkbox"/> Potential (presence of two or more indicators)	<input type="checkbox"/> Suspect (one or more indicators with a severity of 3)	<input type="checkbox"/> Obvious
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Section 7: Data Collection

1. Sample for the lab?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
2. If yes, collected from:	<input type="checkbox"/> Flow <input type="checkbox"/> Pool
3. Intermittent flow trap set?	<input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, type: <input type="checkbox"/> OBM <input type="checkbox"/> Caulk dam

Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?



## Photo Log

Photo No. 1: image.jpg





## OUTFALL RECONNAISSANCE INVENTORY/ SAMPLE COLLECTION FIELD SHEET

### Section 1: Background Data

Subwatershed:		Outfall ID: CC82	
Today's date: 07/10/17		Time (Military): 11:15AM	
Investigators: Lettice Brown		Form completed by: Lettice Brown	
Temperature (°F): 81		Rainfall (in.): Last 24 hours: 0 Last 48 hours: 0	
Latitude: 39.9601398	Longitude: -76.7325006	GPS Unit:	GPS LMK #:
Camera:		Photo #'s:	
Land Use in Drainage Area (Check all that apply): <input type="checkbox"/> Industrial <input type="checkbox"/> Ultra-Urban Residential <input type="checkbox"/> Suburban Residential <input type="checkbox"/> Commercial		<input type="checkbox"/> Open Space <input type="checkbox"/> Institutional Other: Known Industries:	
Notes (e.g., origin of outfall, if known): York City			

### Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE	DIMENSIONS (IN.)	SUBMERGED
<input checked="" type="checkbox"/> Closed Pipe	<input type="checkbox"/> RCP <input type="checkbox"/> CMP <input type="checkbox"/> PVC <input type="checkbox"/> HDPE <input type="checkbox"/> Steel <input checked="" type="checkbox"/> Other: stone	<input type="checkbox"/> Circular <input type="checkbox"/> Elliptical <input checked="" type="checkbox"/> Box <input type="checkbox"/> Other:	<input checked="" type="checkbox"/> Single <input type="checkbox"/> Double <input type="checkbox"/> Triple <input type="checkbox"/> Other:	Diameter/Dimensions: 36 x 36  In Water: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully With Sediment: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully
<input type="checkbox"/> Open drainage	<input type="checkbox"/> Concrete <input type="checkbox"/> Earthen <input type="checkbox"/> rip-rap <input type="checkbox"/> Other:	<input type="checkbox"/> Trapezoid <input type="checkbox"/> Parabolic <input type="checkbox"/> Other:	Depth:  Top Width:  Bottom Width:	
<input type="checkbox"/> In-Stream	(applicable when collecting samples)			
Flow Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <i>If No, Skip to Section 5</i>			
Flow Description (If present)	<input type="checkbox"/> Trickle <input type="checkbox"/> Moderate <input type="checkbox"/> Substantial			

### Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER	RESULT	UNIT	EQUIPMENT	
<input type="checkbox"/> Flow #1	Volume		Liter	Bottle
	Time to fill		Seconds	
<input type="checkbox"/> Flow #2	Flow depth		Inches	Tape measure
	Flow width		Inches	Tape measure
	Measured length		Inches	Tape measure
	Time of travel		Seconds	Stop watch
Temperature			°F	Thermometer
pH			pH Units	Test strip/Probe
Ammonia			mg/L	Test strip



Outfall Reconnaissance Inventory Field Sheet

Section 4: Physical Indicators for Flowing Outfalls Only

Are Any Physical Indicators Present in the flow? ☐ Yes ☐ No *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	<input type="checkbox"/>	<input type="checkbox"/> Sewage <input type="checkbox"/> Rancid/sour <input type="checkbox"/> Petroleum/gas <input type="checkbox"/> Sulfide <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint	<input type="checkbox"/> 2 - Easily detected	<input type="checkbox"/> 3 - Noticeable from a distance
Color	<input type="checkbox"/>	<input type="checkbox"/> Clear <input type="checkbox"/> Brown <input type="checkbox"/> Gray <input type="checkbox"/> Yellow <input type="checkbox"/> Green <input type="checkbox"/> Orange <input type="checkbox"/> Red <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint colors in sample bottle	<input type="checkbox"/> 2 - Clearly visible in sample bottle	<input type="checkbox"/> 3 - Clearly visible in outfall flow
Turbidity	<input type="checkbox"/>	See severity	<input type="checkbox"/> 1 - Slight cloudiness	<input type="checkbox"/> 2 - Cloudy	<input type="checkbox"/> 3 - Opaque
Floatables -Does Not Include Trash!!	<input type="checkbox"/>	<input type="checkbox"/> Sewage (Toilet Paper, etc.) <input type="checkbox"/> Suds <input type="checkbox"/> Petroleum (oil sheen) <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Few/slight; origin not obvious	<input type="checkbox"/> 2 - Some; indications of origin (e.g., possible suds or oil sheen)	<input type="checkbox"/> 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☐ Yes ☒ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	<input type="checkbox"/>	<input type="checkbox"/> Spalling, Cracking or Chipping <input type="checkbox"/> Peeling Paint <input type="checkbox"/> Corrosion	
Deposits/Stains	<input type="checkbox"/>	<input type="checkbox"/> Oily <input type="checkbox"/> Flow Line <input type="checkbox"/> Paint <input type="checkbox"/> Other:	
Abnormal Vegetation	<input type="checkbox"/>	<input type="checkbox"/> Excessive <input type="checkbox"/> Inhibited	
Poor pool quality	<input type="checkbox"/>	<input type="checkbox"/> Odors <input type="checkbox"/> Colors <input type="checkbox"/> Floatables <input type="checkbox"/> Oil Sheen <input type="checkbox"/> Suds <input type="checkbox"/> Excessive Algae <input type="checkbox"/> Other:	
Pipe benthic growth	<input type="checkbox"/>	<input type="checkbox"/> Brown <input type="checkbox"/> Orange <input type="checkbox"/> Green <input type="checkbox"/> Other:	

Section 6: Overall Outfall Characterization

<input checked="" type="checkbox"/> Unlikely	<input type="checkbox"/> Potential (presence of two or more indicators)	<input type="checkbox"/> Suspect (one or more indicators with a severity of 3)	<input type="checkbox"/> Obvious
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Section 7: Data Collection

1. Sample for the lab?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
2. If yes, collected from:	<input type="checkbox"/> Flow <input type="checkbox"/> Pool
3. Intermittent flow trap set?	<input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, type: <input type="checkbox"/> OBM <input type="checkbox"/> Caulk dam

Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?



## Photo Log

Photo No. 1: image.jpg





## OUTFALL RECONNAISSANCE INVENTORY/ SAMPLE COLLECTION FIELD SHEET

### Section 1: Background Data

Subwatershed:		Outfall ID: CC82A	
Today's date: 07/10/17		Time (Military): 11:20AM	
Investigators: Lettice Brown		Form completed by: Lettice Brown	
Temperature (°F): 81		Rainfall (in.): Last 24 hours: 0 Last 48 hours: 0	
Latitude: 39.9600559	Longitude: -76.7325247	GPS Unit:	GPS LMK #:
Camera:		Photo #'s:	
Land Use in Drainage Area (Check all that apply): <input type="checkbox"/> Industrial <input type="checkbox"/> Ultra-Urban Residential <input type="checkbox"/> Suburban Residential <input type="checkbox"/> Commercial		<input type="checkbox"/> Open Space <input type="checkbox"/> Institutional Other: Known Industries:	
Notes (e.g., origin of outfall, if known): York City			

### Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE	DIMENSIONS (IN.)	SUBMERGED
<input checked="" type="checkbox"/> Closed Pipe	<input checked="" type="checkbox"/> RCP <input type="checkbox"/> CMP <input type="checkbox"/> PVC <input type="checkbox"/> HDPE <input type="checkbox"/> Steel <input type="checkbox"/> Other:	<input checked="" type="checkbox"/> Circular <input type="checkbox"/> Elliptical <input type="checkbox"/> Box <input type="checkbox"/> Other:	<input checked="" type="checkbox"/> Single <input type="checkbox"/> Double <input type="checkbox"/> Triple <input type="checkbox"/> Other:	Diameter/Dimensions: 18  In Water: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully With Sediment: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully
<input type="checkbox"/> Open drainage	<input type="checkbox"/> Concrete <input type="checkbox"/> Earthen <input type="checkbox"/> rip-rap <input type="checkbox"/> Other:	<input type="checkbox"/> Trapezoid <input type="checkbox"/> Parabolic <input type="checkbox"/> Other:	Depth:  Top Width:  Bottom Width:	
<input type="checkbox"/> In-Stream	(applicable when collecting samples)			
Flow Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <i>If No, Skip to Section 5</i>			
Flow Description (If present)	<input type="checkbox"/> Trickle <input type="checkbox"/> Moderate <input type="checkbox"/> Substantial			

### Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER	RESULT	UNIT	EQUIPMENT	
<input type="checkbox"/> Flow #1	Volume	Liter	Bottle	
	Time to fill	Seconds		
<input type="checkbox"/> Flow #2	Flow depth	Inches	Tape measure	
	Flow width	Inches	Tape measure	
	Measured length	Inches	Tape measure	
	Time of travel	Seconds	Stop watch	
Temperature		°F	Thermometer	
pH		pH Units	Test strip/Probe	
Ammonia		mg/L	Test strip	



Outfall Reconnaissance Inventory Field Sheet

Section 4: Physical Indicators for Flowing Outfalls Only

Are Any Physical Indicators Present in the flow? ☐ Yes ☐ No *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	<input type="checkbox"/>	<input type="checkbox"/> Sewage <input type="checkbox"/> Rancid/sour <input type="checkbox"/> Petroleum/gas <input type="checkbox"/> Sulfide <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint	<input type="checkbox"/> 2 - Easily detected	<input type="checkbox"/> 3 - Noticeable from a distance
Color	<input type="checkbox"/>	<input type="checkbox"/> Clear <input type="checkbox"/> Brown <input type="checkbox"/> Gray <input type="checkbox"/> Yellow <input type="checkbox"/> Green <input type="checkbox"/> Orange <input type="checkbox"/> Red <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint colors in sample bottle	<input type="checkbox"/> 2 - Clearly visible in sample bottle	<input type="checkbox"/> 3 - Clearly visible in outfall flow
Turbidity	<input type="checkbox"/>	See severity	<input type="checkbox"/> 1 - Slight cloudiness	<input type="checkbox"/> 2 - Cloudy	<input type="checkbox"/> 3 - Opaque
Floatables -Does Not Include Trash!!	<input type="checkbox"/>	<input type="checkbox"/> Sewage (Toilet Paper, etc.) <input type="checkbox"/> Suds <input type="checkbox"/> Petroleum (oil sheen) <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Few/slight; origin not obvious	<input type="checkbox"/> 2 - Some; indications of origin (e.g., possible suds or oil sheen)	<input type="checkbox"/> 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☐ Yes ☒ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	<input type="checkbox"/>	<input type="checkbox"/> Spalling, Cracking or Chipping <input type="checkbox"/> Peeling Paint <input type="checkbox"/> Corrosion	
Deposits/Stains	<input type="checkbox"/>	<input type="checkbox"/> Oily <input type="checkbox"/> Flow Line <input type="checkbox"/> Paint <input type="checkbox"/> Other:	
Abnormal Vegetation	<input type="checkbox"/>	<input type="checkbox"/> Excessive <input type="checkbox"/> Inhibited	
Poor pool quality	<input type="checkbox"/>	<input type="checkbox"/> Odors <input type="checkbox"/> Colors <input type="checkbox"/> Floatables <input type="checkbox"/> Oil Sheen <input type="checkbox"/> Suds <input type="checkbox"/> Excessive Algae <input type="checkbox"/> Other:	
Pipe benthic growth	<input type="checkbox"/>	<input type="checkbox"/> Brown <input type="checkbox"/> Orange <input type="checkbox"/> Green <input type="checkbox"/> Other:	

Section 6: Overall Outfall Characterization

<input checked="" type="checkbox"/> Unlikely	<input type="checkbox"/> Potential (presence of two or more indicators)	<input type="checkbox"/> Suspect (one or more indicators with a severity of 3)	<input type="checkbox"/> Obvious
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Section 7: Data Collection

1. Sample for the lab?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
2. If yes, collected from:	<input type="checkbox"/> Flow <input type="checkbox"/> Pool
3. Intermittent flow trap set?	<input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, type: <input type="checkbox"/> OBM <input type="checkbox"/> Caulk dam

Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?



## Photo Log

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## OUTFALL RECONNAISSANCE INVENTORY/ SAMPLE COLLECTION FIELD SHEET

### Section 1: Background Data

Subwatershed:		Outfall ID: CC82B	
Today's date: 07/10/17		Time (Military): 11:20AM	
Investigators: Lettice Brown		Form completed by: Lettice Brown	
Temperature (°F): 81		Rainfall (in.): Last 24 hours: 0 Last 48 hours: 0	
Latitude: 39.9600394	Longitude: -76.7325201	GPS Unit:	GPS LMK #:
Camera:		Photo #'s:	
Land Use in Drainage Area (Check all that apply): <input type="checkbox"/> Industrial <input type="checkbox"/> Ultra-Urban Residential <input type="checkbox"/> Suburban Residential <input type="checkbox"/> Commercial		<input type="checkbox"/> Open Space <input type="checkbox"/> Institutional Other: Known Industries:	
Notes (e.g., origin of outfall, if known): York City			

### Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE	DIMENSIONS (IN.)	SUBMERGED
<input checked="" type="checkbox"/> Closed Pipe	<input checked="" type="checkbox"/> RCP <input type="checkbox"/> CMP <input type="checkbox"/> PVC <input type="checkbox"/> HDPE <input type="checkbox"/> Steel <input type="checkbox"/> Other:	<input checked="" type="checkbox"/> Circular <input checked="" type="checkbox"/> Single <input type="checkbox"/> Elliptical <input type="checkbox"/> Double <input type="checkbox"/> Box <input type="checkbox"/> Triple <input type="checkbox"/> Other: <input type="checkbox"/> Other:	Diameter/Dimensions: 18	In Water: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully With Sediment: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully
<input type="checkbox"/> Open drainage	<input type="checkbox"/> Concrete <input type="checkbox"/> Earthen <input type="checkbox"/> rip-rap <input type="checkbox"/> Other:	<input type="checkbox"/> Trapezoid <input type="checkbox"/> Parabolic <input type="checkbox"/> Other:	Depth:  Top Width:  Bottom Width:	
<input type="checkbox"/> In-Stream	(applicable when collecting samples)			
Flow Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <i>If No, Skip to Section 5</i>			
Flow Description (If present)	<input type="checkbox"/> Trickle <input type="checkbox"/> Moderate <input type="checkbox"/> Substantial			

### Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER		RESULT	UNIT	EQUIPMENT
<input type="checkbox"/> Flow #1	Volume		Liter	Bottle
	Time to fill		Seconds	
<input type="checkbox"/> Flow #2	Flow depth		Inches	Tape measure
	Flow width		Inches	Tape measure
	Measured length		Inches	Tape measure
	Time of travel		Seconds	Stop watch
Temperature			°F	Thermometer
pH			pH Units	Test strip/Probe
Ammonia			mg/L	Test strip



Outfall Reconnaissance Inventory Field Sheet

Section 4: Physical Indicators for Flowing Outfalls Only

Are Any Physical Indicators Present in the flow? ☐ Yes ☐ No *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	<input type="checkbox"/>	<input type="checkbox"/> Sewage <input type="checkbox"/> Rancid/sour <input type="checkbox"/> Petroleum/gas <input type="checkbox"/> Sulfide <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint	<input type="checkbox"/> 2 - Easily detected	<input type="checkbox"/> 3 - Noticeable from a distance
Color	<input type="checkbox"/>	<input type="checkbox"/> Clear <input type="checkbox"/> Brown <input type="checkbox"/> Gray <input type="checkbox"/> Yellow <input type="checkbox"/> Green <input type="checkbox"/> Orange <input type="checkbox"/> Red <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint colors in sample bottle	<input type="checkbox"/> 2 - Clearly visible in sample bottle	<input type="checkbox"/> 3 - Clearly visible in outfall flow
Turbidity	<input type="checkbox"/>	See severity	<input type="checkbox"/> 1 - Slight cloudiness	<input type="checkbox"/> 2 - Cloudy	<input type="checkbox"/> 3 - Opaque
Floatables -Does Not Include Trash!!	<input type="checkbox"/>	<input type="checkbox"/> Sewage (Toilet Paper, etc.) <input type="checkbox"/> Suds <input type="checkbox"/> Petroleum (oil sheen) <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Few/slight; origin not obvious	<input type="checkbox"/> 2 - Some; indications of origin (e.g., possible suds or oil sheen)	<input type="checkbox"/> 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☐ Yes ☒ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	<input type="checkbox"/>	<input type="checkbox"/> Spalling, Cracking or Chipping <input type="checkbox"/> Peeling Paint <input type="checkbox"/> Corrosion	
Deposits/Stains	<input type="checkbox"/>	<input type="checkbox"/> Oily <input type="checkbox"/> Flow Line <input type="checkbox"/> Paint <input type="checkbox"/> Other:	
Abnormal Vegetation	<input type="checkbox"/>	<input type="checkbox"/> Excessive <input type="checkbox"/> Inhibited	
Poor pool quality	<input type="checkbox"/>	<input type="checkbox"/> Odors <input type="checkbox"/> Colors <input type="checkbox"/> Floatables <input type="checkbox"/> Oil Sheen <input type="checkbox"/> Suds <input type="checkbox"/> Excessive Algae <input type="checkbox"/> Other:	
Pipe benthic growth	<input type="checkbox"/>	<input type="checkbox"/> Brown <input type="checkbox"/> Orange <input type="checkbox"/> Green <input type="checkbox"/> Other:	

Section 6: Overall Outfall Characterization

<input checked="" type="checkbox"/> Unlikely	<input type="checkbox"/> Potential (presence of two or more indicators)	<input type="checkbox"/> Suspect (one or more indicators with a severity of 3)	<input type="checkbox"/> Obvious
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Section 7: Data Collection

1. Sample for the lab?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
2. If yes, collected from:	<input type="checkbox"/> Flow <input type="checkbox"/> Pool
3. Intermittent flow trap set?	<input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, type: <input type="checkbox"/> OBM <input type="checkbox"/> Caulk dam

Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?



## Photo Log

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## OUTFALL RECONNAISSANCE INVENTORY/ SAMPLE COLLECTION FIELD SHEET

### Section 1: Background Data

Subwatershed:		Outfall ID: CC84	
Today's date: 07/10/17		Time (Military): 1:30PM	
Investigators: Lettice Brown		Form completed by: Lettice Brown	
Temperature (°F): 87		Rainfall (in.): Last 24 hours: 0 Last 48 hours: 0	
Latitude: 39.9594264	Longitude: -76.7324144	GPS Unit:	GPS LMK #:
Camera:		Photo #'s:	
Land Use in Drainage Area (Check all that apply): <input type="checkbox"/> Industrial <input type="checkbox"/> Ultra-Urban Residential <input type="checkbox"/> Suburban Residential <input type="checkbox"/> Commercial		<input type="checkbox"/> Open Space <input type="checkbox"/> Institutional Other: Known Industries:	
Notes (e.g., origin of outfall, if known): York City			

### Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE	DIMENSIONS (IN.)	SUBMERGED
<input checked="" type="checkbox"/> Closed Pipe	<input type="checkbox"/> RCP <input type="checkbox"/> CMP <input type="checkbox"/> PVC <input type="checkbox"/> HDPE <input type="checkbox"/> Steel <input checked="" type="checkbox"/> Other: stone	<input type="checkbox"/> Circular <input type="checkbox"/> Elliptical <input checked="" type="checkbox"/> Box <input type="checkbox"/> Other:	<input checked="" type="checkbox"/> Single <input type="checkbox"/> Double <input type="checkbox"/> Triple <input type="checkbox"/> Other:	Diameter/Dimensions: 27 x 55  In Water: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully With Sediment: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully
<input type="checkbox"/> Open drainage	<input type="checkbox"/> Concrete <input type="checkbox"/> Earthen <input type="checkbox"/> rip-rap <input type="checkbox"/> Other:	<input type="checkbox"/> Trapezoid <input type="checkbox"/> Parabolic <input type="checkbox"/> Other:	Depth:  Top Width:  Bottom Width:	
<input type="checkbox"/> In-Stream	(applicable when collecting samples)			
Flow Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <i>If No, Skip to Section 5</i>			
Flow Description (If present)	<input type="checkbox"/> Trickle <input type="checkbox"/> Moderate <input type="checkbox"/> Substantial			

### Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER		RESULT	UNIT	EQUIPMENT
<input type="checkbox"/> Flow #1	Volume		Liter	Bottle
	Time to fill		Seconds	
<input type="checkbox"/> Flow #2	Flow depth		Inches	Tape measure
	Flow width		Inches	Tape measure
	Measured length		Inches	Tape measure
	Time of travel		Seconds	Stop watch
Temperature			°F	Thermometer
pH			pH Units	Test strip/Probe
Ammonia			mg/L	Test strip



Outfall Reconnaissance Inventory Field Sheet

Section 4: Physical Indicators for Flowing Outfalls Only

Are Any Physical Indicators Present in the flow? ☐ Yes ☐ No (If No, Skip to Section 5)

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	<input type="checkbox"/>	<input type="checkbox"/> Sewage <input type="checkbox"/> Rancid/sour <input type="checkbox"/> Petroleum/gas <input type="checkbox"/> Sulfide <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint	<input type="checkbox"/> 2 - Easily detected	<input type="checkbox"/> 3 - Noticeable from a distance
Color	<input type="checkbox"/>	<input type="checkbox"/> Clear <input type="checkbox"/> Brown <input type="checkbox"/> Gray <input type="checkbox"/> Yellow <input type="checkbox"/> Green <input type="checkbox"/> Orange <input type="checkbox"/> Red <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint colors in sample bottle	<input type="checkbox"/> 2 - Clearly visible in sample bottle	<input type="checkbox"/> 3 - Clearly visible in outfall flow
Turbidity	<input type="checkbox"/>	See severity	<input type="checkbox"/> 1 - Slight cloudiness	<input type="checkbox"/> 2 - Cloudy	<input type="checkbox"/> 3 - Opaque
Floatables -Does Not Include Trash!!	<input type="checkbox"/>	<input type="checkbox"/> Sewage (Toilet Paper, etc.) <input type="checkbox"/> Suds <input type="checkbox"/> Petroleum (oil sheen) <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Few/slight; origin not obvious	<input type="checkbox"/> 2 - Some; indications of origin (e.g., possible suds or oil sheen)	<input type="checkbox"/> 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☐ Yes ☒ No (If No, Skip to Section 6)

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	<input type="checkbox"/>	<input type="checkbox"/> Spalling, Cracking or Chipping <input type="checkbox"/> Peeling Paint <input type="checkbox"/> Corrosion	
Deposits/Stains	<input type="checkbox"/>	<input type="checkbox"/> Oily <input type="checkbox"/> Flow Line <input type="checkbox"/> Paint <input type="checkbox"/> Other:	
Abnormal Vegetation	<input type="checkbox"/>	<input type="checkbox"/> Excessive <input type="checkbox"/> Inhibited	
Poor pool quality	<input type="checkbox"/>	<input type="checkbox"/> Odors <input type="checkbox"/> Colors <input type="checkbox"/> Floatables <input type="checkbox"/> Oil Sheen <input type="checkbox"/> Suds <input type="checkbox"/> Excessive Algae <input type="checkbox"/> Other:	
Pipe benthic growth	<input type="checkbox"/>	<input type="checkbox"/> Brown <input type="checkbox"/> Orange <input type="checkbox"/> Green <input type="checkbox"/> Other:	

Section 6: Overall Outfall Characterization

<input checked="" type="checkbox"/> Unlikely	<input type="checkbox"/> Potential (presence of two or more indicators)	<input type="checkbox"/> Suspect (one or more indicators with a severity of 3)	<input type="checkbox"/> Obvious
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Section 7: Data Collection

1. Sample for the lab?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
2. If yes, collected from:	<input type="checkbox"/> Flow <input type="checkbox"/> Pool
3. Intermittent flow trap set?	<input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, type: <input type="checkbox"/> OBM <input type="checkbox"/> Caulk dam

Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?



## Photo Log

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## OUTFALL RECONNAISSANCE INVENTORY/ SAMPLE COLLECTION FIELD SHEET

### Section 1: Background Data

Subwatershed:		Outfall ID: CC88	
Today's date: 07/10/17		Time (Military): 1:40PM	
Investigators: Lettice Brown		Form completed by: Lettice Brown	
Temperature (°F): 86		Rainfall (in.): Last 24 hours: 0 Last 48 hours: 0	
Latitude: 39.9586043	Longitude: -76.7323707	GPS Unit:	GPS LMK #:
Camera:		Photo #'s:	
Land Use in Drainage Area (Check all that apply): <input type="checkbox"/> Industrial <input type="checkbox"/> Ultra-Urban Residential <input type="checkbox"/> Suburban Residential <input type="checkbox"/> Commercial		<input type="checkbox"/> Open Space <input type="checkbox"/> Institutional Other: Known Industries:	
Notes (e.g., origin of outfall, if known): York City			

### Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE	DIMENSIONS (IN.)	SUBMERGED
<input checked="" type="checkbox"/> Closed Pipe	<input type="checkbox"/> RCP <input type="checkbox"/> PVC <input type="checkbox"/> Steel <input type="checkbox"/> Other:	<input checked="" type="checkbox"/> Circular <input type="checkbox"/> Elliptical <input type="checkbox"/> Box <input type="checkbox"/> Other:	<input checked="" type="checkbox"/> Single <input type="checkbox"/> Double <input type="checkbox"/> Triple <input type="checkbox"/> Other:	Diameter/Dimensions: 30
	<input checked="" type="checkbox"/> CMP <input type="checkbox"/> HDPE			In Water: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully With Sediment: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully
<input type="checkbox"/> Open drainage	<input type="checkbox"/> Concrete <input type="checkbox"/> Earthen <input type="checkbox"/> rip-rap <input type="checkbox"/> Other:	<input type="checkbox"/> Trapezoid <input type="checkbox"/> Parabolic <input type="checkbox"/> Other:	Depth:  Top Width:  Bottom Width:	
<input type="checkbox"/> In-Stream	(applicable when collecting samples)			
Flow Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <i>If No, Skip to Section 5</i>			
Flow Description (If present)	<input type="checkbox"/> Trickle <input type="checkbox"/> Moderate <input type="checkbox"/> Substantial			

### Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER		RESULT	UNIT	EQUIPMENT
<input type="checkbox"/> Flow #1	Volume		Liter	Bottle
	Time to fill		Seconds	
<input type="checkbox"/> Flow #2	Flow depth		Inches	Tape measure
	Flow width		Inches	Tape measure
	Measured length		Inches	Tape measure
	Time of travel		Seconds	Stop watch
Temperature			°F	Thermometer
pH			pH Units	Test strip/Probe
Ammonia			mg/L	Test strip



Outfall Reconnaissance Inventory Field Sheet

Section 4: Physical Indicators for Flowing Outfalls Only

Are Any Physical Indicators Present in the flow? ☐ Yes ☐ No *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	<input type="checkbox"/>	<input type="checkbox"/> Sewage <input type="checkbox"/> Rancid/sour <input type="checkbox"/> Petroleum/gas <input type="checkbox"/> Sulfide <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint	<input type="checkbox"/> 2 - Easily detected	<input type="checkbox"/> 3 - Noticeable from a distance
Color	<input type="checkbox"/>	<input type="checkbox"/> Clear <input type="checkbox"/> Brown <input type="checkbox"/> Gray <input type="checkbox"/> Yellow <input type="checkbox"/> Green <input type="checkbox"/> Orange <input type="checkbox"/> Red <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint colors in sample bottle	<input type="checkbox"/> 2 - Clearly visible in sample bottle	<input type="checkbox"/> 3 - Clearly visible in outfall flow
Turbidity	<input type="checkbox"/>	See severity	<input type="checkbox"/> 1 - Slight cloudiness	<input type="checkbox"/> 2 - Cloudy	<input type="checkbox"/> 3 - Opaque
Floatables -Does Not Include Trash!!	<input type="checkbox"/>	<input type="checkbox"/> Sewage (Toilet Paper, etc.) <input type="checkbox"/> Suds <input type="checkbox"/> Petroleum (oil sheen) <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Few/slight; origin not obvious	<input type="checkbox"/> 2 - Some; indications of origin (e.g., possible suds or oil sheen)	<input type="checkbox"/> 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☐ Yes ☒ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	<input type="checkbox"/>	<input type="checkbox"/> Spalling, Cracking or Chipping <input type="checkbox"/> Peeling Paint <input type="checkbox"/> Corrosion	
Deposits/Stains	<input type="checkbox"/>	<input type="checkbox"/> Oily <input type="checkbox"/> Flow Line <input type="checkbox"/> Paint <input type="checkbox"/> Other:	
Abnormal Vegetation	<input type="checkbox"/>	<input type="checkbox"/> Excessive <input type="checkbox"/> Inhibited	
Poor pool quality	<input type="checkbox"/>	<input type="checkbox"/> Odors <input type="checkbox"/> Colors <input type="checkbox"/> Floatables <input type="checkbox"/> Oil Sheen <input type="checkbox"/> Suds <input type="checkbox"/> Excessive Algae <input type="checkbox"/> Other:	
Pipe benthic growth	<input type="checkbox"/>	<input type="checkbox"/> Brown <input type="checkbox"/> Orange <input type="checkbox"/> Green <input type="checkbox"/> Other:	

Section 6: Overall Outfall Characterization

<input checked="" type="checkbox"/> Unlikely	<input type="checkbox"/> Potential (presence of two or more indicators)	<input type="checkbox"/> Suspect (one or more indicators with a severity of 3)	<input type="checkbox"/> Obvious
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Section 7: Data Collection

1. Sample for the lab?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
2. If yes, collected from:	<input type="checkbox"/> Flow <input type="checkbox"/> Pool
3. Intermittent flow trap set?	<input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, type: <input type="checkbox"/> OBM <input type="checkbox"/> Caulk dam

Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?



## Photo Log

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## OUTFALL RECONNAISSANCE INVENTORY/ SAMPLE COLLECTION FIELD SHEET

### Section 1: Background Data

Subwatershed:		Outfall ID: CC90	
Today's date: 07/10/17		Time (Military): 1:40PM	
Investigators: Lettice Brown		Form completed by: Lettice Brown	
Temperature (°F): 87		Rainfall (in.): Last 24 hours: 0 Last 48 hours: 0	
Latitude: 39.9584700	Longitude: -76.7324267	GPS Unit:	GPS LMK #:
Camera:		Photo #'s:	
Land Use in Drainage Area (Check all that apply): <input type="checkbox"/> Industrial <input type="checkbox"/> Ultra-Urban Residential <input type="checkbox"/> Suburban Residential <input type="checkbox"/> Commercial		<input type="checkbox"/> Open Space <input type="checkbox"/> Institutional Other: Known Industries:	
Notes (e.g., origin of outfall, if known): York City			

### Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE	DIMENSIONS (IN.)	SUBMERGED
<input checked="" type="checkbox"/> Closed Pipe	<input checked="" type="checkbox"/> RCP <input type="checkbox"/> CMP <input type="checkbox"/> PVC <input type="checkbox"/> HDPE <input type="checkbox"/> Steel <input type="checkbox"/> Other:	<input checked="" type="checkbox"/> Circular <input type="checkbox"/> Elliptical <input type="checkbox"/> Box <input type="checkbox"/> Other:	<input checked="" type="checkbox"/> Single <input type="checkbox"/> Double <input type="checkbox"/> Triple <input type="checkbox"/> Other:	Diameter/Dimensions: 20  In Water: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully With Sediment: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully
<input type="checkbox"/> Open drainage	<input type="checkbox"/> Concrete <input type="checkbox"/> Earthen <input type="checkbox"/> rip-rap <input type="checkbox"/> Other:	<input type="checkbox"/> Trapezoid <input type="checkbox"/> Parabolic <input type="checkbox"/> Other:	Depth:  Top Width:  Bottom Width:	
<input type="checkbox"/> In-Stream	(applicable when collecting samples)			
Flow Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <i>If No, Skip to Section 5</i>			
Flow Description (If present)	<input type="checkbox"/> Trickle <input type="checkbox"/> Moderate <input type="checkbox"/> Substantial			

### Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER	RESULT	UNIT	EQUIPMENT	
<input type="checkbox"/> Flow #1	Volume	Liter	Bottle	
	Time to fill	Seconds		
<input type="checkbox"/> Flow #2	Flow depth	Inches	Tape measure	
	Flow width	Inches	Tape measure	
	Measured length	Inches	Tape measure	
	Time of travel	Seconds	Stop watch	
Temperature		°F	Thermometer	
pH		pH Units	Test strip/Probe	
Ammonia		mg/L	Test strip	



Outfall Reconnaissance Inventory Field Sheet

Section 4: Physical Indicators for Flowing Outfalls Only

Are Any Physical Indicators Present in the flow? ☐ Yes ☐ No *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	<input type="checkbox"/>	<input type="checkbox"/> Sewage <input type="checkbox"/> Rancid/sour <input type="checkbox"/> Petroleum/gas <input type="checkbox"/> Sulfide <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint	<input type="checkbox"/> 2 - Easily detected	<input type="checkbox"/> 3 - Noticeable from a distance
Color	<input type="checkbox"/>	<input type="checkbox"/> Clear <input type="checkbox"/> Brown <input type="checkbox"/> Gray <input type="checkbox"/> Yellow <input type="checkbox"/> Green <input type="checkbox"/> Orange <input type="checkbox"/> Red <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint colors in sample bottle	<input type="checkbox"/> 2 - Clearly visible in sample bottle	<input type="checkbox"/> 3 - Clearly visible in outfall flow
Turbidity	<input type="checkbox"/>	See severity	<input type="checkbox"/> 1 - Slight cloudiness	<input type="checkbox"/> 2 - Cloudy	<input type="checkbox"/> 3 - Opaque
Floatables -Does Not Include Trash!!	<input type="checkbox"/>	<input type="checkbox"/> Sewage (Toilet Paper, etc.) <input type="checkbox"/> Suds <input type="checkbox"/> Petroleum (oil sheen) <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Few/slight; origin not obvious	<input type="checkbox"/> 2 - Some; indications of origin (e.g., possible suds or oil sheen)	<input type="checkbox"/> 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☐ Yes ☒ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	<input type="checkbox"/>	<input type="checkbox"/> Spalling, Cracking or Chipping <input type="checkbox"/> Peeling Paint <input type="checkbox"/> Corrosion	
Deposits/Stains	<input type="checkbox"/>	<input type="checkbox"/> Oily <input type="checkbox"/> Flow Line <input type="checkbox"/> Paint <input type="checkbox"/> Other:	
Abnormal Vegetation	<input type="checkbox"/>	<input type="checkbox"/> Excessive <input type="checkbox"/> Inhibited	
Poor pool quality	<input type="checkbox"/>	<input type="checkbox"/> Odors <input type="checkbox"/> Colors <input type="checkbox"/> Floatables <input type="checkbox"/> Oil Sheen <input type="checkbox"/> Suds <input type="checkbox"/> Excessive Algae <input type="checkbox"/> Other:	
Pipe benthic growth	<input type="checkbox"/>	<input type="checkbox"/> Brown <input type="checkbox"/> Orange <input type="checkbox"/> Green <input type="checkbox"/> Other:	

Section 6: Overall Outfall Characterization

<input checked="" type="checkbox"/> Unlikely	<input type="checkbox"/> Potential (presence of two or more indicators)	<input type="checkbox"/> Suspect (one or more indicators with a severity of 3)	<input type="checkbox"/> Obvious
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Section 7: Data Collection

1. Sample for the lab?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
2. If yes, collected from:	<input type="checkbox"/> Flow <input type="checkbox"/> Pool
3. Intermittent flow trap set?	<input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, type: <input type="checkbox"/> OBM <input type="checkbox"/> Caulk dam

Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?



## Photo Log

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## OUTFALL RECONNAISSANCE INVENTORY/ SAMPLE COLLECTION FIELD SHEET

### Section 1: Background Data

Subwatershed:		Outfall ID: CC91	
Today's date: 07/10/17		Time (Military): 1:45PM	
Investigators: Lettice Brown		Form completed by: Lettice Brown	
Temperature (°F): 86		Rainfall (in.): Last 24 hours: 0 Last 48 hours: 0	
Latitude: 39.9584530	Longitude: -76.7324256	GPS Unit:	GPS LMK #:
Camera:		Photo #'s:	
Land Use in Drainage Area (Check all that apply): <input type="checkbox"/> Industrial <input type="checkbox"/> Ultra-Urban Residential <input type="checkbox"/> Suburban Residential <input type="checkbox"/> Commercial		<input type="checkbox"/> Open Space <input type="checkbox"/> Institutional Other: Known Industries:	
Notes (e.g., origin of outfall, if known): York City			

### Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE	DIMENSIONS (IN.)	SUBMERGED
<input checked="" type="checkbox"/> Closed Pipe	<input checked="" type="checkbox"/> RCP <input type="checkbox"/> CMP <input type="checkbox"/> PVC <input type="checkbox"/> HDPE <input type="checkbox"/> Steel <input type="checkbox"/> Other:	<input checked="" type="checkbox"/> Circular <input checked="" type="checkbox"/> Single <input type="checkbox"/> Elliptical <input type="checkbox"/> Double <input type="checkbox"/> Box <input type="checkbox"/> Triple <input type="checkbox"/> Other: <input type="checkbox"/> Other:	Diameter/Dimensions: 20	In Water: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully With Sediment: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully
<input type="checkbox"/> Open drainage	<input type="checkbox"/> Concrete <input type="checkbox"/> Earthen <input type="checkbox"/> rip-rap <input type="checkbox"/> Other:	<input type="checkbox"/> Trapezoid <input type="checkbox"/> Parabolic <input type="checkbox"/> Other:	Depth:  Top Width:  Bottom Width:	
<input type="checkbox"/> In-Stream	(applicable when collecting samples)			
Flow Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <i>If No, Skip to Section 5</i>			
Flow Description (If present)	<input type="checkbox"/> Trickle <input type="checkbox"/> Moderate <input type="checkbox"/> Substantial			

### Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER		RESULT	UNIT	EQUIPMENT
<input type="checkbox"/> Flow #1	Volume		Liter	Bottle
	Time to fill		Seconds	
<input type="checkbox"/> Flow #2	Flow depth		Inches	Tape measure
	Flow width		Inches	Tape measure
	Measured length		Inches	Tape measure
	Time of travel		Seconds	Stop watch
Temperature			°F	Thermometer
pH			pH Units	Test strip/Probe
Ammonia			mg/L	Test strip



Outfall Reconnaissance Inventory Field Sheet

Section 4: Physical Indicators for Flowing Outfalls Only

Are Any Physical Indicators Present in the flow? ☐ Yes ☐ No *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	<input type="checkbox"/>	<input type="checkbox"/> Sewage <input type="checkbox"/> Rancid/sour <input type="checkbox"/> Petroleum/gas <input type="checkbox"/> Sulfide <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint	<input type="checkbox"/> 2 - Easily detected	<input type="checkbox"/> 3 - Noticeable from a distance
Color	<input type="checkbox"/>	<input type="checkbox"/> Clear <input type="checkbox"/> Brown <input type="checkbox"/> Gray <input type="checkbox"/> Yellow <input type="checkbox"/> Green <input type="checkbox"/> Orange <input type="checkbox"/> Red <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint colors in sample bottle	<input type="checkbox"/> 2 - Clearly visible in sample bottle	<input type="checkbox"/> 3 - Clearly visible in outfall flow
Turbidity	<input type="checkbox"/>	See severity	<input type="checkbox"/> 1 - Slight cloudiness	<input type="checkbox"/> 2 - Cloudy	<input type="checkbox"/> 3 - Opaque
Floatables -Does Not Include Trash!!	<input type="checkbox"/>	<input type="checkbox"/> Sewage (Toilet Paper, etc.) <input type="checkbox"/> Suds <input type="checkbox"/> Petroleum (oil sheen) <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Few/slight; origin not obvious	<input type="checkbox"/> 2 - Some; indications of origin (e.g., possible suds or oil sheen)	<input type="checkbox"/> 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☐ Yes ☒ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	<input type="checkbox"/>	<input type="checkbox"/> Spalling, Cracking or Chipping <input type="checkbox"/> Peeling Paint <input type="checkbox"/> Corrosion	
Deposits/Stains	<input type="checkbox"/>	<input type="checkbox"/> Oily <input type="checkbox"/> Flow Line <input type="checkbox"/> Paint <input type="checkbox"/> Other:	
Abnormal Vegetation	<input type="checkbox"/>	<input type="checkbox"/> Excessive <input type="checkbox"/> Inhibited	
Poor pool quality	<input type="checkbox"/>	<input type="checkbox"/> Odors <input type="checkbox"/> Colors <input type="checkbox"/> Floatables <input type="checkbox"/> Oil Sheen <input type="checkbox"/> Suds <input type="checkbox"/> Excessive Algae <input type="checkbox"/> Other:	
Pipe benthic growth	<input type="checkbox"/>	<input type="checkbox"/> Brown <input type="checkbox"/> Orange <input type="checkbox"/> Green <input type="checkbox"/> Other:	

Section 6: Overall Outfall Characterization

<input checked="" type="checkbox"/> Unlikely	<input type="checkbox"/> Potential (presence of two or more indicators)	<input type="checkbox"/> Suspect (one or more indicators with a severity of 3)	<input type="checkbox"/> Obvious
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Section 7: Data Collection

1. Sample for the lab?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
2. If yes, collected from:	<input type="checkbox"/> Flow <input type="checkbox"/> Pool
3. Intermittent flow trap set?	<input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, type: <input type="checkbox"/> OBM <input type="checkbox"/> Caulk dam

Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?



## Photo Log

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## OUTFALL RECONNAISSANCE INVENTORY/ SAMPLE COLLECTION FIELD SHEET

### Section 1: Background Data

Subwatershed:		Outfall ID: CC93	
Today's date: 07/10/17		Time (Military): 1:45PM	
Investigators: Lettice Brown		Form completed by: Lettice Brown	
Temperature (°F): 86		Rainfall (in.): Last 24 hours: 0 Last 48 hours: 0	
Latitude: 39.9581496	Longitude: -76.7323454	GPS Unit:	GPS LMK #:
Camera:		Photo #'s:	
Land Use in Drainage Area (Check all that apply): <input type="checkbox"/> Industrial <input type="checkbox"/> Ultra-Urban Residential <input type="checkbox"/> Suburban Residential <input type="checkbox"/> Commercial		<input type="checkbox"/> Open Space <input type="checkbox"/> Institutional Other: Known Industries:	
Notes (e.g., origin of outfall, if known): York City			

### Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE	DIMENSIONS (IN.)	SUBMERGED	
<input checked="" type="checkbox"/> Closed Pipe	<input type="checkbox"/> RCP <input type="checkbox"/> PVC <input type="checkbox"/> Steel <input type="checkbox"/> Other:	<input checked="" type="checkbox"/> Circular <input type="checkbox"/> Elliptical <input type="checkbox"/> Box <input type="checkbox"/> Other:	<input checked="" type="checkbox"/> Single <input type="checkbox"/> Double <input type="checkbox"/> Triple <input type="checkbox"/> Other:	Diameter/Dimensions: 8	In Water: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully With Sediment: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully
	<input type="checkbox"/> Concrete <input type="checkbox"/> Earthen <input type="checkbox"/> rip-rap <input type="checkbox"/> Other:	<input type="checkbox"/> Trapezoid <input type="checkbox"/> Parabolic <input type="checkbox"/> Other:	Depth: Top Width: Bottom Width:		
<input type="checkbox"/> Open drainage					
<input type="checkbox"/> In-Stream	(applicable when collecting samples)				
Flow Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <i>If No, Skip to Section 5</i>				
Flow Description (If present)	<input type="checkbox"/> Trickle <input type="checkbox"/> Moderate <input type="checkbox"/> Substantial				

### Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER	RESULT	UNIT	EQUIPMENT	
<input type="checkbox"/> Flow #1	Volume		Liter	Bottle
	Time to fill		Seconds	
<input type="checkbox"/> Flow #2	Flow depth		Inches	Tape measure
	Flow width		Inches	Tape measure
	Measured length		Inches	Tape measure
	Time of travel		Seconds	Stop watch
Temperature			°F	Thermometer
pH			pH Units	Test strip/Probe
Ammonia			mg/L	Test strip



Outfall Reconnaissance Inventory Field Sheet

Section 4: Physical Indicators for Flowing Outfalls Only

Are Any Physical Indicators Present in the flow? ☐ Yes ☐ No *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	<input type="checkbox"/>	<input type="checkbox"/> Sewage <input type="checkbox"/> Rancid/sour <input type="checkbox"/> Petroleum/gas <input type="checkbox"/> Sulfide <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint	<input type="checkbox"/> 2 - Easily detected	<input type="checkbox"/> 3 - Noticeable from a distance
Color	<input type="checkbox"/>	<input type="checkbox"/> Clear <input type="checkbox"/> Brown <input type="checkbox"/> Gray <input type="checkbox"/> Yellow <input type="checkbox"/> Green <input type="checkbox"/> Orange <input type="checkbox"/> Red <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint colors in sample bottle	<input type="checkbox"/> 2 - Clearly visible in sample bottle	<input type="checkbox"/> 3 - Clearly visible in outfall flow
Turbidity	<input type="checkbox"/>	See severity	<input type="checkbox"/> 1 - Slight cloudiness	<input type="checkbox"/> 2 - Cloudy	<input type="checkbox"/> 3 - Opaque
Floatables -Does Not Include Trash!!	<input type="checkbox"/>	<input type="checkbox"/> Sewage (Toilet Paper, etc.) <input type="checkbox"/> Suds <input type="checkbox"/> Petroleum (oil sheen) <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Few/slight; origin not obvious	<input type="checkbox"/> 2 - Some; indications of origin (e.g., possible suds or oil sheen)	<input type="checkbox"/> 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☐ Yes ☒ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	<input type="checkbox"/>	<input type="checkbox"/> Spalling, Cracking or Chipping <input type="checkbox"/> Peeling Paint <input type="checkbox"/> Corrosion	
Deposits/Stains	<input type="checkbox"/>	<input type="checkbox"/> Oily <input type="checkbox"/> Flow Line <input type="checkbox"/> Paint <input type="checkbox"/> Other:	
Abnormal Vegetation	<input type="checkbox"/>	<input type="checkbox"/> Excessive <input type="checkbox"/> Inhibited	
Poor pool quality	<input type="checkbox"/>	<input type="checkbox"/> Odors <input type="checkbox"/> Colors <input type="checkbox"/> Floatables <input type="checkbox"/> Oil Sheen <input type="checkbox"/> Suds <input type="checkbox"/> Excessive Algae <input type="checkbox"/> Other:	
Pipe benthic growth	<input type="checkbox"/>	<input type="checkbox"/> Brown <input type="checkbox"/> Orange <input type="checkbox"/> Green <input type="checkbox"/> Other:	

Section 6: Overall Outfall Characterization

<input checked="" type="checkbox"/> Unlikely	<input type="checkbox"/> Potential (presence of two or more indicators)	<input type="checkbox"/> Suspect (one or more indicators with a severity of 3)	<input type="checkbox"/> Obvious
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Section 7: Data Collection

1. Sample for the lab?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
2. If yes, collected from:	<input type="checkbox"/> Flow <input type="checkbox"/> Pool
3. Intermittent flow trap set?	<input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, type: <input type="checkbox"/> OBM <input type="checkbox"/> Caulk dam

Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?



## Photo Log

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## OUTFALL RECONNAISSANCE INVENTORY/ SAMPLE COLLECTION FIELD SHEET

### Section 1: Background Data

Subwatershed:		Outfall ID: CC96	
Today's date: 07/10/17		Time (Military): 1:50PM	
Investigators: Lettice Brown		Form completed by: Lettice Brown	
Temperature (°F): 86		Rainfall (in.): Last 24 hours: 0 Last 48 hours: 0	
Latitude: 39.9578469	Longitude: -76.7323933	GPS Unit:	GPS LMK #:
Camera:		Photo #'s:	
Land Use in Drainage Area (Check all that apply): <input type="checkbox"/> Industrial <input type="checkbox"/> Ultra-Urban Residential <input type="checkbox"/> Suburban Residential <input type="checkbox"/> Commercial		<input type="checkbox"/> Open Space <input type="checkbox"/> Institutional Other: Known Industries:	
Notes (e.g., origin of outfall, if known): York City			

### Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE	DIMENSIONS (IN.)	SUBMERGED	
<input checked="" type="checkbox"/> Closed Pipe	<input type="checkbox"/> RCP <input type="checkbox"/> CMP <input type="checkbox"/> PVC <input type="checkbox"/> HDPE <input type="checkbox"/> Steel <input checked="" type="checkbox"/> Other: TCP	<input checked="" type="checkbox"/> Circular <input type="checkbox"/> Elliptical <input type="checkbox"/> Box <input type="checkbox"/> Other:	<input checked="" type="checkbox"/> Single <input type="checkbox"/> Double <input type="checkbox"/> Triple <input type="checkbox"/> Other:	Diameter/Dimensions: 24.0	In Water: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully With Sediment: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully
	<input type="checkbox"/> Open drainage	<input type="checkbox"/> Concrete <input type="checkbox"/> Earthen <input type="checkbox"/> rip-rap <input type="checkbox"/> Other:	<input type="checkbox"/> Trapezoid <input type="checkbox"/> Parabolic <input type="checkbox"/> Other:	Depth:  Top Width:  Bottom Width:	
<input type="checkbox"/> In-Stream	(applicable when collecting samples)				
Flow Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <i>If No, Skip to Section 5</i>				
Flow Description (If present)	<input type="checkbox"/> Trickle <input type="checkbox"/> Moderate <input type="checkbox"/> Substantial				

### Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER		RESULT	UNIT	EQUIPMENT
<input type="checkbox"/> Flow #1	Volume		Liter	Bottle
	Time to fill		Seconds	
<input type="checkbox"/> Flow #2	Flow depth		Inches	Tape measure
	Flow width		Inches	Tape measure
	Measured length		Inches	Tape measure
	Time of travel		Seconds	Stop watch
Temperature			°F	Thermometer
pH			pH Units	Test strip/Probe
Ammonia			mg/L	Test strip



Outfall Reconnaissance Inventory Field Sheet

Section 4: Physical Indicators for Flowing Outfalls Only

Are Any Physical Indicators Present in the flow? ☐ Yes ☐ No (If No, Skip to Section 5)

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	<input type="checkbox"/>	<input type="checkbox"/> Sewage <input type="checkbox"/> Rancid/sour <input type="checkbox"/> Petroleum/gas <input type="checkbox"/> Sulfide <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint	<input type="checkbox"/> 2 - Easily detected	<input type="checkbox"/> 3 - Noticeable from a distance
Color	<input type="checkbox"/>	<input type="checkbox"/> Clear <input type="checkbox"/> Brown <input type="checkbox"/> Gray <input type="checkbox"/> Yellow <input type="checkbox"/> Green <input type="checkbox"/> Orange <input type="checkbox"/> Red <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint colors in sample bottle	<input type="checkbox"/> 2 - Clearly visible in sample bottle	<input type="checkbox"/> 3 - Clearly visible in outfall flow
Turbidity	<input type="checkbox"/>	See severity	<input type="checkbox"/> 1 - Slight cloudiness	<input type="checkbox"/> 2 - Cloudy	<input type="checkbox"/> 3 - Opaque
Floatables -Does Not Include Trash!!	<input type="checkbox"/>	<input type="checkbox"/> Sewage (Toilet Paper, etc.) <input type="checkbox"/> Suds <input type="checkbox"/> Petroleum (oil sheen) <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Few/slight; origin not obvious	<input type="checkbox"/> 2 - Some; indications of origin (e.g., possible suds or oil sheen)	<input type="checkbox"/> 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☐ Yes ☒ No (If No, Skip to Section 6)

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	<input type="checkbox"/>	<input type="checkbox"/> Spalling, Cracking or Chipping <input type="checkbox"/> Peeling Paint <input type="checkbox"/> Corrosion	
Deposits/Stains	<input type="checkbox"/>	<input type="checkbox"/> Oily <input type="checkbox"/> Flow Line <input type="checkbox"/> Paint <input type="checkbox"/> Other:	
Abnormal Vegetation	<input type="checkbox"/>	<input type="checkbox"/> Excessive <input type="checkbox"/> Inhibited	
Poor pool quality	<input type="checkbox"/>	<input type="checkbox"/> Odors <input type="checkbox"/> Colors <input type="checkbox"/> Floatables <input type="checkbox"/> Oil Sheen <input type="checkbox"/> Suds <input type="checkbox"/> Excessive Algae <input type="checkbox"/> Other:	
Pipe benthic growth	<input type="checkbox"/>	<input type="checkbox"/> Brown <input type="checkbox"/> Orange <input type="checkbox"/> Green <input type="checkbox"/> Other:	

Section 6: Overall Outfall Characterization

<input checked="" type="checkbox"/> Unlikely	<input type="checkbox"/> Potential (presence of two or more indicators)	<input type="checkbox"/> Suspect (one or more indicators with a severity of 3)	<input type="checkbox"/> Obvious
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Section 7: Data Collection

1. Sample for the lab?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
2. If yes, collected from:	<input type="checkbox"/> Flow <input type="checkbox"/> Pool
3. Intermittent flow trap set?	<input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, type: <input type="checkbox"/> OBM <input type="checkbox"/> Caulk dam

Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?



## Photo Log

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## OUTFALL RECONNAISSANCE INVENTORY/ SAMPLE COLLECTION FIELD SHEET

### Section 1: Background Data

Subwatershed:		Outfall ID: CC98	
Today's date: 07/10/17		Time (Military): 1:55PM	
Investigators: Lettice Brown		Form completed by: Lettice Brown	
Temperature (°F): 86		Rainfall (in.): Last 24 hours: 0 Last 48 hours: 0	
Latitude: 39.9577397	Longitude: -76.7323728	GPS Unit:	GPS LMK #:
Camera:		Photo #'s:	
Land Use in Drainage Area (Check all that apply): <input type="checkbox"/> Industrial <input type="checkbox"/> Ultra-Urban Residential <input type="checkbox"/> Suburban Residential <input type="checkbox"/> Commercial		<input type="checkbox"/> Open Space <input type="checkbox"/> Institutional Other: Known Industries:	
Notes (e.g., origin of outfall, if known): York City			

### Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE	DIMENSIONS (IN.)	SUBMERGED
<input checked="" type="checkbox"/> Closed Pipe	<input type="checkbox"/> RCP <input type="checkbox"/> CMP <input type="checkbox"/> PVC <input type="checkbox"/> HDPE <input type="checkbox"/> Steel <input checked="" type="checkbox"/> Other: TCP	<input checked="" type="checkbox"/> Circular <input type="checkbox"/> Elliptical <input type="checkbox"/> Box <input type="checkbox"/> Other:	<input checked="" type="checkbox"/> Single <input type="checkbox"/> Double <input type="checkbox"/> Triple <input type="checkbox"/> Other:	Diameter/Dimensions: 24  In Water: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully With Sediment: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully
<input type="checkbox"/> Open drainage	<input type="checkbox"/> Concrete <input type="checkbox"/> Earthen <input type="checkbox"/> rip-rap <input type="checkbox"/> Other:	<input type="checkbox"/> Trapezoid <input type="checkbox"/> Parabolic <input type="checkbox"/> Other:	Depth:  Top Width:  Bottom Width:	
<input type="checkbox"/> In-Stream	(applicable when collecting samples)			
Flow Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <i>If No, Skip to Section 5</i>			
Flow Description (If present)	<input type="checkbox"/> Trickle <input type="checkbox"/> Moderate <input type="checkbox"/> Substantial			

### Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER		RESULT	UNIT	EQUIPMENT
<input type="checkbox"/> Flow #1	Volume		Liter	Bottle
	Time to fill		Seconds	
<input type="checkbox"/> Flow #2	Flow depth		Inches	Tape measure
	Flow width		Inches	Tape measure
	Measured length		Inches	Tape measure
	Time of travel		Seconds	Stop watch
Temperature			°F	Thermometer
pH			pH Units	Test strip/Probe
Ammonia			mg/L	Test strip



Outfall Reconnaissance Inventory Field Sheet

Section 4: Physical Indicators for Flowing Outfalls Only

Are Any Physical Indicators Present in the flow? ☐ Yes ☐ No *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	<input type="checkbox"/>	<input type="checkbox"/> Sewage <input type="checkbox"/> Rancid/sour <input type="checkbox"/> Petroleum/gas <input type="checkbox"/> Sulfide <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint	<input type="checkbox"/> 2 - Easily detected	<input type="checkbox"/> 3 - Noticeable from a distance
Color	<input type="checkbox"/>	<input type="checkbox"/> Clear <input type="checkbox"/> Brown <input type="checkbox"/> Gray <input type="checkbox"/> Yellow <input type="checkbox"/> Green <input type="checkbox"/> Orange <input type="checkbox"/> Red <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint colors in sample bottle	<input type="checkbox"/> 2 - Clearly visible in sample bottle	<input type="checkbox"/> 3 - Clearly visible in outfall flow
Turbidity	<input type="checkbox"/>	See severity	<input type="checkbox"/> 1 - Slight cloudiness	<input type="checkbox"/> 2 - Cloudy	<input type="checkbox"/> 3 - Opaque
Floatables -Does Not Include Trash!!	<input type="checkbox"/>	<input type="checkbox"/> Sewage (Toilet Paper, etc.) <input type="checkbox"/> Suds <input type="checkbox"/> Petroleum (oil sheen) <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Few/slight; origin not obvious	<input type="checkbox"/> 2 - Some; indications of origin (e.g., possible suds or oil sheen)	<input type="checkbox"/> 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☐ Yes ☒ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	<input type="checkbox"/>	<input type="checkbox"/> Spalling, Cracking or Chipping <input type="checkbox"/> Peeling Paint <input type="checkbox"/> Corrosion	
Deposits/Stains	<input type="checkbox"/>	<input type="checkbox"/> Oily <input type="checkbox"/> Flow Line <input type="checkbox"/> Paint <input type="checkbox"/> Other:	
Abnormal Vegetation	<input type="checkbox"/>	<input type="checkbox"/> Excessive <input type="checkbox"/> Inhibited	
Poor pool quality	<input type="checkbox"/>	<input type="checkbox"/> Odors <input type="checkbox"/> Colors <input type="checkbox"/> Floatables <input type="checkbox"/> Oil Sheen <input type="checkbox"/> Suds <input type="checkbox"/> Excessive Algae <input type="checkbox"/> Other:	
Pipe benthic growth	<input type="checkbox"/>	<input type="checkbox"/> Brown <input type="checkbox"/> Orange <input type="checkbox"/> Green <input type="checkbox"/> Other:	

Section 6: Overall Outfall Characterization

<input checked="" type="checkbox"/> Unlikely	<input type="checkbox"/> Potential (presence of two or more indicators)	<input type="checkbox"/> Suspect (one or more indicators with a severity of 3)	<input type="checkbox"/> Obvious
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Section 7: Data Collection

1. Sample for the lab?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
2. If yes, collected from:	<input type="checkbox"/> Flow <input type="checkbox"/> Pool
3. Intermittent flow trap set?	<input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, type: <input type="checkbox"/> OBM <input type="checkbox"/> Caulk dam

Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?



## Photo Log

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## OUTFALL RECONNAISSANCE INVENTORY/ SAMPLE COLLECTION FIELD SHEET

### Section 1: Background Data

Subwatershed:		Outfall ID: CC103	
Today's date: 07/10/17		Time (Military): 2:00PM	
Investigators: Lettice Brown		Form completed by: Lettice Brown	
Temperature (°F): 86		Rainfall (in.): Last 24 hours: 0 Last 48 hours: 0	
Latitude: 39.9570334	Longitude: -76.7322777	GPS Unit:	GPS LMK #:
Camera:		Photo #'s:	
Land Use in Drainage Area (Check all that apply): <input type="checkbox"/> Industrial <input type="checkbox"/> Ultra-Urban Residential <input type="checkbox"/> Suburban Residential <input type="checkbox"/> Commercial		<input type="checkbox"/> Open Space <input type="checkbox"/> Institutional Other: Known Industries:	
Notes (e.g., origin of outfall, if known): York City			

### Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE	DIMENSIONS (IN.)	SUBMERGED
<input checked="" type="checkbox"/> Closed Pipe	<input type="checkbox"/> RCP <input type="checkbox"/> PVC <input type="checkbox"/> Steel <input type="checkbox"/> Other:	<input checked="" type="checkbox"/> Circular <input type="checkbox"/> Elliptical <input type="checkbox"/> Box <input type="checkbox"/> Other:	<input checked="" type="checkbox"/> Single <input type="checkbox"/> Double <input type="checkbox"/> Triple <input type="checkbox"/> Other:	Diameter/Dimensions: 30
	<input checked="" type="checkbox"/> CMP <input type="checkbox"/> HDPE			In Water: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully With Sediment: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully
<input type="checkbox"/> Open drainage	<input type="checkbox"/> Concrete <input type="checkbox"/> Earthen <input type="checkbox"/> rip-rap <input type="checkbox"/> Other:	<input type="checkbox"/> Trapezoid <input type="checkbox"/> Parabolic <input type="checkbox"/> Other:	Depth:  Top Width:  Bottom Width:	
<input type="checkbox"/> In-Stream	(applicable when collecting samples)			
Flow Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <i>If No, Skip to Section 5</i>			
Flow Description (If present)	<input type="checkbox"/> Trickle <input type="checkbox"/> Moderate <input type="checkbox"/> Substantial			

### Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER	RESULT	UNIT	EQUIPMENT	
<input type="checkbox"/> Flow #1	Volume		Liter	Bottle
	Time to fill		Seconds	
<input type="checkbox"/> Flow #2	Flow depth		Inches	Tape measure
	Flow width		Inches	Tape measure
	Measured length		Inches	Tape measure
	Time of travel		Seconds	Stop watch
Temperature			°F	Thermometer
pH			pH Units	Test strip/Probe
Ammonia			mg/L	Test strip



Outfall Reconnaissance Inventory Field Sheet

Section 4: Physical Indicators for Flowing Outfalls Only

Are Any Physical Indicators Present in the flow? ☐ Yes ☐ No (If No, Skip to Section 5)

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	<input type="checkbox"/>	<input type="checkbox"/> Sewage <input type="checkbox"/> Rancid/sour <input type="checkbox"/> Petroleum/gas <input type="checkbox"/> Sulfide <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint	<input type="checkbox"/> 2 - Easily detected	<input type="checkbox"/> 3 - Noticeable from a distance
Color	<input type="checkbox"/>	<input type="checkbox"/> Clear <input type="checkbox"/> Brown <input type="checkbox"/> Gray <input type="checkbox"/> Yellow <input type="checkbox"/> Green <input type="checkbox"/> Orange <input type="checkbox"/> Red <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint colors in sample bottle	<input type="checkbox"/> 2 - Clearly visible in sample bottle	<input type="checkbox"/> 3 - Clearly visible in outfall flow
Turbidity	<input type="checkbox"/>	See severity	<input type="checkbox"/> 1 - Slight cloudiness	<input type="checkbox"/> 2 - Cloudy	<input type="checkbox"/> 3 - Opaque
Floatables -Does Not Include Trash!!	<input type="checkbox"/>	<input type="checkbox"/> Sewage (Toilet Paper, etc.) <input type="checkbox"/> Suds <input type="checkbox"/> Petroleum (oil sheen) <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Few/slight; origin not obvious	<input type="checkbox"/> 2 - Some; indications of origin (e.g., possible suds or oil sheen)	<input type="checkbox"/> 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☐ Yes ☒ No (If No, Skip to Section 6)

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	<input type="checkbox"/>	<input type="checkbox"/> Spalling, Cracking or Chipping <input type="checkbox"/> Peeling Paint <input type="checkbox"/> Corrosion	
Deposits/Stains	<input type="checkbox"/>	<input type="checkbox"/> Oily <input type="checkbox"/> Flow Line <input type="checkbox"/> Paint <input type="checkbox"/> Other:	
Abnormal Vegetation	<input type="checkbox"/>	<input type="checkbox"/> Excessive <input type="checkbox"/> Inhibited	
Poor pool quality	<input type="checkbox"/>	<input type="checkbox"/> Odors <input type="checkbox"/> Colors <input type="checkbox"/> Floatables <input type="checkbox"/> Oil Sheen <input type="checkbox"/> Suds <input type="checkbox"/> Excessive Algae <input type="checkbox"/> Other:	
Pipe benthic growth	<input type="checkbox"/>	<input type="checkbox"/> Brown <input type="checkbox"/> Orange <input type="checkbox"/> Green <input type="checkbox"/> Other:	

Section 6: Overall Outfall Characterization

<input checked="" type="checkbox"/> Unlikely	<input type="checkbox"/> Potential (presence of two or more indicators)	<input type="checkbox"/> Suspect (one or more indicators with a severity of 3)	<input type="checkbox"/> Obvious
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Section 7: Data Collection

1. Sample for the lab?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
2. If yes, collected from:	<input type="checkbox"/> Flow <input type="checkbox"/> Pool
3. Intermittent flow trap set?	<input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, type: <input type="checkbox"/> OBM <input type="checkbox"/> Caulk dam

Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?



## Photo Log

Photo No. 1: image.jpg





## OUTFALL RECONNAISSANCE INVENTORY/ SAMPLE COLLECTION FIELD SHEET

### Section 1: Background Data

Subwatershed:		Outfall ID: CC104	
Today's date: 07/10/17		Time (Military): 2:05PM	
Investigators: Lettice Brown		Form completed by: Lettice Brown	
Temperature (°F): 86		Rainfall (in.): Last 24 hours: 0 Last 48 hours: 0	
Latitude: 39.9566868	Longitude: -76.7323506	GPS Unit:	GPS LMK #:
Camera:		Photo #'s:	
Land Use in Drainage Area (Check all that apply): <input type="checkbox"/> Industrial <input type="checkbox"/> Ultra-Urban Residential <input type="checkbox"/> Suburban Residential <input type="checkbox"/> Commercial		<input type="checkbox"/> Open Space <input type="checkbox"/> Institutional Other: Known Industries:	
Notes (e.g., origin of outfall, if known): York City			

### Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE	DIMENSIONS (IN.)	SUBMERGED
<input checked="" type="checkbox"/> Closed Pipe	<input checked="" type="checkbox"/> RCP <input type="checkbox"/> CMP <input type="checkbox"/> PVC <input type="checkbox"/> HDPE <input type="checkbox"/> Steel <input type="checkbox"/> Other:	<input checked="" type="checkbox"/> Circular <input type="checkbox"/> Elliptical <input type="checkbox"/> Box <input type="checkbox"/> Other:	<input checked="" type="checkbox"/> Single <input type="checkbox"/> Double <input type="checkbox"/> Triple <input type="checkbox"/> Other:	Diameter/Dimensions: 20  In Water: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully With Sediment: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully
<input type="checkbox"/> Open drainage	<input type="checkbox"/> Concrete <input type="checkbox"/> Earthen <input type="checkbox"/> rip-rap <input type="checkbox"/> Other:	<input type="checkbox"/> Trapezoid <input type="checkbox"/> Parabolic <input type="checkbox"/> Other:	Depth:  Top Width:  Bottom Width:	
<input type="checkbox"/> In-Stream	(applicable when collecting samples)			
Flow Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <i>If No, Skip to Section 5</i>			
Flow Description (If present)	<input type="checkbox"/> Trickle <input type="checkbox"/> Moderate <input type="checkbox"/> Substantial			

### Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER	RESULT	UNIT	EQUIPMENT	
<input type="checkbox"/> Flow #1	Volume		Liter	Bottle
	Time to fill		Seconds	
<input type="checkbox"/> Flow #2	Flow depth		Inches	Tape measure
	Flow width		Inches	Tape measure
	Measured length		Inches	Tape measure
	Time of travel		Seconds	Stop watch
Temperature			°F	Thermometer
pH			pH Units	Test strip/Probe
Ammonia			mg/L	Test strip



Outfall Reconnaissance Inventory Field Sheet

Section 4: Physical Indicators for Flowing Outfalls Only

Are Any Physical Indicators Present in the flow? ☐ Yes ☐ No *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	<input type="checkbox"/>	<input type="checkbox"/> Sewage <input type="checkbox"/> Rancid/sour <input type="checkbox"/> Petroleum/gas <input type="checkbox"/> Sulfide <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint	<input type="checkbox"/> 2 - Easily detected	<input type="checkbox"/> 3 - Noticeable from a distance
Color	<input type="checkbox"/>	<input type="checkbox"/> Clear <input type="checkbox"/> Brown <input type="checkbox"/> Gray <input type="checkbox"/> Yellow <input type="checkbox"/> Green <input type="checkbox"/> Orange <input type="checkbox"/> Red <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint colors in sample bottle	<input type="checkbox"/> 2 - Clearly visible in sample bottle	<input type="checkbox"/> 3 - Clearly visible in outfall flow
Turbidity	<input type="checkbox"/>	See severity	<input type="checkbox"/> 1 - Slight cloudiness	<input type="checkbox"/> 2 - Cloudy	<input type="checkbox"/> 3 - Opaque
Floatables -Does Not Include Trash!!	<input type="checkbox"/>	<input type="checkbox"/> Sewage (Toilet Paper, etc.) <input type="checkbox"/> Suds <input type="checkbox"/> Petroleum (oil sheen) <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Few/slight; origin not obvious	<input type="checkbox"/> 2 - Some; indications of origin (e.g., possible suds or oil sheen)	<input type="checkbox"/> 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☐ Yes ☒ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	<input type="checkbox"/>	<input type="checkbox"/> Spalling, Cracking or Chipping <input type="checkbox"/> Peeling Paint <input type="checkbox"/> Corrosion	
Deposits/Stains	<input type="checkbox"/>	<input type="checkbox"/> Oily <input type="checkbox"/> Flow Line <input type="checkbox"/> Paint <input type="checkbox"/> Other:	
Abnormal Vegetation	<input type="checkbox"/>	<input type="checkbox"/> Excessive <input type="checkbox"/> Inhibited	
Poor pool quality	<input type="checkbox"/>	<input type="checkbox"/> Odors <input type="checkbox"/> Colors <input type="checkbox"/> Floatables <input type="checkbox"/> Oil Sheen <input type="checkbox"/> Suds <input type="checkbox"/> Excessive Algae <input type="checkbox"/> Other:	
Pipe benthic growth	<input type="checkbox"/>	<input type="checkbox"/> Brown <input type="checkbox"/> Orange <input type="checkbox"/> Green <input type="checkbox"/> Other:	

Section 6: Overall Outfall Characterization

<input checked="" type="checkbox"/> Unlikely	<input type="checkbox"/> Potential (presence of two or more indicators)	<input type="checkbox"/> Suspect (one or more indicators with a severity of 3)	<input type="checkbox"/> Obvious
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Section 7: Data Collection

1. Sample for the lab?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
2. If yes, collected from:	<input type="checkbox"/> Flow <input type="checkbox"/> Pool
3. Intermittent flow trap set?	<input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, type: <input type="checkbox"/> OBM <input type="checkbox"/> Caulk dam

Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?



## Photo Log

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## OUTFALL RECONNAISSANCE INVENTORY/ SAMPLE COLLECTION FIELD SHEET

### Section 1: Background Data

Subwatershed:		Outfall ID: CC105	
Today's date: 07/10/17		Time (Military): 2:05PM	
Investigators: Lettice Brown		Form completed by: Lettice Brown	
Temperature (°F): 86		Rainfall (in.): Last 24 hours: 0 Last 48 hours: 0	
Latitude: 39.9566743	Longitude: -76.7323459	GPS Unit:	GPS LMK #:
Camera:		Photo #'s:	
Land Use in Drainage Area (Check all that apply): <input type="checkbox"/> Industrial <input type="checkbox"/> Ultra-Urban Residential <input type="checkbox"/> Suburban Residential <input type="checkbox"/> Commercial		<input type="checkbox"/> Open Space <input type="checkbox"/> Institutional Other: Known Industries:	
Notes (e.g., origin of outfall, if known): York City			

### Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE	DIMENSIONS (IN.)	SUBMERGED
<input checked="" type="checkbox"/> Closed Pipe	<input checked="" type="checkbox"/> RCP <input type="checkbox"/> CMP <input type="checkbox"/> PVC <input type="checkbox"/> HDPE <input type="checkbox"/> Steel <input type="checkbox"/> Other:	<input checked="" type="checkbox"/> Circular <input type="checkbox"/> Elliptical <input type="checkbox"/> Box <input type="checkbox"/> Other:	<input checked="" type="checkbox"/> Single <input type="checkbox"/> Double <input type="checkbox"/> Triple <input type="checkbox"/> Other:	Diameter/Dimensions: 20  In Water: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully With Sediment: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully
<input type="checkbox"/> Open drainage	<input type="checkbox"/> Concrete <input type="checkbox"/> Earthen <input type="checkbox"/> rip-rap <input type="checkbox"/> Other:	<input type="checkbox"/> Trapezoid <input type="checkbox"/> Parabolic <input type="checkbox"/> Other:	Depth:  Top Width:  Bottom Width:	
<input type="checkbox"/> In-Stream	(applicable when collecting samples)			
Flow Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <i>If No, Skip to Section 5</i>			
Flow Description (If present)	<input type="checkbox"/> Trickle <input type="checkbox"/> Moderate <input type="checkbox"/> Substantial			

### Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER	RESULT	UNIT	EQUIPMENT	
<input type="checkbox"/> Flow #1	Volume	Liter	Bottle	
	Time to fill	Seconds		
<input type="checkbox"/> Flow #2	Flow depth	Inches	Tape measure	
	Flow width	Inches	Tape measure	
	Measured length	Inches	Tape measure	
	Time of travel	Seconds	Stop watch	
Temperature		°F	Thermometer	
pH		pH Units	Test strip/Probe	
Ammonia		mg/L	Test strip	



Outfall Reconnaissance Inventory Field Sheet

Section 4: Physical Indicators for Flowing Outfalls Only

Are Any Physical Indicators Present in the flow? ☐ Yes ☐ No (If No, Skip to Section 5)

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	<input type="checkbox"/>	<input type="checkbox"/> Sewage <input type="checkbox"/> Rancid/sour <input type="checkbox"/> Petroleum/gas <input type="checkbox"/> Sulfide <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint	<input type="checkbox"/> 2 - Easily detected	<input type="checkbox"/> 3 - Noticeable from a distance
Color	<input type="checkbox"/>	<input type="checkbox"/> Clear <input type="checkbox"/> Brown <input type="checkbox"/> Gray <input type="checkbox"/> Yellow <input type="checkbox"/> Green <input type="checkbox"/> Orange <input type="checkbox"/> Red <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint colors in sample bottle	<input type="checkbox"/> 2 - Clearly visible in sample bottle	<input type="checkbox"/> 3 - Clearly visible in outfall flow
Turbidity	<input type="checkbox"/>	See severity	<input type="checkbox"/> 1 - Slight cloudiness	<input type="checkbox"/> 2 - Cloudy	<input type="checkbox"/> 3 - Opaque
Floatables -Does Not Include Trash!!	<input type="checkbox"/>	<input type="checkbox"/> Sewage (Toilet Paper, etc.) <input type="checkbox"/> Suds <input type="checkbox"/> Petroleum (oil sheen) <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Few/slight; origin not obvious	<input type="checkbox"/> 2 - Some; indications of origin (e.g., possible suds or oil sheen)	<input type="checkbox"/> 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☐ Yes ☒ No (If No, Skip to Section 6)

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	<input type="checkbox"/>	<input type="checkbox"/> Spalling, Cracking or Chipping <input type="checkbox"/> Peeling Paint <input type="checkbox"/> Corrosion	
Deposits/Stains	<input type="checkbox"/>	<input type="checkbox"/> Oily <input type="checkbox"/> Flow Line <input type="checkbox"/> Paint <input type="checkbox"/> Other:	
Abnormal Vegetation	<input type="checkbox"/>	<input type="checkbox"/> Excessive <input type="checkbox"/> Inhibited	
Poor pool quality	<input type="checkbox"/>	<input type="checkbox"/> Odors <input type="checkbox"/> Colors <input type="checkbox"/> Floatables <input type="checkbox"/> Oil Sheen <input type="checkbox"/> Suds <input type="checkbox"/> Excessive Algae <input type="checkbox"/> Other:	
Pipe benthic growth	<input type="checkbox"/>	<input type="checkbox"/> Brown <input type="checkbox"/> Orange <input type="checkbox"/> Green <input type="checkbox"/> Other:	

Section 6: Overall Outfall Characterization

<input checked="" type="checkbox"/> Unlikely	<input type="checkbox"/> Potential (presence of two or more indicators)	<input type="checkbox"/> Suspect (one or more indicators with a severity of 3)	<input type="checkbox"/> Obvious
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Section 7: Data Collection

1. Sample for the lab?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
2. If yes, collected from:	<input type="checkbox"/> Flow <input type="checkbox"/> Pool
3. Intermittent flow trap set?	<input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, type: <input type="checkbox"/> OBM <input type="checkbox"/> Caulk dam

Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?



## Photo Log

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## OUTFALL RECONNAISSANCE INVENTORY/ SAMPLE COLLECTION FIELD SHEET

### Section 1: Background Data

Subwatershed:		Outfall ID: CC120	
Today's date: 08/02/17		Time (Military): 9:15AM	
Investigators: Lettice Brown		Form completed by: Lettice Brown	
Temperature (°F): 74		Rainfall (in.): Last 24 hours: 0 Last 48 hours: 0	
Latitude: 39.9540606	Longitude: -76.7328892	GPS Unit:	GPS LMK #:
Camera:		Photo #'s:	
Land Use in Drainage Area (Check all that apply): <input type="checkbox"/> Industrial <input type="checkbox"/> Ultra-Urban Residential <input type="checkbox"/> Suburban Residential <input type="checkbox"/> Commercial		<input type="checkbox"/> Open Space <input type="checkbox"/> Institutional Other: Known Industries:	
Notes (e.g., origin of outfall, if known): York City			

### Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE	DIMENSIONS (IN.)	SUBMERGED
<input checked="" type="checkbox"/> Closed Pipe	<input type="checkbox"/> RCP <input type="checkbox"/> CMP <input type="checkbox"/> PVC <input type="checkbox"/> HDPE <input type="checkbox"/> Steel <input checked="" type="checkbox"/> Other: TCP	<input checked="" type="checkbox"/> Circular <input type="checkbox"/> Elliptical <input type="checkbox"/> Box <input type="checkbox"/> Other:	<input checked="" type="checkbox"/> Single <input type="checkbox"/> Double <input type="checkbox"/> Triple <input type="checkbox"/> Other:	Diameter/Dimensions: 12  In Water: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully With Sediment: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully
<input type="checkbox"/> Open drainage	<input type="checkbox"/> Concrete <input type="checkbox"/> Earthen <input type="checkbox"/> rip-rap <input type="checkbox"/> Other:	<input type="checkbox"/> Trapezoid <input type="checkbox"/> Parabolic <input type="checkbox"/> Other:	Depth:  Top Width:  Bottom Width:	
<input type="checkbox"/> In-Stream	(applicable when collecting samples)			
Flow Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <i>If No, Skip to Section 5</i>			
Flow Description (If present)	<input type="checkbox"/> Trickle <input type="checkbox"/> Moderate <input type="checkbox"/> Substantial			

### Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER		RESULT	UNIT	EQUIPMENT
<input type="checkbox"/> Flow #1	Volume		Liter	Bottle
	Time to fill		Seconds	
<input type="checkbox"/> Flow #2	Flow depth		Inches	Tape measure
	Flow width		Inches	Tape measure
	Measured length		Inches	Tape measure
	Time of travel		Seconds	Stop watch
Temperature			°F	Thermometer
pH			pH Units	Test strip/Probe
Ammonia			mg/L	Test strip



Outfall Reconnaissance Inventory Field Sheet

Section 4: Physical Indicators for Flowing Outfalls Only

Are Any Physical Indicators Present in the flow? ☐ Yes ☐ No *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	<input type="checkbox"/>	<input type="checkbox"/> Sewage <input type="checkbox"/> Rancid/sour <input type="checkbox"/> Petroleum/gas <input type="checkbox"/> Sulfide <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint	<input type="checkbox"/> 2 - Easily detected	<input type="checkbox"/> 3 - Noticeable from a distance
Color	<input type="checkbox"/>	<input type="checkbox"/> Clear <input type="checkbox"/> Brown <input type="checkbox"/> Gray <input type="checkbox"/> Yellow <input type="checkbox"/> Green <input type="checkbox"/> Orange <input type="checkbox"/> Red <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint colors in sample bottle	<input type="checkbox"/> 2 - Clearly visible in sample bottle	<input type="checkbox"/> 3 - Clearly visible in outfall flow
Turbidity	<input type="checkbox"/>	See severity	<input type="checkbox"/> 1 - Slight cloudiness	<input type="checkbox"/> 2 - Cloudy	<input type="checkbox"/> 3 - Opaque
Floatables -Does Not Include Trash!!	<input type="checkbox"/>	<input type="checkbox"/> Sewage (Toilet Paper, etc.) <input type="checkbox"/> Suds <input type="checkbox"/> Petroleum (oil sheen) <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Few/slight; origin not obvious	<input type="checkbox"/> 2 - Some; indications of origin (e.g., possible suds or oil sheen)	<input type="checkbox"/> 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☐ Yes ☒ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	<input type="checkbox"/>	<input type="checkbox"/> Spalling, Cracking or Chipping <input type="checkbox"/> Peeling Paint <input type="checkbox"/> Corrosion	
Deposits/Stains	<input type="checkbox"/>	<input type="checkbox"/> Oily <input type="checkbox"/> Flow Line <input type="checkbox"/> Paint <input type="checkbox"/> Other:	
Abnormal Vegetation	<input type="checkbox"/>	<input type="checkbox"/> Excessive <input type="checkbox"/> Inhibited	
Poor pool quality	<input type="checkbox"/>	<input type="checkbox"/> Odors <input type="checkbox"/> Colors <input type="checkbox"/> Floatables <input type="checkbox"/> Oil Sheen <input type="checkbox"/> Suds <input type="checkbox"/> Excessive Algae <input type="checkbox"/> Other:	
Pipe benthic growth	<input type="checkbox"/>	<input type="checkbox"/> Brown <input type="checkbox"/> Orange <input type="checkbox"/> Green <input type="checkbox"/> Other:	

Section 6: Overall Outfall Characterization

<input checked="" type="checkbox"/> Unlikely	<input type="checkbox"/> Potential (presence of two or more indicators)	<input type="checkbox"/> Suspect (one or more indicators with a severity of 3)	<input type="checkbox"/> Obvious
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Section 7: Data Collection

1. Sample for the lab?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
2. If yes, collected from:	<input type="checkbox"/> Flow <input type="checkbox"/> Pool
3. Intermittent flow trap set?	<input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, type: <input type="checkbox"/> OBM <input type="checkbox"/> Caulk dam

Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?



## Photo Log

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## OUTFALL RECONNAISSANCE INVENTORY/ SAMPLE COLLECTION FIELD SHEET

### Section 1: Background Data

Subwatershed:		Outfall ID: CC123	
Today's date: 08/02/17		Time (Military): 9:20AM	
Investigators: Lettice Brown		Form completed by: Lettice Brown	
Temperature (°F): 74		Rainfall (in.): Last 24 hours: 0 Last 48 hours: 0	
Latitude: 39.9537883	Longitude: -76.7334419	GPS Unit:	GPS LMK #:
Camera:		Photo #'s:	
Land Use in Drainage Area (Check all that apply): <input type="checkbox"/> Industrial <input type="checkbox"/> Ultra-Urban Residential <input type="checkbox"/> Suburban Residential <input type="checkbox"/> Commercial		<input type="checkbox"/> Open Space <input type="checkbox"/> Institutional Other: Known Industries:	
Notes (e.g., origin of outfall, if known): York City			

### Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE	DIMENSIONS (IN.)	SUBMERGED
<input checked="" type="checkbox"/> Closed Pipe	<input type="checkbox"/> RCP <input type="checkbox"/> PVC <input type="checkbox"/> Steel <input type="checkbox"/> Other:	<input checked="" type="checkbox"/> Circular <input type="checkbox"/> Elliptical <input type="checkbox"/> Box <input type="checkbox"/> Other:	<input checked="" type="checkbox"/> Single <input type="checkbox"/> Double <input type="checkbox"/> Triple <input type="checkbox"/> Other:	Diameter/Dimensions: 24
	<input checked="" type="checkbox"/> CMP <input type="checkbox"/> HDPE			In Water: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully With Sediment: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully
<input type="checkbox"/> Open drainage	<input type="checkbox"/> Concrete <input type="checkbox"/> Earthen <input type="checkbox"/> rip-rap <input type="checkbox"/> Other:	<input type="checkbox"/> Trapezoid <input type="checkbox"/> Parabolic <input type="checkbox"/> Other:	Depth:  Top Width:  Bottom Width:	
<input type="checkbox"/> In-Stream	(applicable when collecting samples)			
Flow Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <i>If No, Skip to Section 5</i>			
Flow Description (If present)	<input type="checkbox"/> Trickle <input type="checkbox"/> Moderate <input type="checkbox"/> Substantial			

### Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER	RESULT	UNIT	EQUIPMENT	
<input type="checkbox"/> Flow #1	Volume		Liter	Bottle
	Time to fill		Seconds	
<input type="checkbox"/> Flow #2	Flow depth		Inches	Tape measure
	Flow width		Inches	Tape measure
	Measured length		Inches	Tape measure
	Time of travel		Seconds	Stop watch
Temperature			°F	Thermometer
pH			pH Units	Test strip/Probe
Ammonia			mg/L	Test strip



Outfall Reconnaissance Inventory Field Sheet

Section 4: Physical Indicators for Flowing Outfalls Only

Are Any Physical Indicators Present in the flow? ☐ Yes ☐ No *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	<input type="checkbox"/>	<input type="checkbox"/> Sewage <input type="checkbox"/> Rancid/sour <input type="checkbox"/> Petroleum/gas <input type="checkbox"/> Sulfide <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint	<input type="checkbox"/> 2 - Easily detected	<input type="checkbox"/> 3 - Noticeable from a distance
Color	<input type="checkbox"/>	<input type="checkbox"/> Clear <input type="checkbox"/> Brown <input type="checkbox"/> Gray <input type="checkbox"/> Yellow <input type="checkbox"/> Green <input type="checkbox"/> Orange <input type="checkbox"/> Red <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint colors in sample bottle	<input type="checkbox"/> 2 - Clearly visible in sample bottle	<input type="checkbox"/> 3 - Clearly visible in outfall flow
Turbidity	<input type="checkbox"/>	See severity	<input type="checkbox"/> 1 - Slight cloudiness	<input type="checkbox"/> 2 - Cloudy	<input type="checkbox"/> 3 - Opaque
Floatables -Does Not Include Trash!!	<input type="checkbox"/>	<input type="checkbox"/> Sewage (Toilet Paper, etc.) <input type="checkbox"/> Suds <input type="checkbox"/> Petroleum (oil sheen) <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Few/slight; origin not obvious	<input type="checkbox"/> 2 - Some; indications of origin (e.g., possible suds or oil sheen)	<input type="checkbox"/> 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☐ Yes ☒ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	<input type="checkbox"/>	<input type="checkbox"/> Spalling, Cracking or Chipping <input type="checkbox"/> Peeling Paint <input type="checkbox"/> Corrosion	
Deposits/Stains	<input type="checkbox"/>	<input type="checkbox"/> Oily <input type="checkbox"/> Flow Line <input type="checkbox"/> Paint <input type="checkbox"/> Other:	
Abnormal Vegetation	<input type="checkbox"/>	<input type="checkbox"/> Excessive <input type="checkbox"/> Inhibited	
Poor pool quality	<input type="checkbox"/>	<input type="checkbox"/> Odors <input type="checkbox"/> Colors <input type="checkbox"/> Floatables <input type="checkbox"/> Oil Sheen <input type="checkbox"/> Suds <input type="checkbox"/> Excessive Algae <input type="checkbox"/> Other:	
Pipe benthic growth	<input type="checkbox"/>	<input type="checkbox"/> Brown <input type="checkbox"/> Orange <input type="checkbox"/> Green <input type="checkbox"/> Other:	

Section 6: Overall Outfall Characterization

<input checked="" type="checkbox"/> Unlikely	<input type="checkbox"/> Potential (presence of two or more indicators)	<input type="checkbox"/> Suspect (one or more indicators with a severity of 3)	<input type="checkbox"/> Obvious
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Section 7: Data Collection

1. Sample for the lab?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
2. If yes, collected from:	<input type="checkbox"/> Flow <input type="checkbox"/> Pool
3. Intermittent flow trap set?	<input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, type: <input type="checkbox"/> OBM <input type="checkbox"/> Caulk dam

Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?



## Photo Log

Photo No. 1: image.jpg





## OUTFALL RECONNAISSANCE INVENTORY/ SAMPLE COLLECTION FIELD SHEET

### Section 1: Background Data

Subwatershed:		Outfall ID: CC130	
Today's date: 08/02/17		Time (Military): 9:30AM	
Investigators: Lettice Brown		Form completed by: Lettice Brown	
Temperature (°F): 78		Rainfall (in.): Last 24 hours: 0 Last 48 hours: 0	
Latitude: 39.9536796	Longitude: -76.7340080	GPS Unit:	GPS LMK #:
Camera:		Photo #'s:	
Land Use in Drainage Area (Check all that apply): <input type="checkbox"/> Industrial <input type="checkbox"/> Ultra-Urban Residential <input type="checkbox"/> Suburban Residential <input type="checkbox"/> Commercial		<input type="checkbox"/> Open Space <input type="checkbox"/> Institutional Other: Known Industries:	
Notes (e.g., origin of outfall, if known): York City			

### Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE	DIMENSIONS (IN.)	SUBMERGED
<input checked="" type="checkbox"/> Closed Pipe	<input type="checkbox"/> RCP <input type="checkbox"/> CMP <input type="checkbox"/> PVC <input type="checkbox"/> HDPE <input type="checkbox"/> Steel <input checked="" type="checkbox"/> Other: TCP	<input checked="" type="checkbox"/> Circular <input type="checkbox"/> Elliptical <input type="checkbox"/> Box <input type="checkbox"/> Other:	<input checked="" type="checkbox"/> Single <input type="checkbox"/> Double <input type="checkbox"/> Triple <input type="checkbox"/> Other:	Diameter/Dimensions: 12  In Water: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully With Sediment: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully
<input type="checkbox"/> Open drainage	<input type="checkbox"/> Concrete <input type="checkbox"/> Earthen <input type="checkbox"/> rip-rap <input type="checkbox"/> Other:	<input type="checkbox"/> Trapezoid <input type="checkbox"/> Parabolic <input type="checkbox"/> Other:	Depth:  Top Width:  Bottom Width:	
<input type="checkbox"/> In-Stream	(applicable when collecting samples)			
Flow Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <i>If No, Skip to Section 5</i>			
Flow Description (If present)	<input type="checkbox"/> Trickle <input type="checkbox"/> Moderate <input type="checkbox"/> Substantial			

### Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER	RESULT	UNIT	EQUIPMENT	
<input type="checkbox"/> Flow #1	Volume		Liter	Bottle
	Time to fill		Seconds	
<input type="checkbox"/> Flow #2	Flow depth		Inches	Tape measure
	Flow width		Inches	Tape measure
	Measured length		Inches	Tape measure
	Time of travel		Seconds	Stop watch
Temperature			°F	Thermometer
pH			pH Units	Test strip/Probe
Ammonia			mg/L	Test strip



Outfall Reconnaissance Inventory Field Sheet

Section 4: Physical Indicators for Flowing Outfalls Only

Are Any Physical Indicators Present in the flow? ☐ Yes ☐ No *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	<input type="checkbox"/>	<input type="checkbox"/> Sewage <input type="checkbox"/> Rancid/sour <input type="checkbox"/> Petroleum/gas <input type="checkbox"/> Sulfide <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint	<input type="checkbox"/> 2 - Easily detected	<input type="checkbox"/> 3 - Noticeable from a distance
Color	<input type="checkbox"/>	<input type="checkbox"/> Clear <input type="checkbox"/> Brown <input type="checkbox"/> Gray <input type="checkbox"/> Yellow <input type="checkbox"/> Green <input type="checkbox"/> Orange <input type="checkbox"/> Red <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint colors in sample bottle	<input type="checkbox"/> 2 - Clearly visible in sample bottle	<input type="checkbox"/> 3 - Clearly visible in outfall flow
Turbidity	<input type="checkbox"/>	See severity	<input type="checkbox"/> 1 - Slight cloudiness	<input type="checkbox"/> 2 - Cloudy	<input type="checkbox"/> 3 - Opaque
Floatables -Does Not Include Trash!!	<input type="checkbox"/>	<input type="checkbox"/> Sewage (Toilet Paper, etc.) <input type="checkbox"/> Suds <input type="checkbox"/> Petroleum (oil sheen) <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Few/slight; origin not obvious	<input type="checkbox"/> 2 - Some; indications of origin (e.g., possible suds or oil sheen)	<input type="checkbox"/> 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☐ Yes ☒ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	<input type="checkbox"/>	<input type="checkbox"/> Spalling, Cracking or Chipping <input type="checkbox"/> Peeling Paint <input type="checkbox"/> Corrosion	
Deposits/Stains	<input type="checkbox"/>	<input type="checkbox"/> Oily <input type="checkbox"/> Flow Line <input type="checkbox"/> Paint <input type="checkbox"/> Other:	
Abnormal Vegetation	<input type="checkbox"/>	<input type="checkbox"/> Excessive <input type="checkbox"/> Inhibited	
Poor pool quality	<input type="checkbox"/>	<input type="checkbox"/> Odors <input type="checkbox"/> Colors <input type="checkbox"/> Floatables <input type="checkbox"/> Oil Sheen <input type="checkbox"/> Suds <input type="checkbox"/> Excessive Algae <input type="checkbox"/> Other:	
Pipe benthic growth	<input type="checkbox"/>	<input type="checkbox"/> Brown <input type="checkbox"/> Orange <input type="checkbox"/> Green <input type="checkbox"/> Other:	

Section 6: Overall Outfall Characterization

<input checked="" type="checkbox"/> Unlikely	<input type="checkbox"/> Potential (presence of two or more indicators)	<input type="checkbox"/> Suspect (one or more indicators with a severity of 3)	<input type="checkbox"/> Obvious
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Section 7: Data Collection

1. Sample for the lab?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
2. If yes, collected from:	<input type="checkbox"/> Flow <input type="checkbox"/> Pool
3. Intermittent flow trap set?	<input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, type: <input type="checkbox"/> OBM <input type="checkbox"/> Caulk dam

Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?



## Photo Log

Photo No. 1: image.jpg





## OUTFALL RECONNAISSANCE INVENTORY/ SAMPLE COLLECTION FIELD SHEET

### Section 1: Background Data

Subwatershed:		Outfall ID: CC131	
Today's date: 08/02/17		Time (Military): 9:30AM	
Investigators: Lettice Brown		Form completed by: Lettice Brown	
Temperature (°F): 78		Rainfall (in.): Last 24 hours: 0 Last 48 hours: 0	
Latitude: 39.9536647	Longitude: -76.7340908	GPS Unit:	GPS LMK #:
Camera:		Photo #'s:	
Land Use in Drainage Area (Check all that apply): <input type="checkbox"/> Industrial <input type="checkbox"/> Ultra-Urban Residential <input type="checkbox"/> Suburban Residential <input type="checkbox"/> Commercial		<input type="checkbox"/> Open Space <input type="checkbox"/> Institutional Other: Known Industries:	
Notes (e.g., origin of outfall, if known): York City			

### Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE	DIMENSIONS (IN.)	SUBMERGED
<input checked="" type="checkbox"/> Closed Pipe	<input type="checkbox"/> RCP <input type="checkbox"/> PVC <input type="checkbox"/> Steel <input type="checkbox"/> Other:	<input checked="" type="checkbox"/> Circular <input type="checkbox"/> Elliptical <input type="checkbox"/> Box <input type="checkbox"/> Other:	<input checked="" type="checkbox"/> Single <input type="checkbox"/> Double <input type="checkbox"/> Triple <input type="checkbox"/> Other:	Diameter/Dimensions: 24
	<input checked="" type="checkbox"/> CMP <input type="checkbox"/> HDPE			In Water: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully With Sediment: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully
<input type="checkbox"/> Open drainage	<input type="checkbox"/> Concrete <input type="checkbox"/> Earthen <input type="checkbox"/> rip-rap <input type="checkbox"/> Other:	<input type="checkbox"/> Trapezoid <input type="checkbox"/> Parabolic <input type="checkbox"/> Other:	Depth:  Top Width:  Bottom Width:	
<input type="checkbox"/> In-Stream	(applicable when collecting samples)			
Flow Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <i>If No, Skip to Section 5</i>			
Flow Description (If present)	<input type="checkbox"/> Trickle <input type="checkbox"/> Moderate <input type="checkbox"/> Substantial			

### Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER		RESULT	UNIT	EQUIPMENT
<input type="checkbox"/> Flow #1	Volume		Liter	Bottle
	Time to fill		Seconds	
<input type="checkbox"/> Flow #2	Flow depth		Inches	Tape measure
	Flow width		Inches	Tape measure
	Measured length		Inches	Tape measure
	Time of travel		Seconds	Stop watch
Temperature			°F	Thermometer
pH			pH Units	Test strip/Probe
Ammonia			mg/L	Test strip



Outfall Reconnaissance Inventory Field Sheet

Section 4: Physical Indicators for Flowing Outfalls Only

Are Any Physical Indicators Present in the flow? ☐ Yes ☐ No (If No, Skip to Section 5)

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	<input type="checkbox"/>	<input type="checkbox"/> Sewage <input type="checkbox"/> Rancid/sour <input type="checkbox"/> Petroleum/gas <input type="checkbox"/> Sulfide <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint	<input type="checkbox"/> 2 - Easily detected	<input type="checkbox"/> 3 - Noticeable from a distance
Color	<input type="checkbox"/>	<input type="checkbox"/> Clear <input type="checkbox"/> Brown <input type="checkbox"/> Gray <input type="checkbox"/> Yellow <input type="checkbox"/> Green <input type="checkbox"/> Orange <input type="checkbox"/> Red <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint colors in sample bottle	<input type="checkbox"/> 2 - Clearly visible in sample bottle	<input type="checkbox"/> 3 - Clearly visible in outfall flow
Turbidity	<input type="checkbox"/>	See severity	<input type="checkbox"/> 1 - Slight cloudiness	<input type="checkbox"/> 2 - Cloudy	<input type="checkbox"/> 3 - Opaque
Floatables -Does Not Include Trash!!	<input type="checkbox"/>	<input type="checkbox"/> Sewage (Toilet Paper, etc.) <input type="checkbox"/> Suds <input type="checkbox"/> Petroleum (oil sheen) <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Few/slight; origin not obvious	<input type="checkbox"/> 2 - Some; indications of origin (e.g., possible suds or oil sheen)	<input type="checkbox"/> 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☐ Yes ☒ No (If No, Skip to Section 6)

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	<input type="checkbox"/>	<input type="checkbox"/> Spalling, Cracking or Chipping <input type="checkbox"/> Peeling Paint <input type="checkbox"/> Corrosion	
Deposits/Stains	<input type="checkbox"/>	<input type="checkbox"/> Oily <input type="checkbox"/> Flow Line <input type="checkbox"/> Paint <input type="checkbox"/> Other:	
Abnormal Vegetation	<input type="checkbox"/>	<input type="checkbox"/> Excessive <input type="checkbox"/> Inhibited	
Poor pool quality	<input type="checkbox"/>	<input type="checkbox"/> Odors <input type="checkbox"/> Colors <input type="checkbox"/> Floatables <input type="checkbox"/> Oil Sheen <input type="checkbox"/> Suds <input type="checkbox"/> Excessive Algae <input type="checkbox"/> Other:	
Pipe benthic growth	<input type="checkbox"/>	<input type="checkbox"/> Brown <input type="checkbox"/> Orange <input type="checkbox"/> Green <input type="checkbox"/> Other:	

Section 6: Overall Outfall Characterization

<input checked="" type="checkbox"/> Unlikely	<input type="checkbox"/> Potential (presence of two or more indicators)	<input type="checkbox"/> Suspect (one or more indicators with a severity of 3)	<input type="checkbox"/> Obvious
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Section 7: Data Collection

1. Sample for the lab?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
2. If yes, collected from:	<input type="checkbox"/> Flow <input type="checkbox"/> Pool
3. Intermittent flow trap set?	<input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, type: <input type="checkbox"/> OBM <input type="checkbox"/> Caulk dam

Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?



## Photo Log

Photo No. 1: image.jpg





## OUTFALL RECONNAISSANCE INVENTORY/ SAMPLE COLLECTION FIELD SHEET

### Section 1: Background Data

Subwatershed:		Outfall ID: CC134	
Today's date: 08/02/17		Time (Military): 9:35AM	
Investigators: Lettice Brown		Form completed by: Lettice Brown	
Temperature (°F): 78		Rainfall (in.): Last 24 hours: 0 Last 48 hours: 0	
Latitude: 39.9536410	Longitude: -76.7349258	GPS Unit:	GPS LMK #:
Camera:		Photo #'s:	
Land Use in Drainage Area (Check all that apply): <input type="checkbox"/> Industrial <input type="checkbox"/> Ultra-Urban Residential <input type="checkbox"/> Suburban Residential <input type="checkbox"/> Commercial		<input type="checkbox"/> Open Space <input type="checkbox"/> Institutional Other: Known Industries:	
Notes (e.g., origin of outfall, if known): York City			

### Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE	DIMENSIONS (IN.)	SUBMERGED
<input checked="" type="checkbox"/> Closed Pipe	<input type="checkbox"/> RCP <input type="checkbox"/> CMP <input type="checkbox"/> PVC <input type="checkbox"/> HDPE <input type="checkbox"/> Steel <input checked="" type="checkbox"/> Other: CPP	<input checked="" type="checkbox"/> Circular <input type="checkbox"/> Elliptical <input type="checkbox"/> Box <input type="checkbox"/> Other:	<input checked="" type="checkbox"/> Single <input type="checkbox"/> Double <input type="checkbox"/> Triple <input type="checkbox"/> Other:	Diameter/Dimensions: 15  In Water: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully With Sediment: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully
<input type="checkbox"/> Open drainage	<input type="checkbox"/> Concrete <input type="checkbox"/> Earthen <input type="checkbox"/> rip-rap <input type="checkbox"/> Other:	<input type="checkbox"/> Trapezoid <input type="checkbox"/> Parabolic <input type="checkbox"/> Other:	Depth:  Top Width:  Bottom Width:	
<input type="checkbox"/> In-Stream	(applicable when collecting samples)			
Flow Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <i>If No, Skip to Section 5</i>			
Flow Description (If present)	<input type="checkbox"/> Trickle <input type="checkbox"/> Moderate <input type="checkbox"/> Substantial			

### Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER		RESULT	UNIT	EQUIPMENT
<input type="checkbox"/> Flow #1	Volume		Liter	Bottle
	Time to fill		Seconds	
<input type="checkbox"/> Flow #2	Flow depth		Inches	Tape measure
	Flow width		Inches	Tape measure
	Measured length		Inches	Tape measure
	Time of travel		Seconds	Stop watch
Temperature			°F	Thermometer
pH			pH Units	Test strip/Probe
Ammonia			mg/L	Test strip



Outfall Reconnaissance Inventory Field Sheet

Section 4: Physical Indicators for Flowing Outfalls Only

Are Any Physical Indicators Present in the flow? ☐ Yes ☐ No *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	<input type="checkbox"/>	<input type="checkbox"/> Sewage <input type="checkbox"/> Rancid/sour <input type="checkbox"/> Petroleum/gas <input type="checkbox"/> Sulfide <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint	<input type="checkbox"/> 2 - Easily detected	<input type="checkbox"/> 3 - Noticeable from a distance
Color	<input type="checkbox"/>	<input type="checkbox"/> Clear <input type="checkbox"/> Brown <input type="checkbox"/> Gray <input type="checkbox"/> Yellow <input type="checkbox"/> Green <input type="checkbox"/> Orange <input type="checkbox"/> Red <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint colors in sample bottle	<input type="checkbox"/> 2 - Clearly visible in sample bottle	<input type="checkbox"/> 3 - Clearly visible in outfall flow
Turbidity	<input type="checkbox"/>	See severity	<input type="checkbox"/> 1 - Slight cloudiness	<input type="checkbox"/> 2 - Cloudy	<input type="checkbox"/> 3 - Opaque
Floatables -Does Not Include Trash!!	<input type="checkbox"/>	<input type="checkbox"/> Sewage (Toilet Paper, etc.) <input type="checkbox"/> Suds <input type="checkbox"/> Petroleum (oil sheen) <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Few/slight; origin not obvious	<input type="checkbox"/> 2 - Some; indications of origin (e.g., possible suds or oil sheen)	<input type="checkbox"/> 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☐ Yes ☒ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	<input type="checkbox"/>	<input type="checkbox"/> Spalling, Cracking or Chipping <input type="checkbox"/> Peeling Paint <input type="checkbox"/> Corrosion	
Deposits/Stains	<input type="checkbox"/>	<input type="checkbox"/> Oily <input type="checkbox"/> Flow Line <input type="checkbox"/> Paint <input type="checkbox"/> Other:	
Abnormal Vegetation	<input type="checkbox"/>	<input type="checkbox"/> Excessive <input type="checkbox"/> Inhibited	
Poor pool quality	<input type="checkbox"/>	<input type="checkbox"/> Odors <input type="checkbox"/> Colors <input type="checkbox"/> Floatables <input type="checkbox"/> Oil Sheen <input type="checkbox"/> Suds <input type="checkbox"/> Excessive Algae <input type="checkbox"/> Other:	
Pipe benthic growth	<input type="checkbox"/>	<input type="checkbox"/> Brown <input type="checkbox"/> Orange <input type="checkbox"/> Green <input type="checkbox"/> Other:	

Section 6: Overall Outfall Characterization

<input checked="" type="checkbox"/> Unlikely	<input type="checkbox"/> Potential (presence of two or more indicators)	<input type="checkbox"/> Suspect (one or more indicators with a severity of 3)	<input type="checkbox"/> Obvious
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Section 7: Data Collection

1. Sample for the lab?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
2. If yes, collected from:	<input type="checkbox"/> Flow <input type="checkbox"/> Pool
3. Intermittent flow trap set?	<input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, type: <input type="checkbox"/> OBM <input type="checkbox"/> Caulk dam

Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

Overgrown weeds around outfall. Could use cutting down



## Photo Log

Photo No. 1: image.jpg





## OUTFALL RECONNAISSANCE INVENTORY/ SAMPLE COLLECTION FIELD SHEET

### Section 1: Background Data

Subwatershed:		Outfall ID: CC140	
Today's date: 08/02/17		Time (Military): 9:40AM	
Investigators: Lettice Brown		Form completed by: Lettice Brown	
Temperature (°F): 78		Rainfall (in.): Last 24 hours: 0 Last 48 hours: 0	
Latitude: 39.9536762	Longitude: -76.7355026	GPS Unit:	GPS LMK #:
Camera:		Photo #'s:	
Land Use in Drainage Area (Check all that apply): <input type="checkbox"/> Industrial <input type="checkbox"/> Ultra-Urban Residential <input type="checkbox"/> Suburban Residential <input type="checkbox"/> Commercial		<input type="checkbox"/> Open Space <input type="checkbox"/> Institutional Other: Known Industries:	
Notes (e.g., origin of outfall, if known): York City			

### Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE	DIMENSIONS (IN.)	SUBMERGED
<input checked="" type="checkbox"/> Closed Pipe	<input checked="" type="checkbox"/> RCP <input type="checkbox"/> CMP <input type="checkbox"/> PVC <input type="checkbox"/> HDPE <input type="checkbox"/> Steel <input type="checkbox"/> Other:	<input checked="" type="checkbox"/> Circular <input type="checkbox"/> Elliptical <input type="checkbox"/> Box <input type="checkbox"/> Other:	<input checked="" type="checkbox"/> Single <input type="checkbox"/> Double <input type="checkbox"/> Triple <input type="checkbox"/> Other:	Diameter/Dimensions: 20  In Water: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully With Sediment: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully
<input type="checkbox"/> Open drainage	<input type="checkbox"/> Concrete <input type="checkbox"/> Earthen <input type="checkbox"/> rip-rap <input type="checkbox"/> Other:	<input type="checkbox"/> Trapezoid <input type="checkbox"/> Parabolic <input type="checkbox"/> Other:	Depth:  Top Width:  Bottom Width:	
<input type="checkbox"/> In-Stream	(applicable when collecting samples)			
Flow Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <i>If No, Skip to Section 5</i>			
Flow Description (If present)	<input type="checkbox"/> Trickle <input type="checkbox"/> Moderate <input type="checkbox"/> Substantial			

### Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER	RESULT	UNIT	EQUIPMENT	
<input type="checkbox"/> Flow #1	Volume		Liter	Bottle
	Time to fill		Seconds	
<input type="checkbox"/> Flow #2	Flow depth		Inches	Tape measure
	Flow width		Inches	Tape measure
	Measured length		Inches	Tape measure
	Time of travel		Seconds	Stop watch
Temperature			°F	Thermometer
pH			pH Units	Test strip/Probe
Ammonia			mg/L	Test strip



Outfall Reconnaissance Inventory Field Sheet

Section 4: Physical Indicators for Flowing Outfalls Only

Are Any Physical Indicators Present in the flow? ☐ Yes ☐ No *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	<input type="checkbox"/>	<input type="checkbox"/> Sewage <input type="checkbox"/> Rancid/sour <input type="checkbox"/> Petroleum/gas <input type="checkbox"/> Sulfide <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint	<input type="checkbox"/> 2 - Easily detected	<input type="checkbox"/> 3 - Noticeable from a distance
Color	<input type="checkbox"/>	<input type="checkbox"/> Clear <input type="checkbox"/> Brown <input type="checkbox"/> Gray <input type="checkbox"/> Yellow <input type="checkbox"/> Green <input type="checkbox"/> Orange <input type="checkbox"/> Red <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint colors in sample bottle	<input type="checkbox"/> 2 - Clearly visible in sample bottle	<input type="checkbox"/> 3 - Clearly visible in outfall flow
Turbidity	<input type="checkbox"/>	See severity	<input type="checkbox"/> 1 - Slight cloudiness	<input type="checkbox"/> 2 - Cloudy	<input type="checkbox"/> 3 - Opaque
Floatables -Does Not Include Trash!!	<input type="checkbox"/>	<input type="checkbox"/> Sewage (Toilet Paper, etc.) <input type="checkbox"/> Suds <input type="checkbox"/> Petroleum (oil sheen) <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Few/slight; origin not obvious	<input type="checkbox"/> 2 - Some; indications of origin (e.g., possible suds or oil sheen)	<input type="checkbox"/> 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☐ Yes ☒ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	<input type="checkbox"/>	<input type="checkbox"/> Spalling, Cracking or Chipping <input type="checkbox"/> Peeling Paint <input type="checkbox"/> Corrosion	
Deposits/Stains	<input type="checkbox"/>	<input type="checkbox"/> Oily <input type="checkbox"/> Flow Line <input type="checkbox"/> Paint <input type="checkbox"/> Other:	
Abnormal Vegetation	<input type="checkbox"/>	<input type="checkbox"/> Excessive <input type="checkbox"/> Inhibited	
Poor pool quality	<input type="checkbox"/>	<input type="checkbox"/> Odors <input type="checkbox"/> Colors <input type="checkbox"/> Floatables <input type="checkbox"/> Oil Sheen <input type="checkbox"/> Suds <input type="checkbox"/> Excessive Algae <input type="checkbox"/> Other:	
Pipe benthic growth	<input type="checkbox"/>	<input type="checkbox"/> Brown <input type="checkbox"/> Orange <input type="checkbox"/> Green <input type="checkbox"/> Other:	

Section 6: Overall Outfall Characterization

<input checked="" type="checkbox"/> Unlikely	<input type="checkbox"/> Potential (presence of two or more indicators)	<input type="checkbox"/> Suspect (one or more indicators with a severity of 3)	<input type="checkbox"/> Obvious
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Section 7: Data Collection

1. Sample for the lab?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
2. If yes, collected from:	<input type="checkbox"/> Flow <input type="checkbox"/> Pool
3. Intermittent flow trap set?	<input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, type: <input type="checkbox"/> OBM <input type="checkbox"/> Caulk dam

Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

Some excess vegetation



## Photo Log

Photo No. 1: image.jpg





## OUTFALL RECONNAISSANCE INVENTORY/ SAMPLE COLLECTION FIELD SHEET

### Section 1: Background Data

Subwatershed:		Outfall ID: CC141	
Today's date: 08/02/17		Time (Military): 9:40AM	
Investigators: Lettice Brown		Form completed by: Lettice Brown	
Temperature (°F): 78		Rainfall (in.): Last 24 hours: 0 Last 48 hours: 0	
Latitude: 39.9536746	Longitude: -76.7355398	GPS Unit:	GPS LMK #:
Camera:		Photo #'s:	
Land Use in Drainage Area (Check all that apply): <input type="checkbox"/> Industrial <input type="checkbox"/> Ultra-Urban Residential <input type="checkbox"/> Suburban Residential <input type="checkbox"/> Commercial		<input type="checkbox"/> Open Space <input type="checkbox"/> Institutional Other: Known Industries:	
Notes (e.g., origin of outfall, if known): York City			

### Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE	DIMENSIONS (IN.)	SUBMERGED
<input checked="" type="checkbox"/> Closed Pipe	<input checked="" type="checkbox"/> RCP <input type="checkbox"/> CMP <input type="checkbox"/> PVC <input type="checkbox"/> HDPE <input type="checkbox"/> Steel <input type="checkbox"/> Other:	<input checked="" type="checkbox"/> Circular <input type="checkbox"/> Elliptical <input type="checkbox"/> Box <input type="checkbox"/> Other:	<input checked="" type="checkbox"/> Single <input type="checkbox"/> Double <input type="checkbox"/> Triple <input type="checkbox"/> Other:	Diameter/Dimensions: 20  In Water: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully With Sediment: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully
<input type="checkbox"/> Open drainage	<input type="checkbox"/> Concrete <input type="checkbox"/> Earthen <input type="checkbox"/> rip-rap <input type="checkbox"/> Other:	<input type="checkbox"/> Trapezoid <input type="checkbox"/> Parabolic <input type="checkbox"/> Other:	Depth:  Top Width:  Bottom Width:	
<input type="checkbox"/> In-Stream	(applicable when collecting samples)			
Flow Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <i>If No, Skip to Section 5</i>			
Flow Description (If present)	<input type="checkbox"/> Trickle <input type="checkbox"/> Moderate <input type="checkbox"/> Substantial			

### Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER	RESULT	UNIT	EQUIPMENT	
<input type="checkbox"/> Flow #1	Volume	Liter	Bottle	
	Time to fill	Seconds		
<input type="checkbox"/> Flow #2	Flow depth	Inches	Tape measure	
	Flow width	Inches	Tape measure	
	Measured length	Inches	Tape measure	
	Time of travel	Seconds	Stop watch	
Temperature		°F	Thermometer	
pH		pH Units	Test strip/Probe	
Ammonia		mg/L	Test strip	



Outfall Reconnaissance Inventory Field Sheet

Section 4: Physical Indicators for Flowing Outfalls Only

Are Any Physical Indicators Present in the flow? ☐ Yes ☐ No *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	<input type="checkbox"/>	<input type="checkbox"/> Sewage <input type="checkbox"/> Rancid/sour <input type="checkbox"/> Petroleum/gas <input type="checkbox"/> Sulfide <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint	<input type="checkbox"/> 2 - Easily detected	<input type="checkbox"/> 3 - Noticeable from a distance
Color	<input type="checkbox"/>	<input type="checkbox"/> Clear <input type="checkbox"/> Brown <input type="checkbox"/> Gray <input type="checkbox"/> Yellow <input type="checkbox"/> Green <input type="checkbox"/> Orange <input type="checkbox"/> Red <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint colors in sample bottle	<input type="checkbox"/> 2 - Clearly visible in sample bottle	<input type="checkbox"/> 3 - Clearly visible in outfall flow
Turbidity	<input type="checkbox"/>	See severity	<input type="checkbox"/> 1 - Slight cloudiness	<input type="checkbox"/> 2 - Cloudy	<input type="checkbox"/> 3 - Opaque
Floatables -Does Not Include Trash!!	<input type="checkbox"/>	<input type="checkbox"/> Sewage (Toilet Paper, etc.) <input type="checkbox"/> Suds <input type="checkbox"/> Petroleum (oil sheen) <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Few/slight; origin not obvious	<input type="checkbox"/> 2 - Some; indications of origin (e.g., possible suds or oil sheen)	<input type="checkbox"/> 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☐ Yes ☒ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	<input type="checkbox"/>	<input type="checkbox"/> Spalling, Cracking or Chipping <input type="checkbox"/> Peeling Paint <input type="checkbox"/> Corrosion	
Deposits/Stains	<input type="checkbox"/>	<input type="checkbox"/> Oily <input type="checkbox"/> Flow Line <input type="checkbox"/> Paint <input type="checkbox"/> Other:	
Abnormal Vegetation	<input type="checkbox"/>	<input type="checkbox"/> Excessive <input type="checkbox"/> Inhibited	
Poor pool quality	<input type="checkbox"/>	<input type="checkbox"/> Odors <input type="checkbox"/> Colors <input type="checkbox"/> Floatables <input type="checkbox"/> Oil Sheen <input type="checkbox"/> Suds <input type="checkbox"/> Excessive Algae <input type="checkbox"/> Other:	
Pipe benthic growth	<input type="checkbox"/>	<input type="checkbox"/> Brown <input type="checkbox"/> Orange <input type="checkbox"/> Green <input type="checkbox"/> Other:	

Section 6: Overall Outfall Characterization

<input checked="" type="checkbox"/> Unlikely	<input type="checkbox"/> Potential (presence of two or more indicators)	<input type="checkbox"/> Suspect (one or more indicators with a severity of 3)	<input type="checkbox"/> Obvious
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Section 7: Data Collection

1. Sample for the lab?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
2. If yes, collected from:	<input type="checkbox"/> Flow <input type="checkbox"/> Pool
3. Intermittent flow trap set?	<input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, type: <input type="checkbox"/> OBM <input type="checkbox"/> Caulk dam

Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

Some excess vegetation



## Photo Log

Photo No. 1: image.jpg





## OUTFALL RECONNAISSANCE INVENTORY/ SAMPLE COLLECTION FIELD SHEET

### Section 1: Background Data

Subwatershed:		Outfall ID: CC145	
Today's date: 08/02/17		Time (Military): 9:50AM	
Investigators: Lettice Brown		Form completed by: Lettice Brown	
Temperature (°F): 78		Rainfall (in.): Last 24 hours: 0 Last 48 hours: 0	
Latitude: 39.9534009	Longitude: -76.7375342	GPS Unit:	GPS LMK #:
Camera:		Photo #'s:	
Land Use in Drainage Area (Check all that apply): <input type="checkbox"/> Industrial <input type="checkbox"/> Ultra-Urban Residential <input type="checkbox"/> Suburban Residential <input type="checkbox"/> Commercial		<input type="checkbox"/> Open Space <input type="checkbox"/> Institutional Other: Known Industries:	
Notes (e.g., origin of outfall, if known): York City			

### Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE	DIMENSIONS (IN.)	SUBMERGED
<input checked="" type="checkbox"/> Closed Pipe	<input type="checkbox"/> RCP <input type="checkbox"/> CMP <input type="checkbox"/> PVC <input type="checkbox"/> HDPE <input type="checkbox"/> Steel <input checked="" type="checkbox"/> Other: concrete	<input type="checkbox"/> Circular <input type="checkbox"/> Elliptical <input checked="" type="checkbox"/> Box <input type="checkbox"/> Other:	<input checked="" type="checkbox"/> Single <input type="checkbox"/> Double <input type="checkbox"/> Triple <input type="checkbox"/> Other:	Diameter/Dimensions: 24 x 48  In Water: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully With Sediment: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully
<input type="checkbox"/> Open drainage	<input type="checkbox"/> Concrete <input type="checkbox"/> Earthen <input type="checkbox"/> rip-rap <input type="checkbox"/> Other:	<input type="checkbox"/> Trapezoid <input type="checkbox"/> Parabolic <input type="checkbox"/> Other:	Depth:  Top Width:  Bottom Width:	
<input type="checkbox"/> In-Stream	(applicable when collecting samples)			
Flow Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <i>If No, Skip to Section 5</i>			
Flow Description (If present)	<input type="checkbox"/> Trickle <input type="checkbox"/> Moderate <input type="checkbox"/> Substantial			

### Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER	RESULT	UNIT	EQUIPMENT	
<input type="checkbox"/> Flow #1	Volume		Liter	Bottle
	Time to fill		Seconds	
<input type="checkbox"/> Flow #2	Flow depth		Inches	Tape measure
	Flow width		Inches	Tape measure
	Measured length		Inches	Tape measure
	Time of travel		Seconds	Stop watch
Temperature			°F	Thermometer
pH			pH Units	Test strip/Probe
Ammonia			mg/L	Test strip



Outfall Reconnaissance Inventory Field Sheet

Section 4: Physical Indicators for Flowing Outfalls Only

Are Any Physical Indicators Present in the flow? ☐ Yes ☐ No *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	<input type="checkbox"/>	<input type="checkbox"/> Sewage <input type="checkbox"/> Rancid/sour <input type="checkbox"/> Petroleum/gas <input type="checkbox"/> Sulfide <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint	<input type="checkbox"/> 2 - Easily detected	<input type="checkbox"/> 3 - Noticeable from a distance
Color	<input type="checkbox"/>	<input type="checkbox"/> Clear <input type="checkbox"/> Brown <input type="checkbox"/> Gray <input type="checkbox"/> Yellow <input type="checkbox"/> Green <input type="checkbox"/> Orange <input type="checkbox"/> Red <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint colors in sample bottle	<input type="checkbox"/> 2 - Clearly visible in sample bottle	<input type="checkbox"/> 3 - Clearly visible in outfall flow
Turbidity	<input type="checkbox"/>	See severity	<input type="checkbox"/> 1 - Slight cloudiness	<input type="checkbox"/> 2 - Cloudy	<input type="checkbox"/> 3 - Opaque
Floatables -Does Not Include Trash!!	<input type="checkbox"/>	<input type="checkbox"/> Sewage (Toilet Paper, etc.) <input type="checkbox"/> Suds <input type="checkbox"/> Petroleum (oil sheen) <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Few/slight; origin not obvious	<input type="checkbox"/> 2 - Some; indications of origin (e.g., possible suds or oil sheen)	<input type="checkbox"/> 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☐ Yes ☒ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	<input type="checkbox"/>	<input type="checkbox"/> Spalling, Cracking or Chipping <input type="checkbox"/> Peeling Paint <input type="checkbox"/> Corrosion	
Deposits/Stains	<input type="checkbox"/>	<input type="checkbox"/> Oily <input type="checkbox"/> Flow Line <input type="checkbox"/> Paint <input type="checkbox"/> Other:	
Abnormal Vegetation	<input type="checkbox"/>	<input type="checkbox"/> Excessive <input type="checkbox"/> Inhibited	
Poor pool quality	<input type="checkbox"/>	<input type="checkbox"/> Odors <input type="checkbox"/> Colors <input type="checkbox"/> Floatables <input type="checkbox"/> Oil Sheen <input type="checkbox"/> Suds <input type="checkbox"/> Excessive Algae <input type="checkbox"/> Other:	
Pipe benthic growth	<input type="checkbox"/>	<input type="checkbox"/> Brown <input type="checkbox"/> Orange <input type="checkbox"/> Green <input type="checkbox"/> Other:	

Section 6: Overall Outfall Characterization

<input checked="" type="checkbox"/> Unlikely	<input type="checkbox"/> Potential (presence of two or more indicators)	<input type="checkbox"/> Suspect (one or more indicators with a severity of 3)	<input type="checkbox"/> Obvious
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Section 7: Data Collection

1. Sample for the lab?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
2. If yes, collected from:	<input type="checkbox"/> Flow <input type="checkbox"/> Pool
3. Intermittent flow trap set?	<input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, type: <input type="checkbox"/> OBM <input type="checkbox"/> Caulk dam

Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?



## Photo Log

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## OUTFALL RECONNAISSANCE INVENTORY/ SAMPLE COLLECTION FIELD SHEET

### Section 1: Background Data

Subwatershed:		Outfall ID: CC149	
Today's date: 08/02/17		Time (Military): 9:55AM	
Investigators: Lettice Brown		Form completed by: Lettice Brown	
Temperature (°F): 78		Rainfall (in.): Last 24 hours: 0 Last 48 hours: 0	
Latitude: 39.9531044	Longitude: -76.7383605	GPS Unit:	GPS LMK #:
Camera:		Photo #'s:	
Land Use in Drainage Area (Check all that apply): <input type="checkbox"/> Industrial <input type="checkbox"/> Ultra-Urban Residential <input type="checkbox"/> Suburban Residential <input type="checkbox"/> Commercial		<input type="checkbox"/> Open Space <input type="checkbox"/> Institutional Other: Known Industries:	
Notes (e.g., origin of outfall, if known): York City			

### Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE	DIMENSIONS (IN.)	SUBMERGED	
<input checked="" type="checkbox"/> Closed Pipe	<input type="checkbox"/> RCP <input type="checkbox"/> PVC <input type="checkbox"/> Steel <input type="checkbox"/> Other:	<input checked="" type="checkbox"/> Circular <input type="checkbox"/> Elliptical <input type="checkbox"/> Box <input type="checkbox"/> Other:	<input checked="" type="checkbox"/> Single <input type="checkbox"/> Double <input type="checkbox"/> Triple <input type="checkbox"/> Other:	Diameter/Dimensions: 18	In Water: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully With Sediment: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully
	<input type="checkbox"/> Concrete <input type="checkbox"/> Earthen <input type="checkbox"/> rip-rap <input type="checkbox"/> Other:	<input type="checkbox"/> Trapezoid <input type="checkbox"/> Parabolic <input type="checkbox"/> Other:	Depth:  Top Width:  Bottom Width:		
<input type="checkbox"/> Open drainage					
<input type="checkbox"/> In-Stream	(applicable when collecting samples)				
Flow Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <i>If No, Skip to Section 5</i>				
Flow Description (If present)	<input type="checkbox"/> Trickle <input type="checkbox"/> Moderate <input type="checkbox"/> Substantial				

### Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER	RESULT	UNIT	EQUIPMENT	
<input type="checkbox"/> Flow #1	Volume		Liter	Bottle
	Time to fill		Seconds	
<input type="checkbox"/> Flow #2	Flow depth		Inches	Tape measure
	Flow width		Inches	Tape measure
	Measured length		Inches	Tape measure
	Time of travel		Seconds	Stop watch
Temperature			°F	Thermometer
pH			pH Units	Test strip/Probe
Ammonia			mg/L	Test strip



Outfall Reconnaissance Inventory Field Sheet

Section 4: Physical Indicators for Flowing Outfalls Only

Are Any Physical Indicators Present in the flow? ☐ Yes ☐ No *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	<input type="checkbox"/>	<input type="checkbox"/> Sewage <input type="checkbox"/> Rancid/sour <input type="checkbox"/> Petroleum/gas <input type="checkbox"/> Sulfide <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint	<input type="checkbox"/> 2 - Easily detected	<input type="checkbox"/> 3 - Noticeable from a distance
Color	<input type="checkbox"/>	<input type="checkbox"/> Clear <input type="checkbox"/> Brown <input type="checkbox"/> Gray <input type="checkbox"/> Yellow <input type="checkbox"/> Green <input type="checkbox"/> Orange <input type="checkbox"/> Red <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint colors in sample bottle	<input type="checkbox"/> 2 - Clearly visible in sample bottle	<input type="checkbox"/> 3 - Clearly visible in outfall flow
Turbidity	<input type="checkbox"/>	See severity	<input type="checkbox"/> 1 - Slight cloudiness	<input type="checkbox"/> 2 - Cloudy	<input type="checkbox"/> 3 - Opaque
Floatables -Does Not Include Trash!!	<input type="checkbox"/>	<input type="checkbox"/> Sewage (Toilet Paper, etc.) <input type="checkbox"/> Suds <input type="checkbox"/> Petroleum (oil sheen) <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Few/slight; origin not obvious	<input type="checkbox"/> 2 - Some; indications of origin (e.g., possible suds or oil sheen)	<input type="checkbox"/> 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☐ Yes ☒ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	<input type="checkbox"/>	<input type="checkbox"/> Spalling, Cracking or Chipping <input type="checkbox"/> Peeling Paint <input type="checkbox"/> Corrosion	
Deposits/Stains	<input type="checkbox"/>	<input type="checkbox"/> Oily <input type="checkbox"/> Flow Line <input type="checkbox"/> Paint <input type="checkbox"/> Other:	
Abnormal Vegetation	<input type="checkbox"/>	<input type="checkbox"/> Excessive <input type="checkbox"/> Inhibited	
Poor pool quality	<input type="checkbox"/>	<input type="checkbox"/> Odors <input type="checkbox"/> Colors <input type="checkbox"/> Floatables <input type="checkbox"/> Oil Sheen <input type="checkbox"/> Suds <input type="checkbox"/> Excessive Algae <input type="checkbox"/> Other:	
Pipe benthic growth	<input type="checkbox"/>	<input type="checkbox"/> Brown <input type="checkbox"/> Orange <input type="checkbox"/> Green <input type="checkbox"/> Other:	

Section 6: Overall Outfall Characterization

<input checked="" type="checkbox"/> Unlikely	<input type="checkbox"/> Potential (presence of two or more indicators)	<input type="checkbox"/> Suspect (one or more indicators with a severity of 3)	<input type="checkbox"/> Obvious
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Section 7: Data Collection

1. Sample for the lab?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
2. If yes, collected from:	<input type="checkbox"/> Flow <input type="checkbox"/> Pool
3. Intermittent flow trap set?	<input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, type: <input type="checkbox"/> OBM <input type="checkbox"/> Caulk dam

Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?



## Photo Log

Photo No. 1: image.jpg





## OUTFALL RECONNAISSANCE INVENTORY/ SAMPLE COLLECTION FIELD SHEET

### Section 1: Background Data

Subwatershed:		Outfall ID: CC150	
Today's date: 08/02/17		Time (Military): 10:00AM	
Investigators: Lettice Brown		Form completed by: Lettice Brown	
Temperature (°F): 78		Rainfall (in.): Last 24 hours: 0 Last 48 hours: 0	
Latitude: 39.9530742	Longitude: -76.7383916	GPS Unit:	GPS LMK #:
Camera:		Photo #'s:	
Land Use in Drainage Area (Check all that apply): <input type="checkbox"/> Industrial <input type="checkbox"/> Ultra-Urban Residential <input type="checkbox"/> Suburban Residential <input type="checkbox"/> Commercial		<input type="checkbox"/> Open Space <input type="checkbox"/> Institutional Other: Known Industries:	
Notes (e.g., origin of outfall, if known): York City			

### Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE	DIMENSIONS (IN.)	SUBMERGED
<input checked="" type="checkbox"/> Closed Pipe	<input type="checkbox"/> RCP <input type="checkbox"/> CMP <input type="checkbox"/> PVC <input type="checkbox"/> HDPE <input type="checkbox"/> Steel <input checked="" type="checkbox"/> Other: TCP	<input checked="" type="checkbox"/> Circular <input type="checkbox"/> Elliptical <input type="checkbox"/> Box <input type="checkbox"/> Other:	<input checked="" type="checkbox"/> Single <input type="checkbox"/> Double <input type="checkbox"/> Triple <input type="checkbox"/> Other:	Diameter/Dimensions: 18  In Water: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully With Sediment: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully
<input type="checkbox"/> Open drainage	<input type="checkbox"/> Concrete <input type="checkbox"/> Earthen <input type="checkbox"/> rip-rap <input type="checkbox"/> Other:	<input type="checkbox"/> Trapezoid <input type="checkbox"/> Parabolic <input type="checkbox"/> Other:	Depth:  Top Width:  Bottom Width:	
<input type="checkbox"/> In-Stream	(applicable when collecting samples)			
Flow Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <i>If No, Skip to Section 5</i>			
Flow Description (If present)	<input type="checkbox"/> Trickle <input type="checkbox"/> Moderate <input type="checkbox"/> Substantial			

### Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER	RESULT	UNIT	EQUIPMENT	
<input type="checkbox"/> Flow #1	Volume		Liter	Bottle
	Time to fill		Seconds	
<input type="checkbox"/> Flow #2	Flow depth		Inches	Tape measure
	Flow width		Inches	Tape measure
	Measured length		Inches	Tape measure
	Time of travel		Seconds	Stop watch
Temperature			°F	Thermometer
pH			pH Units	Test strip/Probe
Ammonia			mg/L	Test strip



Outfall Reconnaissance Inventory Field Sheet

Section 4: Physical Indicators for Flowing Outfalls Only

Are Any Physical Indicators Present in the flow? ☐ Yes ☐ No *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	<input type="checkbox"/>	<input type="checkbox"/> Sewage <input type="checkbox"/> Rancid/sour <input type="checkbox"/> Petroleum/gas <input type="checkbox"/> Sulfide <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint	<input type="checkbox"/> 2 - Easily detected	<input type="checkbox"/> 3 - Noticeable from a distance
Color	<input type="checkbox"/>	<input type="checkbox"/> Clear <input type="checkbox"/> Brown <input type="checkbox"/> Gray <input type="checkbox"/> Yellow <input type="checkbox"/> Green <input type="checkbox"/> Orange <input type="checkbox"/> Red <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint colors in sample bottle	<input type="checkbox"/> 2 - Clearly visible in sample bottle	<input type="checkbox"/> 3 - Clearly visible in outfall flow
Turbidity	<input type="checkbox"/>	See severity	<input type="checkbox"/> 1 - Slight cloudiness	<input type="checkbox"/> 2 - Cloudy	<input type="checkbox"/> 3 - Opaque
Floatables -Does Not Include Trash!!	<input type="checkbox"/>	<input type="checkbox"/> Sewage (Toilet Paper, etc.) <input type="checkbox"/> Suds <input type="checkbox"/> Petroleum (oil sheen) <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Few/slight; origin not obvious	<input type="checkbox"/> 2 - Some; indications of origin (e.g., possible suds or oil sheen)	<input type="checkbox"/> 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☐ Yes ☒ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	<input type="checkbox"/>	<input type="checkbox"/> Spalling, Cracking or Chipping <input type="checkbox"/> Peeling Paint <input type="checkbox"/> Corrosion	
Deposits/Stains	<input type="checkbox"/>	<input type="checkbox"/> Oily <input type="checkbox"/> Flow Line <input type="checkbox"/> Paint <input type="checkbox"/> Other:	
Abnormal Vegetation	<input type="checkbox"/>	<input type="checkbox"/> Excessive <input type="checkbox"/> Inhibited	
Poor pool quality	<input type="checkbox"/>	<input type="checkbox"/> Odors <input type="checkbox"/> Colors <input type="checkbox"/> Floatables <input type="checkbox"/> Oil Sheen <input type="checkbox"/> Suds <input type="checkbox"/> Excessive Algae <input type="checkbox"/> Other:	
Pipe benthic growth	<input type="checkbox"/>	<input type="checkbox"/> Brown <input type="checkbox"/> Orange <input type="checkbox"/> Green <input type="checkbox"/> Other:	

Section 6: Overall Outfall Characterization

<input checked="" type="checkbox"/> Unlikely	<input type="checkbox"/> Potential (presence of two or more indicators)	<input type="checkbox"/> Suspect (one or more indicators with a severity of 3)	<input type="checkbox"/> Obvious
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Section 7: Data Collection

1. Sample for the lab?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
2. If yes, collected from:	<input type="checkbox"/> Flow <input type="checkbox"/> Pool
3. Intermittent flow trap set?	<input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, type: <input type="checkbox"/> OBM <input type="checkbox"/> Caulk dam

Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?



## Photo Log

Photo No. 1: image.jpg





## OUTFALL RECONNAISSANCE INVENTORY/ SAMPLE COLLECTION FIELD SHEET

### Section 1: Background Data

Subwatershed:		Outfall ID: CC152	
Today's date: 08/02/17		Time (Military): 10:15AM	
Investigators: Lettice Brown		Form completed by: Lettice Brown	
Temperature (°F): 78		Rainfall (in.): Last 24 hours: 0 Last 48 hours: 0	
Latitude: 39.9519248	Longitude: -76.7422771	GPS Unit:	GPS LMK #:
Camera:		Photo #'s:	
Land Use in Drainage Area (Check all that apply): <input type="checkbox"/> Industrial <input type="checkbox"/> Ultra-Urban Residential <input type="checkbox"/> Suburban Residential <input type="checkbox"/> Commercial		<input type="checkbox"/> Open Space <input type="checkbox"/> Institutional Other: Known Industries:	
Notes (e.g., origin of outfall, if known): York City			

### Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE	DIMENSIONS (IN.)	SUBMERGED
<input checked="" type="checkbox"/> Closed Pipe	<input type="checkbox"/> RCP <input type="checkbox"/> CMP <input type="checkbox"/> PVC <input type="checkbox"/> HDPE <input type="checkbox"/> Steel <input checked="" type="checkbox"/> Other: CPP	<input checked="" type="checkbox"/> Circular <input type="checkbox"/> Elliptical <input type="checkbox"/> Box <input type="checkbox"/> Other:	<input checked="" type="checkbox"/> Single <input type="checkbox"/> Double <input type="checkbox"/> Triple <input type="checkbox"/> Other:	Diameter/Dimensions: 18  In Water: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully With Sediment: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully
<input type="checkbox"/> Open drainage	<input type="checkbox"/> Concrete <input type="checkbox"/> Earthen <input type="checkbox"/> rip-rap <input type="checkbox"/> Other:	<input type="checkbox"/> Trapezoid <input type="checkbox"/> Parabolic <input type="checkbox"/> Other:	Depth:  Top Width:  Bottom Width:	
<input type="checkbox"/> In-Stream	(applicable when collecting samples)			
Flow Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <i>If No, Skip to Section 5</i>			
Flow Description (If present)	<input type="checkbox"/> Trickle <input type="checkbox"/> Moderate <input type="checkbox"/> Substantial			

### Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER	RESULT	UNIT	EQUIPMENT	
<input type="checkbox"/> Flow #1	Volume		Liter	Bottle
	Time to fill		Seconds	
<input type="checkbox"/> Flow #2	Flow depth		Inches	Tape measure
	Flow width		Inches	Tape measure
	Measured length		Inches	Tape measure
	Time of travel		Seconds	Stop watch
Temperature			°F	Thermometer
pH			pH Units	Test strip/Probe
Ammonia			mg/L	Test strip



Outfall Reconnaissance Inventory Field Sheet

Section 4: Physical Indicators for Flowing Outfalls Only

Are Any Physical Indicators Present in the flow? ☐ Yes ☐ No *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	<input type="checkbox"/>	<input type="checkbox"/> Sewage <input type="checkbox"/> Rancid/sour <input type="checkbox"/> Petroleum/gas <input type="checkbox"/> Sulfide <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint	<input type="checkbox"/> 2 - Easily detected	<input type="checkbox"/> 3 - Noticeable from a distance
Color	<input type="checkbox"/>	<input type="checkbox"/> Clear <input type="checkbox"/> Brown <input type="checkbox"/> Gray <input type="checkbox"/> Yellow <input type="checkbox"/> Green <input type="checkbox"/> Orange <input type="checkbox"/> Red <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint colors in sample bottle	<input type="checkbox"/> 2 - Clearly visible in sample bottle	<input type="checkbox"/> 3 - Clearly visible in outfall flow
Turbidity	<input type="checkbox"/>	See severity	<input type="checkbox"/> 1 - Slight cloudiness	<input type="checkbox"/> 2 - Cloudy	<input type="checkbox"/> 3 - Opaque
Floatables -Does Not Include Trash!!	<input type="checkbox"/>	<input type="checkbox"/> Sewage (Toilet Paper, etc.) <input type="checkbox"/> Suds <input type="checkbox"/> Petroleum (oil sheen) <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Few/slight; origin not obvious	<input type="checkbox"/> 2 - Some; indications of origin (e.g., possible suds or oil sheen)	<input type="checkbox"/> 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☐ Yes ☒ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	<input type="checkbox"/>	<input type="checkbox"/> Spalling, Cracking or Chipping <input type="checkbox"/> Peeling Paint <input type="checkbox"/> Corrosion	
Deposits/Stains	<input type="checkbox"/>	<input type="checkbox"/> Oily <input type="checkbox"/> Flow Line <input type="checkbox"/> Paint <input type="checkbox"/> Other:	
Abnormal Vegetation	<input type="checkbox"/>	<input type="checkbox"/> Excessive <input type="checkbox"/> Inhibited	
Poor pool quality	<input type="checkbox"/>	<input type="checkbox"/> Odors <input type="checkbox"/> Colors <input type="checkbox"/> Floatables <input type="checkbox"/> Oil Sheen <input type="checkbox"/> Suds <input type="checkbox"/> Excessive Algae <input type="checkbox"/> Other:	
Pipe benthic growth	<input type="checkbox"/>	<input type="checkbox"/> Brown <input type="checkbox"/> Orange <input type="checkbox"/> Green <input type="checkbox"/> Other:	

Section 6: Overall Outfall Characterization

<input checked="" type="checkbox"/> Unlikely	<input type="checkbox"/> Potential (presence of two or more indicators)	<input type="checkbox"/> Suspect (one or more indicators with a severity of 3)	<input type="checkbox"/> Obvious
--	---	--	----------------------------------

Section 7: Data Collection

1. Sample for the lab?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
2. If yes, collected from:	<input type="checkbox"/> Flow <input type="checkbox"/> Pool
3. Intermittent flow trap set?	<input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, type: <input type="checkbox"/> OBM <input type="checkbox"/> Caulk dam

Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?



## Photo Log

Photo No. 1: image.jpg





## OUTFALL RECONNAISSANCE INVENTORY/ SAMPLE COLLECTION FIELD SHEET

### Section 1: Background Data

Subwatershed:		Outfall ID: CC151	
Today's date: 08/02/17		Time (Military): 10:30AM	
Investigators: Lettice Brown		Form completed by: Lettice Brown	
Temperature (°F): 82		Rainfall (in.): Last 24 hours: 0 Last 48 hours: 0	
Latitude: 39.9525484	Longitude: -76.7398265	GPS Unit:	GPS LMK #:
Camera:		Photo #'s:	
Land Use in Drainage Area (Check all that apply): <input type="checkbox"/> Industrial <input type="checkbox"/> Ultra-Urban Residential <input type="checkbox"/> Suburban Residential <input type="checkbox"/> Commercial		<input type="checkbox"/> Open Space <input type="checkbox"/> Institutional Other: Known Industries:	
Notes (e.g., origin of outfall, if known): York City			

### Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE	DIMENSIONS (IN.)	SUBMERGED
<input checked="" type="checkbox"/> Closed Pipe	<input type="checkbox"/> RCP <input type="checkbox"/> CMP <input type="checkbox"/> PVC <input type="checkbox"/> HDPE <input type="checkbox"/> Steel <input checked="" type="checkbox"/> Other: TCP	<input checked="" type="checkbox"/> Circular <input type="checkbox"/> Elliptical <input type="checkbox"/> Box <input type="checkbox"/> Other:	<input checked="" type="checkbox"/> Single <input type="checkbox"/> Double <input type="checkbox"/> Triple <input type="checkbox"/> Other:	Diameter/Dimensions: 24  In Water: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully With Sediment: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully
<input type="checkbox"/> Open drainage	<input type="checkbox"/> Concrete <input type="checkbox"/> Earthen <input type="checkbox"/> rip-rap <input type="checkbox"/> Other:	<input type="checkbox"/> Trapezoid <input type="checkbox"/> Parabolic <input type="checkbox"/> Other:	Depth:  Top Width:  Bottom Width:	
<input type="checkbox"/> In-Stream	(applicable when collecting samples)			
Flow Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <i>If No, Skip to Section 5</i>			
Flow Description (If present)	<input type="checkbox"/> Trickle <input type="checkbox"/> Moderate <input type="checkbox"/> Substantial			

### Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER		RESULT	UNIT	EQUIPMENT
<input type="checkbox"/> Flow #1	Volume		Liter	Bottle
	Time to fill		Seconds	
<input type="checkbox"/> Flow #2	Flow depth		Inches	Tape measure
	Flow width		Inches	Tape measure
	Measured length		Inches	Tape measure
	Time of travel		Seconds	Stop watch
Temperature			°F	Thermometer
pH			pH Units	Test strip/Probe
Ammonia			mg/L	Test strip



Outfall Reconnaissance Inventory Field Sheet

Section 4: Physical Indicators for Flowing Outfalls Only

Are Any Physical Indicators Present in the flow? ☐ Yes ☐ No *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	<input type="checkbox"/>	<input type="checkbox"/> Sewage <input type="checkbox"/> Rancid/sour <input type="checkbox"/> Petroleum/gas <input type="checkbox"/> Sulfide <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint	<input type="checkbox"/> 2 - Easily detected	<input type="checkbox"/> 3 - Noticeable from a distance
Color	<input type="checkbox"/>	<input type="checkbox"/> Clear <input type="checkbox"/> Brown <input type="checkbox"/> Gray <input type="checkbox"/> Yellow <input type="checkbox"/> Green <input type="checkbox"/> Orange <input type="checkbox"/> Red <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint colors in sample bottle	<input type="checkbox"/> 2 - Clearly visible in sample bottle	<input type="checkbox"/> 3 - Clearly visible in outfall flow
Turbidity	<input type="checkbox"/>	See severity	<input type="checkbox"/> 1 - Slight cloudiness	<input type="checkbox"/> 2 - Cloudy	<input type="checkbox"/> 3 - Opaque
Floatables -Does Not Include Trash!!	<input type="checkbox"/>	<input type="checkbox"/> Sewage (Toilet Paper, etc.) <input type="checkbox"/> Suds <input type="checkbox"/> Petroleum (oil sheen) <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Few/slight; origin not obvious	<input type="checkbox"/> 2 - Some; indications of origin (e.g., possible suds or oil sheen)	<input type="checkbox"/> 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☐ Yes ☒ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	<input type="checkbox"/>	<input type="checkbox"/> Spalling, Cracking or Chipping <input type="checkbox"/> Peeling Paint <input type="checkbox"/> Corrosion	
Deposits/Stains	<input type="checkbox"/>	<input type="checkbox"/> Oily <input type="checkbox"/> Flow Line <input type="checkbox"/> Paint <input type="checkbox"/> Other:	
Abnormal Vegetation	<input type="checkbox"/>	<input type="checkbox"/> Excessive <input type="checkbox"/> Inhibited	
Poor pool quality	<input type="checkbox"/>	<input type="checkbox"/> Odors <input type="checkbox"/> Colors <input type="checkbox"/> Floatables <input type="checkbox"/> Oil Sheen <input type="checkbox"/> Suds <input type="checkbox"/> Excessive Algae <input type="checkbox"/> Other:	
Pipe benthic growth	<input type="checkbox"/>	<input type="checkbox"/> Brown <input type="checkbox"/> Orange <input type="checkbox"/> Green <input type="checkbox"/> Other:	

Section 6: Overall Outfall Characterization

<input checked="" type="checkbox"/> Unlikely	<input type="checkbox"/> Potential (presence of two or more indicators)	<input type="checkbox"/> Suspect (one or more indicators with a severity of 3)	<input type="checkbox"/> Obvious
--	---	--	----------------------------------

Section 7: Data Collection

1. Sample for the lab?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
2. If yes, collected from:	<input type="checkbox"/> Flow <input type="checkbox"/> Pool
3. Intermittent flow trap set?	<input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, type: <input type="checkbox"/> OBM <input type="checkbox"/> Caulk dam

Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?



## Photo Log

Photo No. 1: image.jpg





## OUTFALL RECONNAISSANCE INVENTORY/ SAMPLE COLLECTION FIELD SHEET

### Section 1: Background Data

Subwatershed:		Outfall ID: CC151A	
Today's date: 08/02/17		Time (Military): 10:30AM	
Investigators: Lettice Brown		Form completed by: Lettice Brown	
Temperature (°F): 82		Rainfall (in.): Last 24 hours: 0 Last 48 hours: 0	
Latitude: 39.9525665	Longitude: -76.7398381	GPS Unit:	GPS LMK #:
Camera:		Photo #'s:	
Land Use in Drainage Area (Check all that apply): <input type="checkbox"/> Industrial <input type="checkbox"/> Ultra-Urban Residential <input type="checkbox"/> Suburban Residential <input type="checkbox"/> Commercial		<input type="checkbox"/> Open Space <input type="checkbox"/> Institutional Other: Known Industries:	
Notes (e.g., origin of outfall, if known): York City			

### Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE	DIMENSIONS (IN.)	SUBMERGED	
<input checked="" type="checkbox"/> Closed Pipe	<input type="checkbox"/> RCP <input type="checkbox"/> PVC <input type="checkbox"/> Steel <input type="checkbox"/> Other:	<input checked="" type="checkbox"/> Circular <input type="checkbox"/> Elliptical <input type="checkbox"/> Box <input type="checkbox"/> Other:	<input checked="" type="checkbox"/> Single <input type="checkbox"/> Double <input type="checkbox"/> Triple <input type="checkbox"/> Other:	Diameter/Dimensions: 12	In Water: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully With Sediment: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully
	<input type="checkbox"/> Concrete <input type="checkbox"/> Earthen <input type="checkbox"/> rip-rap <input type="checkbox"/> Other:	<input type="checkbox"/> Trapezoid <input type="checkbox"/> Parabolic <input type="checkbox"/> Other:	Depth:  Top Width:  Bottom Width:		
<input type="checkbox"/> Open drainage					
<input type="checkbox"/> In-Stream	(applicable when collecting samples)				
Flow Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <i>If No, Skip to Section 5</i>				
Flow Description (If present)	<input type="checkbox"/> Trickle <input type="checkbox"/> Moderate <input type="checkbox"/> Substantial				

### Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER		RESULT	UNIT	EQUIPMENT
<input type="checkbox"/> Flow #1	Volume		Liter	Bottle
	Time to fill		Seconds	
<input type="checkbox"/> Flow #2	Flow depth		Inches	Tape measure
	Flow width		Inches	Tape measure
	Measured length		Inches	Tape measure
	Time of travel		Seconds	Stop watch
Temperature			°F	Thermometer
pH			pH Units	Test strip/Probe
Ammonia			mg/L	Test strip



Outfall Reconnaissance Inventory Field Sheet

Section 4: Physical Indicators for Flowing Outfalls Only

Are Any Physical Indicators Present in the flow? ☐ Yes ☐ No *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	<input type="checkbox"/>	<input type="checkbox"/> Sewage <input type="checkbox"/> Rancid/sour <input type="checkbox"/> Petroleum/gas <input type="checkbox"/> Sulfide <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint	<input type="checkbox"/> 2 - Easily detected	<input type="checkbox"/> 3 - Noticeable from a distance
Color	<input type="checkbox"/>	<input type="checkbox"/> Clear <input type="checkbox"/> Brown <input type="checkbox"/> Gray <input type="checkbox"/> Yellow <input type="checkbox"/> Green <input type="checkbox"/> Orange <input type="checkbox"/> Red <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Faint colors in sample bottle	<input type="checkbox"/> 2 - Clearly visible in sample bottle	<input type="checkbox"/> 3 - Clearly visible in outfall flow
Turbidity	<input type="checkbox"/>	See severity	<input type="checkbox"/> 1 - Slight cloudiness	<input type="checkbox"/> 2 - Cloudy	<input type="checkbox"/> 3 - Opaque
Floatables -Does Not Include Trash!!	<input type="checkbox"/>	<input type="checkbox"/> Sewage (Toilet Paper, etc.) <input type="checkbox"/> Suds <input type="checkbox"/> Petroleum (oil sheen) <input type="checkbox"/> Other:	<input type="checkbox"/> 1 - Few/slight; origin not obvious	<input type="checkbox"/> 2 - Some; indications of origin (e.g., possible suds or oil sheen)	<input type="checkbox"/> 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☐ Yes ☒ No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	<input type="checkbox"/>	<input type="checkbox"/> Spalling, Cracking or Chipping <input type="checkbox"/> Peeling Paint <input type="checkbox"/> Corrosion	
Deposits/Stains	<input type="checkbox"/>	<input type="checkbox"/> Oily <input type="checkbox"/> Flow Line <input type="checkbox"/> Paint <input type="checkbox"/> Other:	
Abnormal Vegetation	<input type="checkbox"/>	<input type="checkbox"/> Excessive <input type="checkbox"/> Inhibited	
Poor pool quality	<input type="checkbox"/>	<input type="checkbox"/> Odors <input type="checkbox"/> Colors <input type="checkbox"/> Floatables <input type="checkbox"/> Oil Sheen <input type="checkbox"/> Suds <input type="checkbox"/> Excessive Algae <input type="checkbox"/> Other:	
Pipe benthic growth	<input type="checkbox"/>	<input type="checkbox"/> Brown <input type="checkbox"/> Orange <input type="checkbox"/> Green <input type="checkbox"/> Other:	

Section 6: Overall Outfall Characterization

<input checked="" type="checkbox"/> Unlikely <input type="checkbox"/> Potential (presence of two or more indicators) <input type="checkbox"/> Suspect (one or more indicators with a severity of 3) <input type="checkbox"/> Obvious
--

Section 7: Data Collection

1. Sample for the lab? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
2. If yes, collected from: <input type="checkbox"/> Flow <input type="checkbox"/> Pool
3. Intermittent flow trap set? <input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, type: <input type="checkbox"/> OBM <input type="checkbox"/> Caulk dam

Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?



## Photo Log

Photo No. 1: image.jpg








## MS4 OUTFALL FIELD SCREENING REPORT

BACKGROUND INFORMATION				
Permittee Name: CITY OF YORK		NPDES Permit No.: PA		
Date of Inspection: 09/23/17		Outfall ID No.: CC71		
Land Use in Outfall Drainage Area (Select All): <input type="checkbox"/> Industrial <input type="checkbox"/> Urban Residential <input type="checkbox"/> Commercial <input type="checkbox"/> Suburban Residential <input type="checkbox"/> Open Space <input type="checkbox"/> Other:		Latitude: 39 ° 57 ' 39.9 "		
		Latitude: -76 ° 43 ' 56.6 "		
		Dry Weather Inspection? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		
		Date of Previous Precipitation:		
		Amount of Previous Precipitation: .00 in		
Inspector Name(s): Lettice Brown		Were Photographs Taken? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
		Are Photographs Attached? <input type="checkbox"/> Yes <input type="checkbox"/> No		
OUTFALL DESCRIPTION				
TYPE	MATERIAL	SHAPE	DIMENSIONS	SUBMERGED
<input checked="" type="checkbox"/> Closed Pipe	<input type="checkbox"/> RCP <input type="checkbox"/> CMP <input type="checkbox"/> PVC <input type="checkbox"/> HDPE <input type="checkbox"/> Steel <input checked="" type="checkbox"/> Other	<input type="checkbox"/> Circular <input checked="" type="checkbox"/> Single <input type="checkbox"/> Elliptical <input type="checkbox"/> Double <input checked="" type="checkbox"/> Box <input type="checkbox"/> Triple <input type="checkbox"/> Other <input type="checkbox"/> Other	Diameter: 42 x 63 in	<input type="checkbox"/> In Water <input type="checkbox"/> With Sediment:
<input type="checkbox"/> Open Channel	<input type="checkbox"/> Concrete <input type="checkbox"/> Earthen <input type="checkbox"/> Rip-Rap <input type="checkbox"/> Other	<input type="checkbox"/> Trapezoid <input type="checkbox"/> Parabolic <input type="checkbox"/> Other	Depth: _____ in Top Width: _____ in Bottom Width: _____	
Dry Weather Flow Present at Outfall During Inspection? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No (If No, skip to Certification Section)				
Description of Flow Rate <input type="checkbox"/> Trickle <input type="checkbox"/> Moderate <input type="checkbox"/> Significant <input checked="" type="checkbox"/> N/A				
DRY WEATHER FLOW EVALUATION				
Does the dry weather flow contain color? <input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, provide a description below.				
Does the dry weather flow contain an odor? <input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, provide a description below.				
Is there an observed change in the receiving waters as a result of the discharge? <input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, provide a description below.				
Does the dry weather flow contain floating solids, scum, sheen or substances that result in deposits? <input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, provide a description below.				



Were sample(s) collected of the dry weather flow? <input type="checkbox"/> Yes <input type="checkbox"/> No (If Yes, No. Samples: _____)					
<b>FIELD / LABORATORY ANALYSIS</b>					
<b>PARAMETER</b>	<b>RESULTS</b>	<b>UNITS</b>	<b>PARAMETER</b>	<b>RESULTS</b>	<b>UNITS</b>
Flow Rate		GPM	Fecal Coliform		No./100 mL
pH		S.U.	COD		mg/L
Total Residual Chlorine (TRC)		mg/L	BOD5		mg/L
Conductivity		µmhos/cm	TSS		mg/L
Ammonia-Nitrogen		mg/L	TDS		mg/L
Other: _____			Oil and Grease		mg/L
Other: _____			Other: _____		
Indicate the parameters above that were analyzed by a DEP-certified laboratory:					
<b>ILLICIT DISCHARGES</b>					
Is the dry weather flow an illicit discharge? <input type="checkbox"/> Yes <input type="checkbox"/> No					
If Yes, describe efforts made to determine the source(s) of the illicit discharge.					
Describe corrective actions taken by the permittee in response to the finding of an illicit discharge.					
Inspector Comments:					
<b>RESPONSIBLE OFFICIAL CERTIFICATION</b>					
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 gathered and evaluated 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 knowledge of violations. See 18 Pa. C.S. § 4904 (relating to unsworn falsification).					
Lettice Brown					
Responsible Official Name			Signature		
			01/22/2018		
Telephone No.			Date		



ARTICLE 942  
Detection and Elimination of Illicit Discharges  
to the Municipal Separate Storm Sewer System

942.01	Ultimate responsibility.	942.09	Notification of spills.
942.02	Prohibition of illicit discharges.	942.10	Enforcement.
942.03	Prohibition of illicit connections.	942.11	Appeals of notice of violation.
942.04	Suspension of MS4 access.	942.12	Enforcement measures after appeal.
942.05	Industrial or construction activity discharges.	942.13	Cost of abatement of violation.
942.06	Monitoring of discharges.	942.14	Injunctive relief.
942.07	Requirements to prevent, control and reduce stormwater pollutants by the use of BMPs.	942.15	Compensatory action.
942.08	Watercourse protection.	942.16	Violations deemed as public nuisance.
		942.17	Criminal prosecution.
		942.18	Attorney fees and costs.
		942.19	Remedies not exclusive.

942.01 ULTIMATE RESPONSIBILITY.

The standards set forth herein and promulgated by this Article are minimum standards; therefore, this Article does not intend nor imply that compliance by any person will ensure that there will be no contamination, pollution, nor unauthorized discharge of pollutants.  
(Ord. 32-2011. Passed 10-4-11.)

942.02 PROHIBITION OF ILLICIT DISCHARGES.

(a) No person shall discharge or cause to be discharged in to storm drain system or waters of this Commonwealth any materials, including, but not limited to, pollutants or waters containing pollutants that cause or contribute to a violation of applicable water quality standards, other than stormwater. Any discharge in violation of the Article shall be considered illicit discharges, except as exempted below.



(b) The commencement, conduct or continuance of any illicit discharge to the storm drain system or Waters of this Commonwealth is prohibited except as follows:

- Discharges from firefighting activities	- Flows from riparian habitats and wetlands
- Potable water sources including water line flushing	- Uncontaminated water from foundations or from footing drains
- Irrigation drainage	- Lawn watering
- Air conditioning condensate	- Dechlorinated swimming pool discharges (less than one PPM chlorine)
- Springs	- Uncontaminated groundwater
- Water from crawl space pumps	- Water from individual residential car washing
- Pavement wash waters where spills or leaks of toxic or hazardous materials have not occurred (unless all spill material have been removed) and where detergents are not used	- Routine external building wash down (which does not use detergents or other compounds)
- Diverted stream flows	- Water discharged in well testing for potable water sources
- Groundwater Infiltration to Storm Drains	- Uncontaminated Pumped Groundwater
- Crawl Space Pumps	

- (1) Discharges specified in writing by the Municipality as being necessary to protect public health and safety.
- (2) Dye testing is an allowable discharge, but requires a verbal notification to the Municipality 48 hours prior to the time of the test
- (3) The prohibition shall not apply to any non-stormwater discharge permitted under an NPDES permit, waiver, or waste discharge order issued to the discharger and administered under the authority of DEP; provided, that the discharge is in full compliance with all requirements of the permit, waiver, or order and other applicable laws and regulations; and, provided, that written approval has been granted for any discharge to the storm drain system and/or Waters of this Commonwealth.

(c) In the event that the Municipality or DEP determines that any of the discharges identified in Section 942.02(b) significantly contribute to pollution of the waters of this Commonwealth, Municipality or DEP will notify the responsible person(s) to cease the discharge. (Ord. 32-2011. Passed 10-4-11.)



**942.03 PROHIBITION OF ILLICIT CONNECTIONS.**

The construction, use, maintenance or continued existence of Illicit Connections to the storm drain system is prohibited.

- (a) This prohibition expressly includes, without limitation, Illicit Connections made in the past, regardless of whether the connection was permissible under law or practices applicable or prevailing at the time of connection.
- (b) A person is considered to be in violation of this Article if the person connects a line conveying sewage to the MS4, or allows such a connection to continue. (Ord. 32-2011. Passed 10-4-11.)

**942.04 SUSPENSION OF MS4 ACCESS.**

(a) Suspension due to Illicit Discharges in Emergency Situations. The Municipality, the Commonwealth of Pennsylvania and the United States of America may, without prior notice, suspend MS4 discharge access to a person when such suspension is necessary to stop an actual or threatened discharge which presents or may present imminent and substantial danger to the environment, or to the health or welfare of persons, or to the MS4 or Waters of the Commonwealth of Pennsylvania, or the United States. If the violator fails to comply with a suspension order issued in an emergency, the Municipality may take such steps as deemed necessary to prevent or minimize damage to the MS4 or Waters of the Commonwealth of Pennsylvania or United States, or to minimize danger to persons, including, without limitations, entering the property for the purpose of disconnecting and/or performing emergency maintenance or repairs to storm sewers. In the event the Municipality must disconnect or perform emergency maintenance and/or repairs, the Municipality may file and attach a municipal lien on the property which is causing Illicit Discharge.

(b) Suspension due to the Detection of Illicit Discharge or Illicit Connection. Any person discharging to the MS4 in violation of this Article may have their MS4 access terminated if such termination would abate or reduce an Illicit Discharge or Illicit Connection. The Municipality will notify a violator of the proposed termination of its MS4 access. The violator may petition the Municipality for a reconsideration and hearing.

(c) A person commits an offense if the person reinstates MS4 access to premises terminated pursuant to this Section, without the prior approval of the authorized enforcement agency. (Ord. 32-2011. Passed 10-4-11.)

**942.05 INDUSTRIAL OR CONSTRUCTION ACTIVITY DISCHARGES.**

Any person subject to an industrial or construction activity NPDES storm water discharge permit shall comply with all provisions of such permit. Proof of compliance with said permit may be required in a form acceptable to the Municipality prior to the allowing of discharges to the MS4. (Ord. 32-2011. Passed 10-4-11.)

**942.06 MONITORING OF DISCHARGES.**

(a) Applicability. This section applies to all facilities that have storm water discharges associated with industrial activity, including construction activity.



(b) Access to Facilities.

- (1) The Municipality shall be permitted to enter and inspect facilities subject to regulation under this Article as often as may be necessary to determine compliance with this Article. If a discharger has security measures in force which require proper identification and clearance before entry into its premises, the discharger shall make the necessary arrangements to allow access to representatives of the Municipality.
- (2) Facility operators shall allow the Municipality ready access to all parts of the premises for the purposes of inspection, sampling, examination and copying of records that must be kept under the conditions of an NPDES permit to discharge storm water, and the performance of any additional duties as defined by state and federal law.
- (3) The Municipality shall have the right to set up on any permitted facility such devices as are necessary in the opinion of the Municipality to conduct monitoring and/or sampling of the facility's storm water discharge.
- (4) The Municipality has the right to require the discharger to install monitoring equipment as necessary. The facility's sampling and monitoring equipment shall be maintained at all times in a safe and proper operating condition by the discharger at its own expense. All devices used to measure stormwater flow and quality shall be calibrated to ensure their accuracy.
- (5) Any temporary or permanent obstruction to safe and easy access to the facility to be inspected and/or sampled shall be promptly removed by the operator at the written or oral request of the Municipality and shall not be replaced. The costs of clearing such access shall be borne by the operator.
- (6) Unreasonable delays in allowing the Municipality access to a permitted facility are a violation of a storm water discharge permit and of this Article. A person who is the operator of a facility with a NPDES permit to discharge storm water associated with industrial activity commits an offense if the person denies the Municipality reasonable access to the permitted facility for the purpose of conducting any activity authorized or required by this Article.
- (7) If the Municipality has been refused access to any part of the premises from which stormwater is discharged, and the Municipality representative is able to demonstrate probable cause to believe that there may be a violation of this Ordinance, or that there is a need to inspect and/or sample as part of a routine inspection and sampling program designed to verify compliance with this Article or any order issued hereunder, or to protect the overall public health, safety, and welfare of the community, then the authorized enforcement agency may seek issuance of a search warrant from any court of competent jurisdiction.  
(Ord. 32-2011. Passed 10-4-11.)



**942.07 REQUIREMENTS TO PREVENT, CONTROL AND REDUCE  
STORMWATER POLLUTANTS BY THE USE OF BMPs.**

The Municipality will adopt requirements identifying Best Management Practices for any activity, operation, or facility which may cause or contribute to pollution or contamination of storm water, the storm drain system, or Waters of the Commonwealth of Pennsylvania or the United States. The owner or operator of a commercial or industrial establishment shall provide, at their own expense, reasonable protection from accidental discharge of prohibited materials or other wastes into the municipal storm drain system or watercourses through the use of these structural and non-structural BMPs. Further, any person responsible for a property or premises, which is, or may be, the source of an Illicit Discharge, may be required to implement, at said person's expense, additional structural and non-structural BMPs to prevent the further discharge of pollutants to the municipal separate storm sewer system. Compliance with all terms and conditions of a valid NPDES permit authorizing the discharge of storm water associated with industrial activity, to the extent practicable, shall be deemed in compliance with the provisions of this section. These BMPs shall be part of a stormwater pollution prevention plan (SWPP) as necessary for compliance with requirements of the NPDES permit. (Ord. 32-2011. Passed 10-4-11.)

**942.08 WATERCOURSE PROTECTION.**

Every person owning property through which a watercourse passes, or such person's lessee, shall keep and maintain that part of the watercourse within the property free of trash, debris, excessive vegetation, and other obstacles that would pollute, contaminate, or significantly retard the flow of water through the watercourse. In addition, the owner or lessee shall maintain existing privately owned structures within or adjacent to a watercourse, so that such structures will not become a hazard to the use, function, or physical integrity of the watercourse. (Ord. 32-2011. Passed 10-4-11.)

**942.09 NOTIFICATION OF SPILLS.**

Notwithstanding other requirements of law, as soon as any person responsible for a facility or operation, or responsible for emergency response for a facility or operation has information of any known or suspected release of materials which are resulting or may result in Illicit Discharges or pollutants discharging into storm water, the storm drain system, or water of the Commonwealth of Pennsylvania or the United States, said person shall take all necessary steps to ensure the discovery, containment, and cleanup of such release. In the event of such a release of hazardous materials said person shall immediately notify emergency response agencies of the occurrence via emergency dispatch services. In the event of a release of non-hazardous materials, said person shall notify the authorized enforcement agency in person or by phone or facsimile no later than the next business day. Notifications in person or by phone shall be confirmed by written notice addressed and mailed to Municipality within three business days of the phone notice. If the discharge of prohibited materials emanates from a commercial or industrial establishment, the owner or operator of such establishment shall also retain an on-site written record of the discharge and the actions taken to prevent its recurrence. Such records shall be retained for at least three years. (Ord. 32-2011. Passed 10-4-11.)



**942.10 ENFORCEMENT.**

(a) Whenever the Municipality finds that a person has violated a prohibition or failed to meet a requirement of this Article, the Municipality may order compliance by written notice of violation to the responsible person. Such notice may require without limitation:

- (1) The performance of monitoring, analyses, and reporting;
- (2) The elimination of Illicit Connections or discharges;
- (3) That violating discharges, practices, or operations shall cease and desist;
- (4) The abatement or remediation of storm water pollution or contamination hazards and the restoration of any affected property; and
- (5) Payment of a fine to cover administrative and remediation costs; and
- (6) The implementation of source control or treatment BMPs.

(b) If abatement of a violation and/or restoration of affected property is required, the notice shall set forth a deadline within which such remediation or restoration must be completed. Said notice shall further advise that, should the violator fail to remediate or restore within the established deadline, the work will be done by a designated governmental agency or a contractor and the expense thereof shall be charged to the violator or assessed as a municipal lien on the property.

(Ord. 32-2011. Passed 10-4-11.)

**942.11 APPEALS OF NOTICE OF VIOLATION.**

Any person receiving a Notice of Violation may appeal the determination of the Municipality. The notice of appeal must be received within 30 days from the date of the Notice of Violation. A hearing on the appeal before the appropriate authority or his/her designee shall take place within 15 days from the date of receipt of the notice of appeal. The decision of the Municipal authority or their designee shall be final.

(Ord. 32-2011. Passed 10-4-11.)

**942.12 ENFORCEMENT MEASURES AFTER APPEAL.**

If the violation has not been corrected pursuant to the requirements set forth in the Notice of Violation, or, in the event of an appeal, within 15 days of the hearing representative's decision upholding the decision of the Municipality, then representatives of the Municipality shall enter upon the subject private property and are authorized to take any and all measures necessary to abate the violation and/or restore the property. It shall be unlawful for any person, owner, agent, or person in possession of any premises to refuse to allow the Municipality or designated contractor to enter upon the premises for the purposes set forth above. (Ord. 32-2011. Passed 10-4-11.)

**942.13 COST OF ABATEMENT OF VIOLATION.**

(a) Within 30 days after abatement of the violation, the owner of the property will be notified of the cost of abatement, including administrative costs. The property owner may thereafter file a written protest objecting to the amount of the assessment within 30 days. If the amount due is not paid within a timely manner as determined by the decision of the Municipality or by the expiration of the time in which to file an appeal, the charges shall become a special assessment against the property and shall constitute a Municipal lien on the property for the amount of the assessment.



(b) Any person violating any of the provisions of this Article shall become liable to the Municipality by reason of such violation. The liability shall be paid in not more than 12 equal payments. Interest at the rate of 12 percent per annum shall be assessed on the balance beginning on the 1st day following discovery of the violation.  
(Ord. 32-2011. Passed 10-4-11.)

#### 942.14 INJUNCTIVE RELIEF.

It shall be unlawful for any person to violate any provision or fail to comply with any of the requirements of this Article. If a person has violated or continues to violate the provisions of this Article, the Municipality may petition for a preliminary or permanent injunction restraining the person from activities which would create further violations or compelling the person to perform abatement or remediation of the violation.  
(Ord. 32-2011. Passed 10-4-11.)

#### 942.15 COMPENSATORY ACTION.

In lieu of enforcement proceedings, penalties, and remedies authorized by this Article, the Municipality may impose upon a violator alternative compensatory actions, such as storm drain stenciling, attendance at compliance workshops, creek cleanup, etc.  
(Ord. 32-2011. Passed 10-4-11.)

#### 942.16 VIOLATIONS DEEMED AS PUBLIC NUISANCE.

In addition to the enforcement processes and penalties provided, any condition caused or permitted to exist in violation of any of the provisions of this Article is a threat to public health, safety, and welfare, and is declared and deemed a public nuisance, and may be summarily abated or restored at the violator's expense, and/or a civil action to abate, enjoin, or otherwise compel the cessation of such nuisance may be taken.  
(Ord. 32-2011. Passed 10-4-11.)

#### 942.17 CRIMINAL PROSECUTION.

Any person that has violated or continues to violate this any section of this Article 942 shall be liable to criminal prosecution to the fullest extent of the law, and shall be subject to a criminal penalty of \$1,000 dollars per violation per day and/or imprisonment for a period of time not to exceed 90 days.  
(Ord. 32-2011. Passed 10-4-11.)

#### 942.18 ATTORNEY FEES AND COSTS.

The Municipality may recover all attorney's fees, court costs and other expenses associated with enforcement of this Article, either criminal or civil, including sampling and monitoring expenses or other costs of investigation.  
(Ord. 32-2011. Passed 10-4-11.)

#### 942.19 REMEDIES NOT EXCLUSIVE.

The remedies listed in this Article are not exclusive of any other remedies available under any applicable federal, state or local law and it is within the discretion of the Municipality to seek cumulative remedies.  
(Ord. 32-2011. Passed 10-4-11.)



## Summary of CC48 Meeting

Attendees: Lettice Brown (MS4 Coordinator), Steven Buffington (PPZ Supervisor), Patricia Will (Yohn Properties), Matt Argabright (Yohn Properties), and John Luciani (First Capital Engineering).

- Reviewed the issue
  - Went over how long the discharge has happened
  - Showed photos of what the discharge looks like as well as the sump skimmers
  - Went through some of the documentation and timeline from the DEP paperwork I obtained from DEP.
- Discussion commenced and skimming through the documentation, we determined that no tanks were left in the ground.
- The property owners were unaware of the 5,000 gallon mineral spirit tank that was removed from their property.
- They adamantly think that nothing leaked from that tank – say there is no evidence it leaked
- They also think that the discharge is coming from farther upstream and mentioned PCC.
- John stated that he has gone to the site during a rainstorm and could feel smell gas or oil coming from the inlet near the RR on Hartley.
- We went through all our efforts and they still believe that the discharge is either coming from PCC or above them
- Our next course of action options
  - TV the storm line from Lincoln and West Street, into PCC
  - Check more manholes farther upstream
  - Smoke testing
  - Investigate other spills that have happened in the area (there are 3) They are going to send me the reports for further investigation
    - American Colloid
    - York Wallcoverings
    - PCC??
  - Sample the stormwater at the effluent, Park and Hartley manhole, and near Lincoln and West Streets.
- Patricia stated that PCC is looking to buy the property ASAP and doesn't know what to tell them. We told her to tell them our investigation is inconclusive at this point.
- I also sent them all of the documentation I gathered from DEP during my visit a few months ago.



## **CC48 Meeting October 11, 2017 – 10am**

Attendees: Michael Shannabrook (Emergency Services), Steven Buffington (PPZ), Jeff Shue (CS Davidson – Engineer), Tom Landis (Highway Superintendent), Chaz Green (PW Director), Cody Santiago (Emergency Manager), Lettice Brown (MS4 Coordinator).

- Discussed what we know - That some kind of automotive oil, fluids etc. are coming from CC48. Talked about the multiple reports dating back to 2012-2013.
- Brought to the attention two ALS samples that were taken in 2013 and 2014. The result is Oil/Grease Hexane Extractable. So we are assuming it is some type of automotive fluid.
- Discussion of the drainage area ensued. There were several maps floating around that showed the pipes and draining areas
- It was decided that since booms are placed at Park Street and Hartley, that we should put in new ones there and ones just upstream from that manhole on West Street and Lincoln St, preferably today. Then monitor and see whether the oil is coming in between the manholes to try to narrow down the problem area.
- Tom suggested that Albert (Highway) should tag along as we change out the booms so he is familiar with the process and can see what we are seeing. Also suggested that







Veronica show us how it's done and should be present when placing the booms this time around.

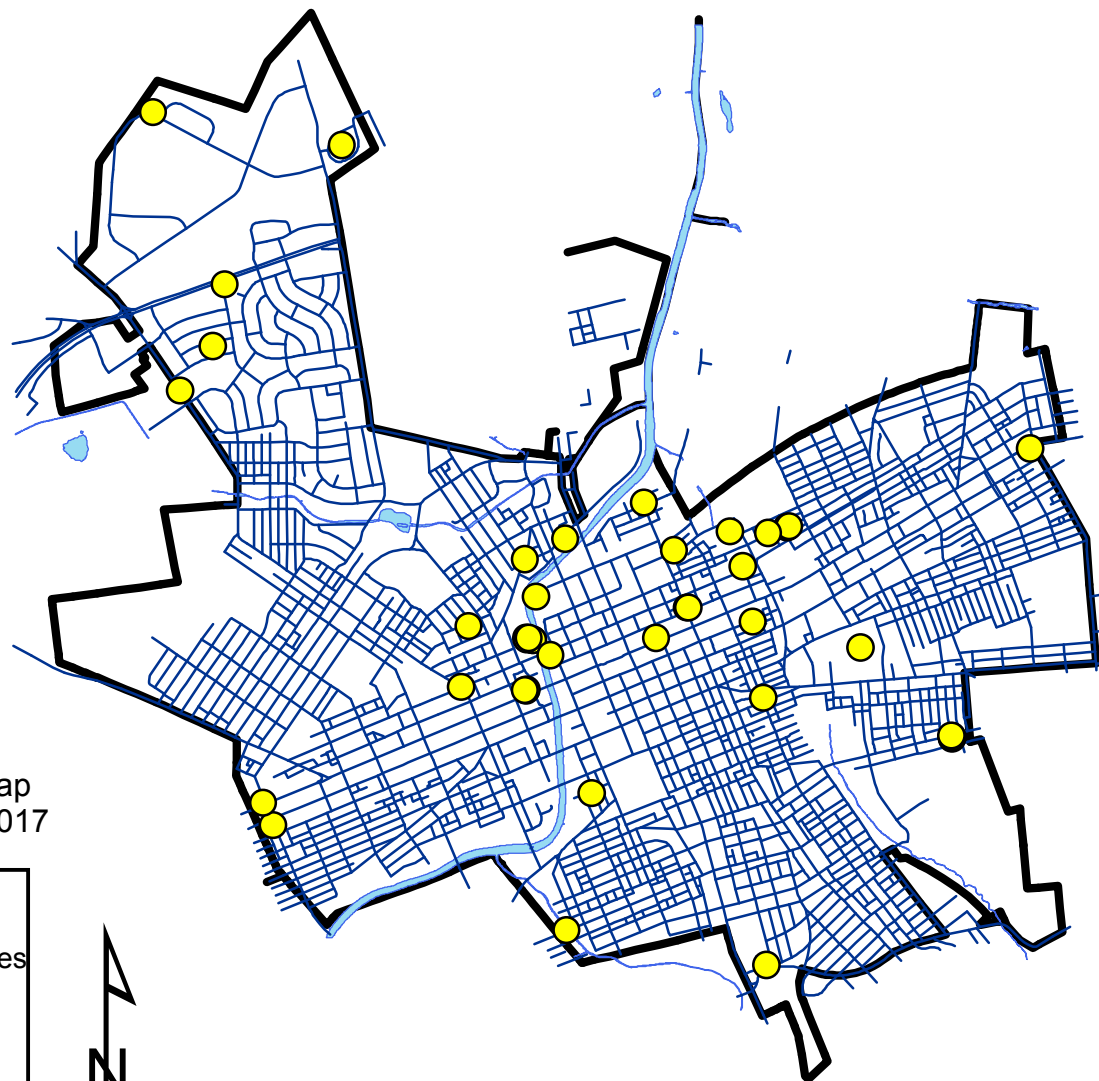
- The idea of dye testing came up and would be the next step if the first idea does not help. After that, and as a last resort, we could try smoke testing.
- Buffington mentioned to ask Veronica about the ice melt place, if it was ever investigated and what the outcome was
- We all took a look at page 38 in the map book and verified to place the new booms into the manhole on West and Lincoln Street.
- This is where we will start and go from there.



Illicit Discharge Map  
April 2016-March 2017

**Legend**

-  Illicit Discharges
-  CLINE-ROAD
-  WATER
-  CITY\_L





# MCM #4 Appendix

- **MCM #4 Project Plan**
- **BMP 4.1 Attachments**
  - Memorandum of Understanding with York County Conservation District



# MCM #4 Project Plan

- BMP 4.1

Description:

Develop your program consisting of all procedures necessary to comply with the requirements of this MCM. Your program shall provide for construction stormwater permitting, construction inspection, and enforcement of installation and maintenance of the necessary E&S control measures. Your program shall describe clearly how your program will be coordinated with DEP's NPDES Construction Stormwater Permitting program.

Measurable Goal:

For new permittees, the written program for this MCM shall be developed during the first year of permit coverage; nevertheless, you are responsible for implementation of this MCM during entire term of this permit, including the time you are developing your program.

For all permittees, your program shall be reviewed and updated during each year of permit coverage. The purpose of the written program is to establish clear roles and responsibilities for the implementation of the MCM #4 requirements. An agreement between the permittee, the CCD, and any other resources to be used by the permittee that clearly defines roles for each entity is recommended. If an agreement is made, you shall place and keep a written copy in your file, consistent with the Retention of Records requirements in this Permit. Please note that in accordance with Section A.2.h in Part A of the Authorization to Discharge, as the permittee you are responsible to ensure that implementation of all requirements under this Permit are fulfilled.

Action Plan:

The City checked Option MCM #4.A in Section E(4) – (5) of the NOI. Therefore, they are relying on DEP's statewide QLP for issuing NPDES Permits for Stormwater Discharges Associated with Construction Activities to satisfy all requirements under this Minimum Control Measure.

The City has executed a Memorandum of Understanding (MOU) with the York County Conservation District to define the roles and responsibilities involved with the program. The Conservation District performs regular inspections of all active construction sites located within the MS4 regulated area and forwards a copy of all inspection records and violation notices to the City. A record of all correspondence with the Conservation District is kept by the City to document the District's activities.

The City has a responsibility to ensure that adequate NPDES permitting and Erosion and Sedimentation Control Plans are in place, when applicable, prior to the issuance on a building permit. Additionally, upon request by the Conservation District, the City will suspend the issuance of any building permits until site deficiencies or violations are considered resolved by the District.

- BMP 4.2

Description:

The permittee shall enact, implement, and enforce an ordinance to require the implementation of erosion and sediment control BMPs, as well as sanctions to ensure compliance.

Measurable Goal:

Within the first year of coverage under the permit, new permittees shall enact and implement an ordinance that meets all applicable requirements of this permit. (Non-municipal permittees shall develop and implement an SOP).

Permittees shall submit a letter signed by a municipal official, municipal engineer or the municipal solicitor as an attachment to their first periodic report certifying the enactment and



implementation of a stormwater management ordinance that meets all requirements of this permit.

Action Plan:

The City checked Option MCM #4.A in Section E(4) – (5) of the NOI. Therefore, they are relying on DEP’s statewide QLP for issuing NPDES Permits for Stormwater Discharges Associated with Construction Activities to satisfy all requirements under this Minimum Control Measure.

The City has executed a Memorandum of Understanding (MOU) with the York County Conservation District to define the roles and responsibilities involved with the program. The Conservation District performs regular inspections of all active construction sites located within the MS4 regulated area and forwards a copy of all inspection records and violation notices to the City. A record of all correspondence with the Conservation District is kept by the City to document the District’s activities.

The City has a responsibility to notify DEP or the York County Conservation District within 5 days of the receipt of an application for a permit involving earth disturbances consisting of 1 acre or more in accordance with 25 Pa. Code 102.42.

- **BMP 4.3**

Description:

Develop and implement requirements for construction site operators to control waste at the construction site that may cause adverse impacts to water quality. While sediment is the most common pollutant of concern for MCM #4, there are other types of pollutants that also can be a concern and the intent of this BMP is to address these other types of pollutants, such as, but not limited to, discarded building materials, washout from concrete trucks, chemicals, litter, and sanitary waste.

Measurable Goal:

New permittees shall establish requirements to address this BMP by the end of the first year of permit coverage. Renewal permittees shall continue to implement existing requirements and update as necessary. This could be implemented by written municipal ordinance/code provisions, by standard notes on the site plans, by any other written format that accomplishes the objectives of this BMP, or by any combination of these measures. The goal of this BMP shall be communicated to construction site operators during pre-construction meetings. This BMP shall be implemented during each year of the MS4 permit. Permittees must prepare and maintain records of site inspections, including dates and results and you must maintain these records in accordance with the Retention of Records requirements in this Permit.

Action Plan:

The City checked Option MCM #4.A in Section E(4) – (5) of the NOI. Therefore, they are relying on DEP’s statewide QLP for issuing NPDES Permits for Stormwater Discharges Associated with Construction Activities to satisfy all requirements under this Minimum Control Measure.

The City has executed a Memorandum of Understanding (MOU) with the York County Conservation District to define the roles and responsibilities involved with the program. The Conservation District performs regular inspections of all active construction sites located within the MS4 regulated area and forwards a copy of all inspection records and violation notices to the City. A record of all correspondence with the Conservation District is kept by the City to document the District’s activities.

The City has enacted, implemented and enforced an ordinance that requires the implementation of E&S control BMPs that includes sanctions for non-compliance, as applicable. (Ord 13-1981. Passed 5-20-81)



- BMP 4.4

Description:

Develop and implement procedures for the receipt and consideration of public inquiries, concerns, and information submitted by the public (to the permittee) regarding local construction activities. The permittee shall demonstrate acknowledgement and consideration of the information submitted, whether submitted verbally or in writing.

Measurable Goal:

Permittees shall establish and implement a tracking system to keep a record of any submitted public information as well as your response, actions, and results. This BMP shall be implemented during each year of coverage under this General Permit and information should be submitted with the each periodic report

Action Plan:

The City checked Option MCM #4.A in Section E(4) – (5) of the NOI. Therefore, they are relying on DEP's statewide QLP for issuing NPDES Permits for Stormwater Discharges Associated with Construction Activities to satisfy all requirements under this Minimum Control Measure.

The City has executed a Memorandum of Understanding (MOU) with the York County Conservation District to define the roles and responsibilities involved with the program. The Conservation District performs regular inspections of all active construction sites located within the MS4 regulated area and forwards a copy of all inspection records and violation notices to the City. A record of all correspondence with the Conservation District is kept by the City to document the District's activities.

The City has a responsibility to ensure that adequate NPDES permitting and Erosion and Sedimentation Control Plans are in place, when applicable, prior to the issuance on a building permit. Additionally, upon request by the Conservation District, the City will suspend the issuance of any building permits until site deficiencies or violations are considered resolved by the District.





YORK COUNTY  
CONSERVATION DISTRICT

*Conserving Natural Resources for Our Future*

April 8, 2011

City of York  
Attn: James E. Gross, Director of Public Works  
P.O. Box 509  
York, PA 17405

RE: Memorandum of Understanding

Dear Mr. Gross:

On April 7, 2011 the York County Conservation District Board of Directors voted to accept the Memorandum of Understanding (MOU). Enclosed is your copy of the signed MOU. If you have any questions please feel free to contact me at phone number 717-840-7430.

Thank you for your on-going cooperation in protecting our natural resources!

Yours in Conservation,

Eric P. Jordan  
Resource Conservationist

Enclosure - MOU





**MEMORANDUM OF UNDERSTANDING (MOU)**  
**Between the**  
**YORK COUNTY CONSERVATION DISTRICT**  
**and**  
**CITY OF YORK**

---

**This Memorandum has been prepared jointly and agreed upon by each party for the following purposes:**

- To serve as a joint commitment by the signatory parties to control accelerated erosion and to prevent sediment pollution to the waters of the Commonwealth which may result from earth disturbance activities conducted in the City of York.
- To serve as a joint commitment by the signatory parties to ensure Best Management Practices (BMPs) are implemented on the ground to protect, maintain, reclaim, and restore water quality and the existing and designated uses of waters of this Commonwealth located in the City of York for the benefit of the City's citizens and downstream water users.
- To serve as a basis for stating the role of each party in administering the Commonwealth of Pennsylvania's Title 25, Chapter 102 regulations and General (PAG-02) National Pollutant Discharge Elimination System (NPDES) permit for Stormwater Discharges from Construction Activities.
- To assist the City of York in meeting its minimum control measures as required by federal PAG-13 permit for Stormwater Discharges from Small Separate Storm Sewer Systems (MS-4s). This MOU will serve to satisfy Minimum Control Measure #4 – Construction Site Runoff Control and will assist in satisfying Minimum Control Measure #5 – Post-Construction Stormwater Management in New Development and Redevelopment.
- To serve as a basis for stating the role of each party in administering the provisions of the City of York's Post-Construction Stormwater Management Ordinance # 936 and Subdivision and Land Development Ordinance # 1331.

**I. In carrying out the intent of this memorandum, the York County Conservation District (District) will:**

**A. E&S Plan Reviews / NPDES Permit Processing**

- 1) Invite the City of York's (City) engineer to all scheduled NPDES pre-application meetings. Attendance will be at the City engineer's discretion.
- 2) Complete a technical review of all E&S plans proposing 1 acre or more of earth disturbance and determine if an NPDES permit is required. Initial technical reviews will be completed within 50 calendar days of receiving a complete plan submission. Additional technical reviews will be completed within 30 calendar days of receiving a complete revised plan submission.
- 3) Complete a technical review of all E&S plans proposing 5,000 square feet to 0.99 acres of earth disturbance when required by City ordinance. The technical review will be completed within 50 calendar days of receiving a complete plan submission.



- 4) Conduct all technical E&S plan reviews in accordance with the District's delegation agreement with PA Department of Environmental Protection (DEP), current Chapter 102 regulations, and the most current PA DEP Erosion and Sediment Pollution Control Program Manual.
- 5) Provide the City with courtesy copies of all administrative and technical plan review deficiency letters, E&S plan approval letters, and copies of the stamped approved E&S plans and final PCSM plans. Deficiency letters will be forwarded via email to the City.
- 6) Provide the City with an adequate supply of the District's "*Guide to Developing an Effective Erosion and Sediment Control Plan for Single Lot Projects*."
- 7) Maintain an E&S Control webpage on the District's website ([www.yorkccd.org](http://www.yorkccd.org)) with all current E&S plan review and NPDES applications, District services fee schedule, useful links, and other information to assist applicants and plan preparers in preparing quality E&S & PCSM plans.
- 8) Conduct periodic educational workshops regarding erosion and sediment control and post construction stormwater management and invite representatives of the City to attend.
- 9) Withhold issuance of a NPDES permit or major modification(s) to an existing NPDES permit until the City's 30-day comment period has expired in accordance with Acts 67, 68, & 127 which amended the Municipalities Planning Code.
- 10) Conduct an administrative review of all PCSM plans requiring a NPDES permit within 20 calendar days of receipt of the plans. Any obvious technical/conceptual deficiencies will be brought to the City engineer's attention.
- 11) Request and receive a PCSM plan consistency/approval letter signed by the City engineer for all NPDES permit applicants prior to issuing any general NPDES permits to ensure that the PCSM plan approved by the City is the same as the PCSM plan submitted for the NPDES permit issued by the District.
- 12) Notify the City of revisions to any PCSM plans submitted to the District after issuance of the NPDES permit.

#### **B. Preconstruction Meetings, Complaint Investigations, & Site Inspections**

- 1) Request that the developer and/or contractor invite the City engineer, codes enforcement officer, or other City representative to the preconstruction meeting for all NPDES-permitted sites. Email the City engineer and/or codes enforcement officer informing him/her of all scheduled pre-construction meetings.
- 2) Investigate all erosion and sediment control (E&S) and stormwater-related complaints within 10 calendar days of receipt. Conduct periodic E&S follow-up inspections until violations have been corrected.
- 3) Refer all storm-water related complaints to the City to determine compliance with the City's stormwater management ordinance and/or MS-4 permit. Refer any stormwater complaints regarding post construction stormwater management (PCSM) BMPs required by the NPDES permit to the Region DEP office and copy the City on any correspondence.
- 4) Refer all complaints involving waterway obstruction and encroachments (potential Chapter 105 violations) to DEP's Southcentral Region Office for resolution. (The District is *not* delegated to administer DEP's Chapter 105 program.)



- 5) Provide the City with a copy of all inspection reports and site meeting correspondence within 14 calendar days of the date of inspection or site meeting. Correspondence will be forwarded via email.
- 6) Provide the City with a copy of all NPDES copermittee/transferee acknowledgement letters.
- 7) Serve as a repository for all plans, complaints, inspection reports, correspondence, etc. that involve earth disturbance activities.
- 8) Conduct routine and follow-up compliance inspections of all NPDES-permitted sites striving to obtain voluntary compliance. Conduct at least one annual inspection of each NPDES-permitted site. Additional inspections will be conducted for priority sites as needed to ensure compliance with Chapter 102. Compliance will be based on conformance with the District-approved E&S plans and the minimum design criteria set forth by the most current PA DEP Erosion and Sediment Control Program Manual. Inspections will be documented on a DEP earth disturbance inspection report form
- 9) Focus on compliance with the E&S plans during inspections however the District will also document any obvious (visual) violations/deficiencies with implementation of the PCSM plans and will bring to the attention of the City and DEP Southcentral Region office.
- 10) Initiate enforcement action in accordance with District and PA DEP compliance assistance and enforcement guidelines for sites where voluntary compliance with Chapter 102 regulations cannot be obtained.
- 11) Contact the City engineer and/or codes enforcement officer to verify compliance with the PCSM plan prior to acknowledging any Notice of Terminations (NOT) for NPDES-permitted site.
- 12) Review the City's Stormwater Management or Subdivision and Land Development Ordinance, at the City's request, to determine consistency with current Chapter 102 regulations.

## **II. In carrying out the intent of this memorandum, City of York will:**

- 1) Remind all citizens, builders, contractors, developers, and farmers that earth disturbance activities including clearing and grubbing of vegetation and construction of agricultural buildings, require implementation of erosion and sediment (E&S) control Best Management Practices (BMPs) and may require a written E&S plan. Refer them to the District for further guidance.
- 2) Provide the District's "*Guide to Developing an Effective Erosion and Sediment Control Plan for Single Lot Projects*", to building/grading permit applicants for projects proposing 5,000 square feet to 0.99 acres of earth disturbance. The guide is intended for low-hazard scattered single family residential lot construction and other small grading projects on non-NPDES permitted projects. It may not be used for commercial or industrial projects.
- 3) Withhold issuance of building and/or grading permit(s) for projects proposing 5,000 square feet to 0.99 acres of earth disturbance until the E&S plan has received District review and approval when such review and approval is required by City ordinance. Notify the applicant (at the earliest possible date) that the District has up to 50 calendar days to review the E&S plans.
- 4) Will notify building permit applicants of the requirement to have an E&S plan reviewed and approved by the District. A District-approved E&S plan will be a required item on the City's building permit application checklist.



- 5) Update the City's Stormwater Management Ordinance, Subdivision and Land Development Ordinance (or) adopt an E&S ordinance requiring District review and approval of **all** projects proposing 1 acre or more of earth disturbance (over the life of the project) so that the District can determine if an NPDES permit is required. Phased project(s) initially proposing less than 1 acre of earth disturbance but which is part or portion of a larger common plan of development which will disturb 1 or more acres may also require an NPDES permit.
- 6) Encourage applicants to meet with the District and City engineer at the earliest possible date to discuss preliminary concept plans thereby avoiding costly delays and revisions due to plan designs that may meet City requirements but fail to meet DEP requirements.
- 7) Notify the District within 10 calendar days of any PCSM plan revisions submitted to the City after the District has issued the NPDES permit.
- 8) Conduct an engineering review and approval of all PCSM plans required by a NPDES permit to ensure that DEP water quality requirements are met and require any revisions to the PCSM plans be resubmitted to the District.
- 9) Invite District to any scheduled preconstruction meetings and/or scheduled inspections especially prior to City adoption of the streets.
- 10) Will conduct during-construction and post-construction inspections to ensure compliance with implementation and long-term operation and maintenance of the PCSM BMPs in accordance with the PCSM plans.
- 11) Withhold:
  - issuance of any building or other permit or final land development plan approval to persons proposing or conducting earth disturbance activities requiring a NPDES permit until the District has approved coverage under the general NPDES Permit for Stormwater Discharges Associated With Construction Activities (as required by Chapter 102.43).
  - issuance of any building or other permit to any building permit applicant until the City has received a District copermittee acknowledgement letter from the building permit applicant (typically the builder) for any lot construction on NPDES-permitted sites (as required by Chapter 102.43). A District copermittee acknowledgement letter will be a required item on the City's building permit application checklist.
  - the issuance of any grading, building, or other permits *upon District request*, when a responsible party continually fails to voluntarily comply with Chapter 102 regulations as documented on two or more DEP earth disturbance inspection report forms.
- 12) Forward all third party complaints to the District regarding earth disturbance activities causing sediment pollution to Waters of the Commonwealth or presenting a significant potential for sediment pollution. Inform the District of any earth disturbance projects that have commenced without receiving E&S plan and/or NPDES permit approval.
- 13) Take the lead on all stormwater complaints (that do not involve earth disturbance activities) and, where applicable, work with the District to bring resolution.
- 14) Voluntarily comply with Chapter 102/NPDES requirements for all City earth disturbance activities.
- 15) Provide the District with copies of all current E&S/PCSM/SALDO ordinances upon District request to ensure consistent application of requirements and avoid duplication of effort.



- 16) Provide enforcement support when the permittee(s) has failed to voluntarily comply with the approved PCSM plans.

**III. This Memorandum of Understanding shall become effective immediately. It shall be reviewed periodically, as the need arises by either or both parties, and may be amended by mutual consent of both parties. This MOU may be terminated at any time, by either party, following a 30 day written notice to the other party.**

FOR THE CITY OF YORK

A. Kim Bracey  
MAYOR

3/21/11  
DATE

FOR THE YORK COUNTY CONSERVATION DISTRICT

Jack DeLoth  
CHAIRMAN, BOARD OF DIRECTORS

4-7-11  
DATE



# MCM #5 Appendix

- **MCM #5 Project Plan**
- **BMP 5.4 Attachments**
  - Article 943 (Enforcement and Penalties)
- **BMP 5.6 Attachments**
  - York City BMP Map
  - BMP Field Inspections



# MCM #5 Project Plan

- BMP 5.1

Description:

Develop a written procedure that describes how the permittee shall address all required components of this MCM. Guidance could be found in the Pennsylvania Stormwater Best Management Practices Manual.

Measurable Goal:

The written procedure shall be developed by the end of the first year of permit coverage and be reviewed and updated every permit year thereafter, as needed. The intent of BMP #1 is for the permittee to describe how the listed tasks will be accomplished.

Action Plan:

The City has selected to rely on DEP's statewide program for issuing NPDES Permits for stormwater discharges associated with construction activities to satisfy all requirements under BMPs #1 through #3. The City has executed a Memorandum of Understanding with the York County Conservation District to outline the roles and responsibilities shared by each group.

- BMP 5.2

Description:

Require the implementation of a combination of structural and/or non-structural BMP's that are appropriate to the local community, that minimize water quality impacts, and that are designed to maintain pre-development runoff conditions. This requirement can be met by ensuring that the selected BMPs comply with the municipal Stormwater Management Ordinance that meets the requirements of the permit.

Measurable Goal:

All qualifying development or redevelopment projects shall be reviewed to ensure that their post-construction stormwater management plans and selected BMPs conform to the applicable requirements. A tracking system (e.g., database, spreadsheet, or written list) shall be maintained to record qualifying projects and their associated BMPs. In your records, you shall note if there are no qualifying projects in a calendar year.

Action Plan:

The City has selected to rely on DEP's statewide program for issuing NPDES Permits for stormwater discharges associated with construction activities to satisfy all requirements under BMPs #1 through #3. The City has executed a Memorandum of Understanding with the York County Conservation District to outline the roles and responsibilities shared by each group.

- BMP 5.3

Description:

Ensure that controls are installed that shall prevent or minimize water quality impacts.

Measurable Goal:

All qualifying development or redevelopment projects shall be inspected during the construction phase to ensure proper installation of the approved structural PCSM BMPs. A tracking system (e.g., database, spreadsheet, or written list) shall be implemented to track the inspections conducted and to track the results of the inspections (e.g., BMPs were, or were not, installed properly). Permittees not relying on DEP's statewide QLP to satisfy requirements under this BMP shall summarize construction inspections and results in periodic reports. See BMP #6 for



requirements related to post-construction inspection and tracking of PCSM BMPs to ensure that the operation and maintenance plan is being implemented.

Action Plan:

The City has selected to rely on DEP's statewide program for issuing NPDES Permits for stormwater discharges associated with construction activities to satisfy all requirements under BMPs #1 through #3. The City has executed a Memorandum of Understanding with the York County Conservation District to outline the roles and responsibilities shared by each group

- BMP 5.4

Description:

The permittee shall enact, implement, and enforce an ordinance (municipal) or SOP or other regulatory mechanism (non-municipal) to address post-construction stormwater runoff from new development and redevelopment projects, as well as sanctions and penalties associated with non-compliance, to the extent allowable under State or local law.

Measurable Goal:

Within the first year of coverage under this permit, new permittees shall enact and implement a stormwater management ordinance (municipal) or SOP (non-municipal) that meets the requirements of this General Permit.

All permittees shall submit a letter signed by a municipal official, municipal engineer or the municipal solicitor as an attachment to their first periodic report certifying the enactment of a stormwater management ordinance that meets the requirements of this General Permit.

Action Plan:

The City adopted an ordinance consistent with the York County Model Act 167 Ordinance on September 20, 2011. The City Planning/Zoning Department and City Engineer are responsible for reviewing permit and land development applications for consistency with this ordinance.

i) Subdivision and land development submittals are reviewed by the City Engineer for stormwater management compliance. The Engineer issues comments to the City Planner who presents the plan to the City Planning Commission and City Council for approval. It is the City Planner's responsibility to ensure all comments are addressed prior to final plan approval and permit issuance. The City Engineer recommends the establishment of financial security to City Council and provides construction inspection for plans requiring stormwater management facilities. It is the City Planner's responsibility to ensure that Operation and Maintenance Agreements and Stormwater As-Builts are recorded for all applicable projects.

ii) Projects not requiring a land development submittal, which propose to install 1,000 ft<sup>2</sup> of impervious area or greater, require the submission of a stormwater management site plan. The City Engineer reviews these plans and issues comments to the City Planner. The City Planner ensures all comments are addressed prior to authorizing the issuing of a permit. It is the City Planner's responsibility to ensure that Operation and Maintenance Agreements and Stormwater As-Builts are recorded for all applicable projects.

iii) Projects not requiring a land development submittal, which propose 999 ft<sup>2</sup> of impervious area or less are reviewed and approved internally by the Zoning Department through the City's Small Projects process.

- BMP 5.5

Description:

Develop and implement measures to encourage and expand the use of Low Impact Development (LID) in new and redevelopment. Measures also should be included to encourage retrofitting LID



into existing development. DEP's Pennsylvania Stormwater Best Management Practices Manual provides guidance on implementing LID practices.

Measurable Goal:

In your inventory of development and redevelopment projects authorized for construction since March 10, 2003, that discharge stormwater to your regulated MS4s, indicate which projects incorporated LID practices and for each project list and track the BMPs that were used.

Enact ordinances consistent with LID practices and repeal sections of ordinances that conflict with LID practices. Progress with enacting and updating your ordinances to enable the use of LID practices shall be summarized in the periodic reports.

Action Plan:

The Municipality adopted an ordinance consistent with the York County Model Act 167 Stormwater Ordinance on September 20, 2011 which contains multiple requirements related to LID and the protection of natural features.

i) Specifically, Section 937.01.H.3 requires developers: To the maximum extent practicable, incorporate the techniques for Low Impact Development Practices described in the Pennsylvania Stormwater Best Management Practices Manual (BMP Manual).

ii) The Stormwater Management Ordinance also requires the protection of natural features such as floodplains, wetlands, wooded areas, and existing vegetation.

iii) The City of York is already heavily built up with very few undeveloped parcels remaining. To aid with the large amount of untreated stormwater runoff, the City's ordinance only allows developers to take credit for 80% of existing impervious area when redeveloping a site. This will ultimately lead to an increase in pervious area and stormwater treatment as sites are redeveloped.

- **BMP 5.6**

Description:

Ensure adequate operation and maintenance of all post-construction stormwater management BMPs installed at all qualifying development or redevelopment projects (including those owned or operated by permittee).

Measurable Goal:

Within the first year of coverage under this permit, new permittees shall develop and implement a written inspection program to ensure that stormwater BMPs are properly operated and maintained. The program shall include sanctions and penalties for non-compliance. All permittees shall review and update the inspection program annually and shall continue to implement this BMP.

An inventory of PCSM BMPs shall be developed by permittees and shall be continually updated during the term of coverage under the permit as development projects are reviewed, approved, and constructed. This inventory shall include all PCSM BMPs installed since March 10, 2003 that discharge directly or indirectly to your regulated small MS4s. The inventory also should include PCSM BMPs discharging to the regulated small MS4 system that may cause or contribute to violation of water quality standard. The inventory shall include:

- all PCSM BMPs that were installed to meet requirements in NPDES Permits for Stormwater Discharges Associated with Construction Activities approved since March 10, 2003
- the exact location of the PCSM BMP (e.g., street address)
- information (e.g., name, address, phone number(s)) for BMP owner and entity responsible for BMP Operation and Maintenance (O&M), if different from BMP owner
- the type of BMP and the year it was installed
- maintenance required for the BMP type according to the Pennsylvania Stormwater BMP



Manual or other manuals and resources

- the actual inspection/maintenance activities for each BMP
- an assessment by the permittee if proper operation and maintenance occurred during the year and if not, what actions the permittee has taken, or shall take, to address compliance with O&M requirements

Action Plan:

1) Written Inspection Program: The City began inventorying and inspecting BMPs during the 2011-2012 permit year. At that time, the City Engineer performed an inspection of all known BMPs and issued violation letters to those owners of facilities which required corrective action. The City worked with a majority of these property owners to correct these issues. During the subsequent permit years, additional BMPs were added to the inventory as they were discovered in the field or were constructed and were also inspected for compliance. The City continues to work with these owners through follow-up inspections to bring all BMPs installed within the City into compliance. Once the City has achieved compliance across all known BMPs which have been installed since 2003, the following inspection protocol will be followed:

- i) All PCSM BMPs will be inspected by City Staff at least once in a four year period. The BMP inspections will be divided into the same four inspection areas that the MCM 3 illicit discharge inspections are utilizing.
- ii) The field inspector utilizes a BMP inspection form to certify the inspection occurred and document any deficiencies observed at that time. Photos are also taken to include with these reports.
- iii) The City will notify each property owner that an inspection has occurred of their BMP. This letter shall include any deficiencies noted during the inspection and require the owner to remediate these issues within a given amount of time.
- iv) The City will perform a follow up inspection of all deficient BMPs upon notification from the owner that all items have been corrected. Steps ii through iv will be repeated until the BMP is deemed compliant.
- v) In the event a BMP owner does not comply with the City's request to correct noted deficiencies, the City Solicitor will be consulted to aid in enforcement action against this owner. The type of enforcement action may vary dependent upon the Solicitor's guidance.
- vi) All records collected during the inspection process are reported to DEP through each annual report process and uploaded to the GIS system for tracking purposes.

2) Inventory of PCSM BMPs: The City utilizes a GIS based inventory system to track PCSM BMPs. Within this system, all inspection and compliance records are stored in addition to the above required information.

The City utilizes the release of public security for stormwater management BMPs as the trigger to add a BMP to the post construction inventory from the construction inventory. The release of security acts as the City's final approval of a BMP to certify that it was constructed per the approved plan. Any BMP for which the City has not yet released security for, is not considered complete and is not inspected as part of this minimum control measure.



ARTICLE 943  
Enforcement and Penalties

943.01	Right-of-entry.	943.05	Suspension and revocation.
943.02	Inspection.	943.06	Penalties.
943.03	Notification.	943.07	Appeals.
943.04	Enforcement.		

943.01 RIGHT-OF-ENTRY.

Upon presentation of proper credentials, the Municipality may enter at reasonable times upon any property within the Municipality to inspect the condition of the stormwater structures and facilities in regard to any aspect regulated by this Ordinance.  
(Ord. 32-2011. Passed 10-4-11.)

943.02 INSPECTION.

SWM BMPs shall be inspected by the landowner, or the owner's designee, including the Municipality for dedicated and owned facilities, according to the following list of minimum frequencies:

(a) Annually.

- (1) During or immediately after the cessation of a ten (10)-year or greater storm, i.e., a storm of a estimated frequency of recurrence of ten (10) years or greater interval of time.
- (2) A report of all inspections shall be submitted to the Municipality annually.
- (3) All inspection records shall be maintained by the landowner and shall be made available to the Municipality upon written request  
(Ord. 32-2011. Passed 10-4-11.)

943.03 NOTIFICATION.

In the event that a person fails to comply with the requirements of this Ordinance, or fails to conform to the requirements of any permit issued hereunder, the Municipality shall provide written notification of the violation. Such notification shall set forth the nature of the violations and establish a time limit for the correction of these violation(s). Failure to comply within the time specified shall subject such person to the penalty provisions of this Ordinance. All such penalties shall be deemed cumulative and do not prevent the Municipality from pursuing any and all remedies. It shall be the responsibility of the Owner of the real property on which any Regulated Activity is proposed to occur, is occurring, or has occurred, to comply with the terms and conditions of this Ordinance.  
(Ord. 32-2011. Passed 10-4-11.)

943.04 ENFORCEMENT.

(a) It shall be unlawful for a person to undertake any regulated activity except as provided in an approved SWM Site Plan, unless specifically exempted in Section 937.02.

(b) It shall be unlawful to violate any Section of this Ordinance.

(c) Inspections regarding compliance with the SWM Site Plan are a responsibility of the Municipality. (Ord. 32-2011. Passed 10-4-11.)

943.05 SUSPENSION AND REVOCATION.

(a) Any approval or permit issued by the Municipality pursuant to this Ordinance may be suspended or revoked for:



- (1) Non-compliance with or failure to implement any provision of the approved SWM Site Plan or O&M Agreement.
  - (2) A violation of any provision of this Ordinance or any other applicable law, ordinance, rule, or regulation relating to the Regulated Activity.
  - (3) The creation of any condition or the commission of any act during the Regulated Activity which constitutes or creates a hazard, nuisance, pollution, or endangers the life or property of others.
- (b) A suspended approval shall be reinstated by the Municipality when:
- (1) The Municipality has inspected and approved the corrections to the violations that caused the suspension.
  - (2) The Municipality is satisfied that the violation has been corrected.
- (c) An approval that has been revoked by the Municipality cannot be reinstated. The applicant may apply for a new approval under the provisions of this Ordinance.
- (d) If a violation causes no immediate danger to life, public health, or property, at its sole discretion, the Municipality may provide a limited time period for the owner to correct the violation. In these cases, the Municipality will provide the owner, or the owner's designee, with a written notice of the violation and the time period allowed for the owner to correct the violation. If the owner does not correct the violation within the allowed time period, the municipality may revoke or suspend any, or all, applicable approvals and permits pertaining to any provision of this Ordinance.  
(Ord. 32-2011. Passed 10-4-11.)

#### 943.06 PENALTIES.

(a) Any person, partnership or corporation who or which has violated the provisions of this Ordinance shall, upon being found liable therefore in a civil enforcement proceeding commenced by the Municipality, pay a judgement of not more than one thousand dollars (\$1,000.00). No judgement shall commence or be imposed, levied or payable until the date of the determination of a violation by the district justice. If the defendant neither pays nor timely appeals the judgement, the Municipality may enforce the judgement pursuant to the applicable rules of civil procedure. Each day that a violation continues shall constitute a separate violation, unless the district justice determining that there has been a violation further determines that there has been a good faith basis for the person, partnership or corporation violating the Ordinance to have believed that there was no such violation, in which event there shall be deemed to have been only one such violation. The Court of Common Pleas, upon petition, may grant an order of stay, upon cause shown, tolling the per diem judgement pending a final adjudication of the violation and judgement.

(b) The Municipality may institute injunctive, mandamus, or any other appropriate action or proceeding at law or in equity for the enforcement of this Ordinance. Any court of competent jurisdiction shall have the right to issue restraining orders, temporary or permanent injunctions, mandamus or other appropriate forms of remedy or relief.  
(Ord. 32-2011. Passed 10-4-11.)

#### 943.07 APPEALS.

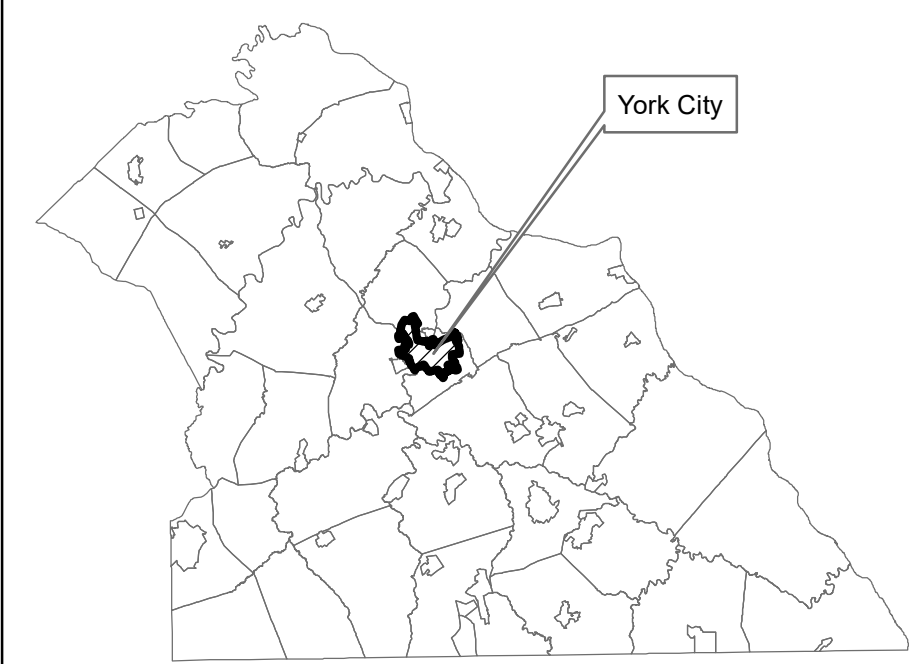
(a) Any person aggrieved by any action of the Municipality or its designee, relevant to the provisions of this Ordinance, may appeal to the City Council within 30 days of that action.

(b) Any person aggrieved by any decision of the Municipality, relevant to the provisions of this Ordinance, may appeal to the York County Court of Common Pleas within 30 days of the Municipality's decision.  
(Ord. 32-2011. Passed 10-4-11.)



# York City BMPs

## Location Map



York County, Pennsylvania

### Vegetated Roof

ID Ferguson Elementary School Vegetated Roof

### Level Spreader

ID Cintas Level Spreader

### Bio-Retention Soil Amendment

ID SA1 Lofts at Ribbon Place Bio-Retention Amended Soil  
SA2 George St Commons Amended Soil

### FloGard Downspout Filter

ID FG1 New Hope Academy Charter School Flow Gard Downspout  
FG2 South Court St LD Flow Gard Downspout

### Filter Strip

ID FS1 Stillmeadow Church of the Nazarene Filter Water Quality Soil Filter  
FS2 St. Matthews Evangelical Lutheran Church Grass Filtration Strip  
FS3 Cintas Vegetated Filter Strip

### Rain Garden

ID RG1 Logos Academy Bio-retention Bed/Rain Garden  
RG2 York College Freshman Dorms Rain Garden #1  
RG3 York College Freshman Dorms Rain Garden #2  
RG4 Ferguson Elementary School Rain Garden/Bio-retention Area  
RG5 Colony Park Corner Rain Garden/Bio-Retention  
RG6 South Court St LD Rain Garden  
RG7 Helen Thackston Charter School West  
RG8 Helen Thackston Charter School East  
RG9 Sheaffer Family Chiropactic Rain Garden  
RG10 St John the Baptist Biofiltration

### Storage Facility

ID SF1 YMCA Giham Aquatic Center Subsurface Storage/Recharge Facility  
SF3 Ruters Farm Store #25A Underground Chamber #3  
SF2 Ruters Farm Store #25A Underground Chamber #2  
SF4 Crispus Attacks Underground Detention Basin  
SF5 Crispus Attacks Early Childhood Center Stomw ater Storage Facility  
SF6 York Academy Regional Charter School Rainw ater Storage Tank 1500  
SF7 York Academy Regional Charter School Rainw ater Storage Tank 500  
SF8 George Street Commons Storage Basin A  
SF9 Chic-Fil-A Storage Basin  
SF10 Skyline Gymnastics Storage Basin  
SF12 Homes at Thackston Park Basin 1  
SF13 Homes at Thackston Park Basin 2  
SF14 Helen Thackston Charter School Storage Pipes

### Basin

ID B1 Apple Automotive Collision Center Stormw ater Basin  
B2 Small's Field Upgrade Retention Basin "B"  
B3 York College Freshman Dorms Infiltration Basin #1  
B4 Parkway Homes Infiltration Basin #1  
B5 Parkway Homes Infiltration Basin #2  
B6 Penn State York Driveway and Parking Lot Basin  
B7 Penn State York Veterans Memorial Park Basin  
B8 United Refrigeration Basin  
B9 KFC Basin (Ref to Chick-Fil-A Plan)  
B10 Wellsplan Plan Basin  
B11 York College Jackson St Parking Lot  
B12 Vogelsong Road Bus Transfer  
B13 Turkey Hill Mnt Markets Basin

### Water Quality Structure

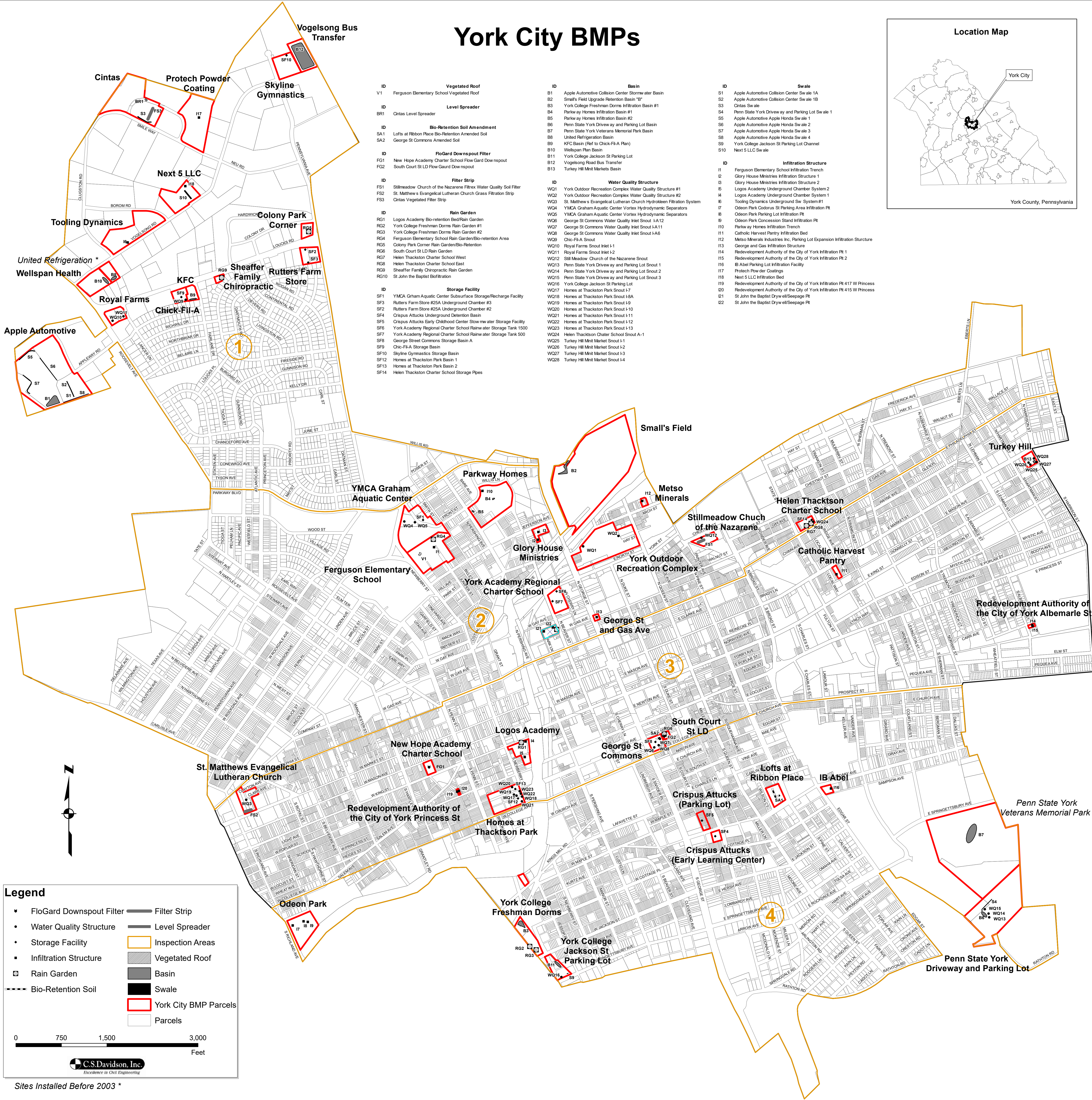
ID WQ1 York Outdoor Recreation Complex Water Quality Structure #1  
WQ2 York Outdoor Recreation Complex Water Quality Structure #2  
WQ3 St. Matthews Evangelical Lutheran Church Hydrokreen Filtration System  
WQ4 YMCA Graham Aquatic Center Vortex Hydrodynamic Separators  
WQ5 YMCA Graham Aquatic Center Vortex Hydrodynamic Separators  
WQ6 George St Commons Water Quality Inlet Snout I-A12  
WQ7 George St Commons Water Quality Inlet Snout I-A11  
WQ8 George St Commons Water Quality Inlet Snout I-A6  
WQ9 Chic-Fil-A Snout  
WQ10 Royal Farms Snout Inlet I-1  
WQ11 Royal Farms Snout Inlet I-2  
WQ12 Still Meadow Church of the Nazarene Snout  
WQ13 Penn State York Driveway and Parking Lot Snout 1  
WQ14 Penn State York Driveway and Parking Lot Snout 2  
WQ15 Penn State York Driveway and Parking Lot Snout 3  
WQ16 York College Jackson St Parking Lot  
WQ17 Homes at Thackston Park Snout I-7  
WQ18 Homes at Thackston Park Snout I-8A  
WQ19 Homes at Thackston Park Snout I-9  
WQ20 Homes at Thackston Park Snout I-10  
WQ21 Homes at Thackston Park Snout I-11  
WQ22 Homes at Thackston Park Snout I-12  
WQ23 Homes at Thackston Park Snout I-13  
WQ24 Helen Thackston Charter School Snout A-1  
WQ25 Turkey Hill Mnt Market Snout I-1  
WQ26 Turkey Hill Mnt Market Snout I-2  
WQ27 Turkey Hill Mnt Market Snout I-3  
WQ28 Turkey Hill Mnt Market Snout I-4

### Swale

ID S1 Apple Automotive Collision Center Swale 1A  
S2 Apple Automotive Collision Center Swale 1B  
S3 Cintas Swale  
S4 Penn State York Driveway and Parking Lot Swale 1  
S5 Apple Automotive Apple Honda Swale 1  
S6 Apple Automotive Apple Honda Swale 2  
S7 Apple Automotive Apple Honda Swale 3  
S8 Apple Automotive Apple Honda Swale 4  
S9 York College Jackson St Parking Lot Channel  
S10 Next 5 LLC Swale

### Infiltration Structure

ID I1 Ferguson Elementary School Infiltration Trench  
I2 Glory House Ministries Infiltration Structure 1  
I3 Glory House Ministries Infiltration Structure 2  
I5 Logos Academy Underground Chamber System2  
I4 Logos Academy Underground Chamber System1  
I6 Tooling Dynamics Underground Sw System #1  
I7 Odeon Park Codorus St Parking Area Infiltration Pit  
I8 Odeon Park Parking Lot Infiltration Pit  
I9 Odeon Park Concession Stand Infiltration Pit  
I10 Parkway Homes Infiltration Trench  
I11 Catholic Harvest Pantry Infiltration Bed  
I12 Metso Minerals Industries Inc. Parking Lot Expansion Infiltration Structure  
I13 George and Gas Infiltration Structure  
I14 Redevelopment Authority of the City of York Infiltration Pit 1  
I15 Redevelopment Authority of the City of York Infiltration Pit 2  
I16 B Abel Parking Lot Infiltration Facility  
I17 Protech Pow der Coatings  
I18 Next 5 LLC Infiltration Bed  
I19 Redevelopment Authority of the City of York Infiltration Pit 417 W Princess  
I20 Redevelopment Authority of the City of York Infiltration Pit 415 W Princess  
I21 St John the Baptist Dryw ell/Seepage Pit  
I22 St John the Baptist Dryw ell/Seepage Pit



## Legend

- FloGard Downspout Filter
- Water Quality Structure
- Storage Facility
- Infiltration Structure
- ☐ Rain Garden
- Bio-Retention Soil
- Filter Strip
- Level Spreader
- ▭ Inspection Areas
- ▨ Vegetated Roof
- ▩ Basin
- ▬ Swale
- ▭ York City BMP Parcels
- ▭ Parcels

0 750 1,500 3,000 Feet

C.S.Davidson, Inc.  
Excellence in Civil Engineering

Sites Installed Before 2003 \*



**BMP Name/ID**

B5 Parkway Homes Infiltration Basin 2

**NPDES Permit #****Inspection Date**

04/05/17

**Time**

1:55PM

**Investigator**

Lettice Brown

**Temperature**

66 °F

**24 Hr Rainfall****48 Hr Rainfall**

0.25 in.

**Weather**

Partly Cloudy

## Overall (Good Condition)

---

Facility is in good condition. No standing water or erosion present

## Components

---

Earthen Component: Berm, Inside (Good)

Earthen Component: Berm, Top (Good)

Earthen Component: Bottom of Basin (Good)

Structural Component: Upstream Collection (Excellent)

## Recommendations

---

None

Prepared By  **CS Datum**



## Photo Log

**Photo No. 1:** Earthen Component: Berm, Top





**Photo No. 2:** Earthen Component: Bottom of Basin





**Photo No. 3: Earthen Component: Berm, Inside**





Photo No. 4: Structural Component: Upstream Collection





BMP Inspection  
CITY OF YORK



**BMP Name/ID**

B4 Parkway Homes Infiltration Basin 1

**NPDES Permit #**

**Inspection Date**

04/05/17

**Time**

2:00PM

**Investigator**

Lettice Brown

**Temperature**

66 °F

**24 Hr Rainfall**

**48 Hr Rainfall**

0.25 in.

**Weather**

Partly Cloudy

**Overall (Good Condition)**

Good condition. Looks good

**Components**

Earthen Component: Berm, Top (Good)

Earthen Component: Bottom of Basin (Excellent)

**Recommendations**

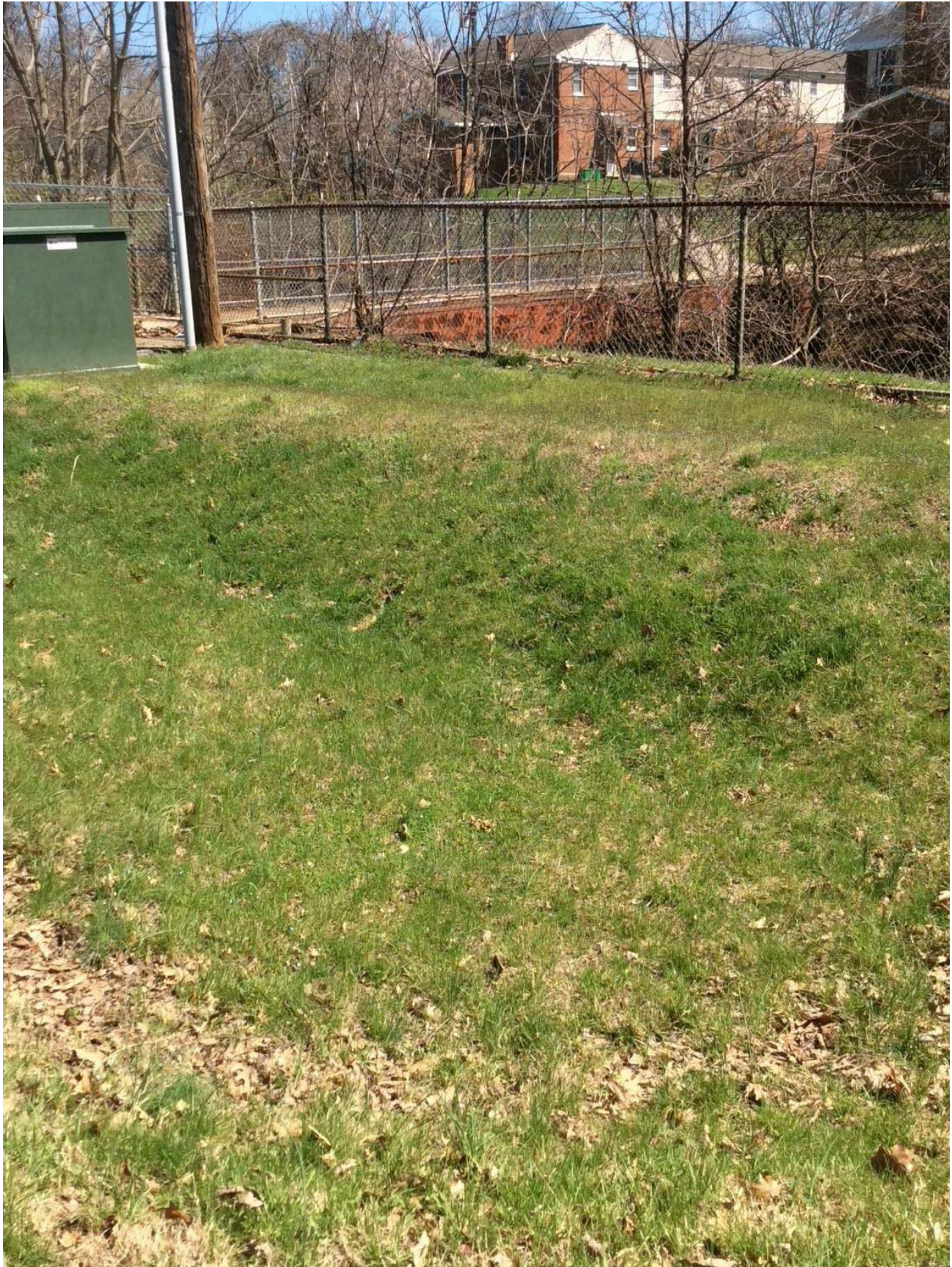
None

Prepared By  **CS Datum**



## Photo Log

**Photo No. 1:** Earthen Component: Berm, Top





**Photo No. 2:** Earthen Component: Bottom of Basin





**BMP Name/ID**

WQ2 York Outdoor Recreation Complex Water Quality Structure 2

**NPDES Permit #****Inspection Date**

09/26/17

**Time**

11:35AM

**Investigator**

Lettice Brown

**Temperature**

81 °F

**24 Hr Rainfall****48 Hr Rainfall****Weather**

Clear

**Overall (Fair Condition)**

---

Needs cleaned

**Components**

---

**Accumulation of Sediment? (Fair)**

Needs cleaned out

**Debris and Trash? (Good)**

None seen

**Recommendations**

---

1. Clean out

Prepared By  **CSDatum**



## Photo Log

Photo No. 1: image.jpg





Photo No. 2: image.jpg

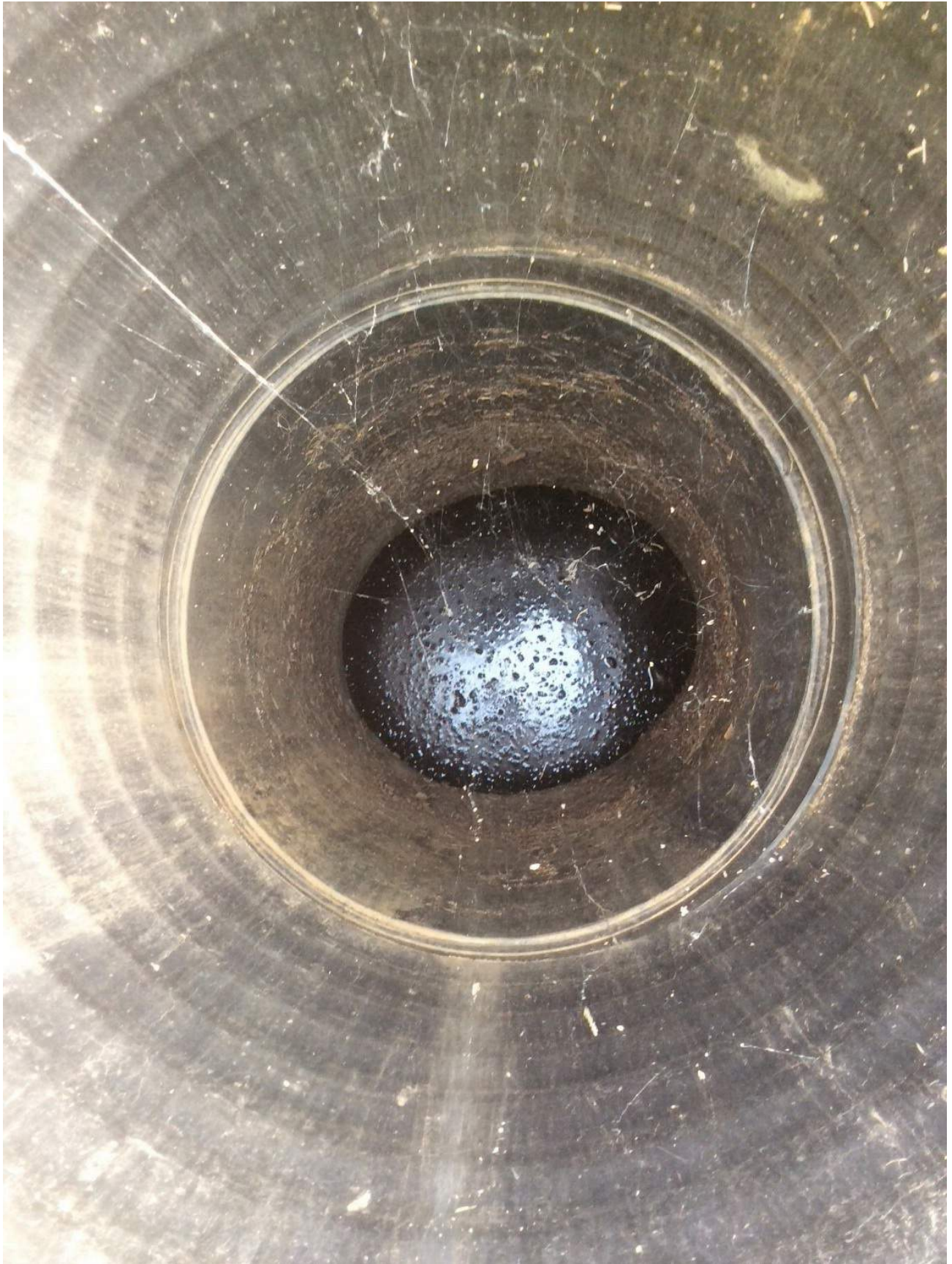




Photo No. 3: image.jpg





**BMP Name/ID**

WQ5 YMCA Graham Aquatic Center Vortex Hydrodynamic Separator

**NPDES Permit #****Inspection Date**

09/26/17

**Time**

11:55AM

**Investigator**

Lettice Brown

**Temperature**

81 °F

**24 Hr Rainfall****48 Hr Rainfall****Weather**

Partly Cloudy

**Overall (Good Condition)**

---

No comments

**Components**

---

**Accumulation of Sediment? (Fair)**

Water in the vortexes

**Debris and Trash? (Excellent)**

None

**Recommendations**

---

1. Check to see if they are draining properly

Prepared By  **CSDatum**



# Photo Log

Photo No. 1: image.jpg





Photo No. 2: image.jpg





**BMP Name/ID**

WQ3 St Matthews Evangelical Lutheran Church Hydrokleen Filtration  
System(Water Quality Insert)

**NPDES Permit #****Inspection Date**

12/04/17

**Time**

1:50PM

**Investigator**

Lettice Brown

**Temperature**

50 °F

**24 Hr Rainfall****48 Hr Rainfall****Weather**

Clear

**Overall (Good Condition)**

---

Some leaves

**Components**

---

Accumulation of Sediment? (Good)

Debris and Trash? (Good)

**Recommendations**

---

1. Might want to look at south end of drain, material may be coming loose

Prepared By  **CSDatum**



## Photo Log

Photo No. 1: image.jpg





**BMP Name/ID**

FS2 St Matthews Evangelical Lutheran Church Grass Filtration Strip

**NPDES Permit #****Inspection Date**

12/04/17

**Time**

1:55PM

**Investigator**

Lettice Brown

**Temperature**

50 °F

**24 Hr Rainfall****48 Hr Rainfall****Weather**

Clear

## Overall (Good Condition)

---

Looks good

## Components

---

Accumulation of Sediment? (Excellent)

Density of Vegetation (Excellent)

Excessive Compaction by Mowers or Vehicles? (Good)

Drain-down Time in 72 Hours? (Good)

Check Dams (Good)

Inlets or Sediment Sumps (Good)

Invasive or Unwanted Growth? (Good)

## Recommendations

---

None



## Photo Log

Photo No. 1: image.jpg





BMP Inspection  
CITY OF YORK



**BMP Name/ID**

I5 Logos Academy Underground Chamber System 2

**NPDES Permit #**

**Inspection Date**

12/04/17

**Time**

2:20PM

**Investigator**

Lettice Brown

**Temperature**

50 °F

**24 Hr Rainfall**

**48 Hr Rainfall**

**Weather**

Partly Cloudy

**Overall (Good Condition)**

---

Looks good

**Components**

---

Catch Basins and Inlets (Good)

Overlying Vegetation Maintained? (Good)

Excessive Compaction by Mowers or Vehicles? (Good)

**Recommendations**

---

None

Prepared By  **CSDatum**



## Photo Log

Photo No. 1: image.jpg





Photo No. 2: image.jpg





BMP Inspection  
CITY OF YORK



**BMP Name/ID**

I4 Logos Academy Underground Chamber System 1

**NPDES Permit #**

**Inspection Date**

12/04/17

**Time**

2:20PM

**Investigator**

Lettice Brown

**Temperature**

50 °F

**24 Hr Rainfall**

**48 Hr Rainfall**

**Weather**

Partly Cloudy

**Overall (Good Condition)**

---

Looks good

**Components**

---

Catch Basins and Inlets (Good)

Overlying Vegetation Maintained? (Good)

Excessive Compaction by Mowers or Vehicles? (Good)

**Recommendations**

---

None

Prepared By  **CS Datum**



## Photo Log

Photo No. 1: image.jpg





Photo No. 2: image.jpg





Photo No. 3: image.jpg





**BMP Name/ID**

RG1 Logos Academy Bio-retention Bed/Rain Garden

**NPDES Permit #****Inspection Date**

12/04/17

**Time**

2:25PM

**Investigator**

Lettice Brown

**Temperature**

50 °F

**24 Hr Rainfall****48 Hr Rainfall****Weather**

Partly Cloudy

## Overall (Good Condition)

---

Leaves and a few weeds should be taken out and cleaned up

## Components

---

**Pruning and Weeding (Fair)**

Some onion grass weeds

**Perennial Plant Cutting (Good)****Mulch and Erosion (Good)****Accumulation of Sediment? (Good)****Supplemental Watering Needed? (Good)****Tree and Shrub Health (Good)**

## Recommendations

---

1. Remove leaves and weeds

Prepared By  **CS Datum**



## Photo Log

Photo No. 1: image.jpg





Photo No. 2: image.jpg





Photo No. 3: image.jpg





**BMP Name/ID**

WQ23 Homes at Thackston Park Snout I-13

**NPDES Permit #****Inspection Date**

12/04/17

**Time**

2:30PM

**Investigator**

Lettice Brown

**Temperature**

50 °F

**24 Hr Rainfall****48 Hr Rainfall****Weather**

Partly Cloudy

## Overall (Fair Condition)

---

Needs TLC. Plaster around snout is breaking away

## Components

---

**Accumulation of Sediment? (Fair)**

Leaves and sheen

**Debris and Trash? (Fair)**

Leaves

## Recommendations

---

1. Clean out inlet according to O&M schedule

Prepared By  **CSDatum**



## Photo Log

Photo No. 1: image.jpg





Photo No. 2: image.jpg





**BMP Name/ID**

WQ22 Homes at Thackston Park Snout I-12

**NPDES Permit #****Inspection Date**

12/04/17

**Time**

2:35PM

**Investigator**

Lettice Brown

**Temperature**

50 °F

**24 Hr Rainfall****48 Hr Rainfall****Weather**

Partly Cloudy

## Overall (Good Condition)

---

Leaves

## Components

---

**Accumulation of Sediment? (Good)**

Leaves

**Debris and Trash? (Fair)**

Leaves

## Recommendations

---

1. Casing around snout weathering away should be fixed. Clean out inlet according to O&M schedule

Prepared By  **CSDatum**



## Photo Log

Photo No. 1: image.jpg





Photo No. 2: image.jpg





BMP Inspection  
CITY OF YORK



**BMP Name/ID**

WQ18 Homes at Thackston Park Snout I-8A

**NPDES Permit #**

**Inspection Date**

12/04/17

**Time**

2:40PM

**Investigator**

Lettice Brown

**Temperature**

49 °F

**24 Hr Rainfall**

**48 Hr Rainfall**

**Weather**

Clear

**Overall (Fair Condition)**

---

Leaves and sheen

**Components**

---

**Accumulation of Sediment? (Fair)**

Leaves and sheen

**Debris and Trash? (Fair)**

**Recommendations**

---

1. Clean out inlet according to O&M schedule

Prepared By  **CSDatum**



## Photo Log

Photo No. 1: image.jpg





Photo No. 2: image.jpg





BMP Inspection  
CITY OF YORK



**BMP Name/ID**  
SF13 Homes at Thackston Park Basin 2

**NPDES Permit #**

**Inspection Date**  
12/04/17

**Time**  
2:45PM

**Investigator**  
Lettice Brown

**Temperature**  
50 °F

**24 Hr Rainfall**

**48 Hr Rainfall**

**Weather**  
Clear

**Overall (Good Condition)**

---

Good

**Components**

---

**Component 1 (Good)**

**Recommendations**

---

None

Prepared By  **CSDatum**



## Photo Log

Photo No. 1: image.jpg





Photo No. 2: image.jpg





**BMP Name/ID**

WQ20 Homes at Thackston Park Snout I-10

**NPDES Permit #****Inspection Date**

12/04/17

**Time**

2:50PM

**Investigator**

Lettice Brown

**Temperature**

50 °F

**24 Hr Rainfall****48 Hr Rainfall****Weather**

Clear

**Overall (Good Condition)**

---

Leaves

**Components**

---

**Accumulation of Sediment? (Fair)**

Leaves

**Debris and Trash? (Good)**

Only leaves

**Recommendations**

---

1. Clean out inlet according to O&M schedule

Prepared By  **CSDatum**



## Photo Log

Photo No. 1: image.jpg





Photo No. 2: image.jpg





BMP Inspection  
CITY OF YORK



**BMP Name/ID**

SF12 Homes at Thackston Park storage Facility 1

**NPDES Permit #**

**Inspection Date**

12/04/17

**Time**

2:55PM

**Investigator**

Lettice Brown

**Temperature**

49 °F

**24 Hr Rainfall**

**48 Hr Rainfall**

**Weather**

Clear

**Overall (Good Condition)**

---

Good

**Components**

---

**Component 1 (Good)**

**Recommendations**

---

1. None

Prepared By  **CSDatum**



## Photo Log

Photo No. 1: image.jpg





**BMP Name/ID**

WQ21 Homes at Thackston Park Snout I-11

**NPDES Permit #****Inspection Date**

12/04/17

**Time**

3:00PM

**Investigator**

Lettice Brown

**Temperature**

49 °F

**24 Hr Rainfall****48 Hr Rainfall****Weather**

Clear

**Overall (Fair Condition)**

---

Lots of trash and cig butts

**Components**

---

**Accumulation of Sediment? (Good)**

None

**Debris and Trash? (Poor)**

Lots of trash

**Recommendations**

---

1. Clean out inlet according to O&M schedule

Prepared By  **CSDatum**



## Photo Log

**Photo No. 1:** image.jpg





Photo No. 2: image.jpg





BMP Inspection  
CITY OF YORK



**BMP Name/ID**

SF8 George St Commons Storage Basin A

**NPDES Permit #**

**Inspection Date**

12/05/17

**Time**

1:40PM

**Investigator**

Lettice Brown

**Temperature**

56 °F

**24 Hr Rainfall**

**48 Hr Rainfall**

**Weather**

Mostly Cloudy

**Overall (Good Condition)**

---

Good

**Components**

---

Catch Basins and Inlets (Good)

Overlying Vegetation Maintained? (Good)

Excessive Compaction by Mowers or Vehicles? (Good)

**Recommendations**

---

None

Prepared By  **CSDatum**



## Photo Log

Photo No. 1: image.jpg





BMP Inspection  
CITY OF YORK



**BMP Name/ID**

WQ6 George St Commons Water Quality Inlet Snout 1-A12

**NPDES Permit #**

**Inspection Date**

12/05/17

**Time**

1:40PM

**Investigator**

Lettice Brown

**Temperature**

56 °F

**24 Hr Rainfall**

**48 Hr Rainfall**

**Weather**

Mostly Cloudy

**Overall (Fair Condition)**

---

Leaves, dirt, oily sheen

**Components**

---

**Accumulation of Sediment? (Fair)**

Leaves

**Debris and Trash? (Fair)**

Leaves and sheen

**Recommendations**

---

1. Clean out inlet according to O&M schedule

Prepared By  **CSDatum**



## Photo Log

Photo No. 1: image.jpg





Photo No. 2: image.jpg





BMP Inspection  
CITY OF YORK



**BMP Name/ID**

WQ8 George St Commons Water Quality Inlet Snout 1-A6

**NPDES Permit #**

**Inspection Date**

12/05/17

**Time**

1:45PM

**Investigator**

Lettice Brown

**Temperature**

56 °F

**24 Hr Rainfall**

**48 Hr Rainfall**

**Weather**

Mostly Cloudy

**Overall (Good Condition)**

---

No comments

**Components**

---

**Accumulation of Sediment? (Good)**

None

**Debris and Trash? (Good)**

**Recommendations**

---

1. Clean out inlet according to O& M Schedule

Prepared By  **CSDatum**



## Photo Log

Photo No. 1: image.jpg





Photo No. 2: image.jpg





BMP Inspection  
CITY OF YORK



**BMP Name/ID**

SA1 George St Commons Amended Soils

**NPDES Permit #**

**Inspection Date**

12/05/17

**Time**

1:45PM

**Investigator**

Lettice Brown

**Temperature**

56 °F

**24 Hr Rainfall**

**48 Hr Rainfall**

**Weather**

Mostly Cloudy

**Overall (Good Condition)**

---

No comments

**Components**

---

Excessive Compaction? (Good)

**Recommendations**

---

None

Prepared By  **CSDatum**



## Photo Log

Photo No. 1: image.jpg





**BMP Name/ID**

WQ7 Goerge St Commons Water Quality Inlet Snout 1-A11

**NPDES Permit #****Inspection Date**

12/05/17

**Time**

1:55PM

**Investigator**

Lettice Brown

**Temperature**

57 °F

**24 Hr Rainfall****48 Hr Rainfall****Weather**

Mostly Cloudy

**Overall (Good Condition)**

---

Good

**Components**

---

**Accumulation of Sediment? (Fair)**

Unknown black substance, may be dirty water

**Debris and Trash? (Fair)**

Ok

**Recommendations**

---

1. Clean out inlet

Prepared By  **CSDatum**



## Photo Log

Photo No. 1: image.jpg





Photo No. 2: image.jpg





**BMP Name/ID**  
I11 Catholic Harvest Pantry Infiltration Bed

**NPDES Permit #**

**Inspection Date**  
12/05/17

**Time**  
2:15PM

**Investigator**  
Lettice Brown

**Temperature**

**24 Hr Rainfall**

**48 Hr Rainfall**

**Weather**

### Overall (Good Condition)

---

Looks good

### Components

---

**Catch Basins and Inlets (Good)**  
Good

**Overlying Vegetation Maintained? (Good)**

**Excessive Compaction by Mowers or Vehicles? (Good)**  
Blacktop

### Recommendations

---

1. Sediment could be cleaned out

Prepared By  **CS Datum**



## Photo Log

Photo No. 1: image.jpg





Photo No. 2: image.jpg





BMP Inspection  
CITY OF YORK



**BMP Name/ID**

WQ28 Turkey Hill Minit Market Snout 1-4

**NPDES Permit #**

**Inspection Date**

12/05/17

**Time**

2:20PM

**Investigator**

Lettice Brown

**Temperature**

57 °F

**24 Hr Rainfall**

**48 Hr Rainfall**

**Weather**

Mostly Cloudy

**Overall (Good Condition)**

---

Just leaves

**Components**

---

**Accumulation of Sediment? (Good)**

Leaves only

**Debris and Trash? (Fair)**

Leaves

**Recommendations**

---

1. Clean out inlet and snout according to O&M agreement

Prepared By  **CSDatum**



## Photo Log

Photo No. 1: image.jpg





Photo No. 2: image.jpg





BMP Inspection  
CITY OF YORK



**BMP Name/ID**  
B13 Turkey Hill Minit Markets Basin

**NPDES Permit #**

**Inspection Date**  
12/05/17

**Time**  
2:25PM

**Investigator**  
Lettice Brown

**Temperature**  
57 °F

**24 Hr Rainfall**

**48 Hr Rainfall**

**Weather**  
Mostly Cloudy

## Overall (Good Condition)

---

Very good

## Components

---

**Vegetation (Good)**  
Good

**Erosion (Excellent)**  
None

**Flow Channelization (Excellent)**  
Good

**Bank Stability (Excellent)**

**Inlet and Outlet Conditions (Good)**  
NA

**Sediment and Debris Accumulation (Excellent)**  
None

**Invasive or Unwanted Growth? (Excellent)**  
None

## Recommendations

---

None

Prepared By  **CSDatum**



## Photo Log

Photo No. 1: image.jpg





Photo No. 2: image.jpg





BMP Inspection  
CITY OF YORK



**BMP Name/ID**

WQ27 Turkey Hill Minit Market Snout 1-3

**NPDES Permit #**

**Inspection Date**

12/05/17

**Time**

2:25PM

**Investigator**

Lettice Brown

**Temperature**

57 °F

**24 Hr Rainfall**

**48 Hr Rainfall**

**Weather**

Mostly Cloudy

**Overall (Fair Condition)**

---

Leaves, cigs, and trash

**Components**

---

**Accumulation of Sediment? (Good)**

None seen

**Debris and Trash? (Fair)**

Cigs, trash, leaves

**Recommendations**

---

1. Needs cleaned out according to O&M agreement

Prepared By  **CS Datum**



## Photo Log

Photo No. 1: image.jpg





Photo No. 2: image.jpg





Photo No. 3: image.jpg





BMP Inspection  
CITY OF YORK



**BMP Name/ID**  
WQ26 Turkey Hill Minit Market Snout 1-2

**NPDES Permit #**

**Inspection Date**  
12/05/17

**Time**  
2:30PM

**Investigator**  
Lettice Brown

**Temperature**  
57 °F

**24 Hr Rainfall**

**48 Hr Rainfall**

**Weather**  
Mostly Cloudy

## Overall (Good Condition)

---

Leaves and trash

## Components

---

**Accumulation of Sediment? (Fair)**  
None seen

**Debris and Trash? (Fair)**  
Leaves and trash

## Recommendations

---

1. Clean out inlet according to O&M agreement

Prepared By  **CSDatum**



## Photo Log

Photo No. 1: image.jpg





Photo No. 2: image.jpg





**BMP Name/ID**

WQ25 Turkey Hill Minit Market Snout 1-1

**NPDES Permit #****Inspection Date**

12/05/17

**Time**

2:35PM

**Investigator**

Lettice Brown

**Temperature**

57 °F

**24 Hr Rainfall****48 Hr Rainfall****Weather**

Drizzle

## Overall (Fair Condition)

---

Could clean the trash off the grate.

## Components

---

**Accumulation of Sediment? (Fair)**

None seen

**Debris and Trash? (Fair)**

Trash on grate, in between rungs, some inside

## Recommendations

---

1. Clean out inlet and grate according to O&M agreement

Prepared By  **CSDatum**



## Photo Log

Photo No. 1: image.jpg





Photo No. 2: image.jpg





**BMP Name/ID**

I20 Redevelopment Authority of the City of York Infiltration Pit

**NPDES Permit #****Inspection Date**

12/15/17

**Time**

10:10AM

**Investigator**

Lettice Brown

**Temperature**

25 °F

**24 Hr Rainfall**

0.01 in.

**48 Hr Rainfall****Weather**

Overcast

## Overall (Poor Condition)

---

Uneven surface, no vegetation, looks like parking on infiltration bed.

## Components

---

**Catch Basins and Inlets (Poor)**

Ground is compacted, uneven, and bare

**Overlying Vegetation Maintained? (Poor)**

No or very little vegetation

**Excessive Compaction by Mowers or Vehicles? (Poor)**

Compacted, little or no vegetation, uneven surface

## Recommendations

---

1. Repairs required



## Photo Log

Photo No. 1: image.jpg





Photo No. 2: image.jpg





**BMP Name/ID**

I19 Redevelopment Authority of the City of York Infiltration Pit

**NPDES Permit #****Inspection Date**

12/15/17

**Time**

10:15AM

**Investigator**

Lettice Brown

**Temperature**

25 °F

**24 Hr Rainfall**

0.01 in.

**48 Hr Rainfall****Weather**

Overcast

## Overall (Poor Condition)

---

Compacted, little to no vegetation, vehicles parking or driving over bed

## Components

---

**Catch Basins and Inlets (Poor)**

Compacted, little to no vegetation

**Overlying Vegetation Maintained? (Poor)**

Little to no vegetation

**Excessive Compaction by Mowers or Vehicles? (Poor)**

Excessive compaction by vehicles

## Recommendations

---

1. Repair required



## Photo Log

Photo No. 1: image.jpg





Photo No. 2: image.jpg





**BMP Name/ID**

I14 Redevelopment Authority of the City of York Albemarle St  
Infiltration Pit #1

**NPDES Permit #****Inspection Date**

12/15/17

**Time**

10:30AM

**Investigator**

Lettice Brown

**Temperature**

25 °F

**24 Hr Rainfall**

0.01 in.

**48 Hr Rainfall****Weather**

Overcast

## Overall (Fair Condition)

---

No comments

## Components

---

**Catch Basins and Inlets (Poor)**

Concrete blocking inlet

**Surface Vegetation Maintained? (Good)**

Good

**Excessive Compaction by Mowers or Vehicles? (Good)**

## Recommendations

---

1. Should this concrete block be blocking the inlet?



## Photo Log

Photo No. 1: image.jpg





Photo No. 2: image.jpg





**BMP Name/ID**

I15 Redevelopment Authority of the City of York Albemarle Street  
Infiltration Pit #2

**NPDES Permit #****Inspection Date**

12/15/17

**Time**

10:30AM

**Investigator**

Lettice Brown

**Temperature**

25 °F

**24 Hr Rainfall**

0.01 in.

**48 Hr Rainfall****Weather**

Overcast

## Overall (Fair Condition)

---

No comments

## Components

---

**Catch Basins and Inlets (Fair)**

Concrete covering inlet

**Surface Vegetation Maintained? (Good)****Excessive Compaction by Mowers or Vehicles? (Good)**

## Recommendations

---

1. Concrete block covering inlet?



## Photo Log

Photo No. 1: image.jpg





Photo No. 2: image.jpg





# MCM #6 Appendix

- **MCM #6 Project Plan**
- **BMP 6.1 Attachments**
  - City Property Map.pdf
- **BMP 6.2 Attachments**
  - Inlet Report 2018.pdf
  - York City Property Checklist
  - Photographs of Signage at City Facilities
  - Operation & Maintenance Program Part 2
  - Operation & Maintenance Program Part 1
- **BMP 6.3 Attachments**
  - York City Employee Training Program.pdf
  - Center for Watershed Protection 2018 Conference Overview.pdf
  - PennTech Conference 2018.pdf
  - MS4 Training for Firemen D Platoon Sign In Sheet
  - MS4 Training for Firemen C Platoon Sign In Sheet
  - MS4 Training for Firemen B Platoon Sign In Sheet
  - MS4 Training for Firemen A Platoon Sign In Sheet
  - MS4 2017-2018 Training for Firemen.pdf
  - May 2018 Task Force Sign In Sheet
  - May 2018 Task Force Agenda
  - WWTP 2 Training Sign in Sheet.pdf
  - WWTP 1 Training Sign in Sheets.pdf
  - RE\_ Update on MS4 Training for Police Officers 2018.pdf
  - MS4 2017-2018 Training for Police Officers.pdf
  - City Employee Training Sign in Sheet Feb 21 2018 Council Chambers.pdf
  - MS4 2017-2018 Training for City Employees.pdf
  - Stormwater Management Summit State College PA.pdf
  - Stormwater Mini Conference.pdf
  - Sanitary Sewer Overflows Training.pdf
  - Firemen SSO Training Sign In Sheet.pdf
  - bus tour sign in BMP Tour 2017.pdf
  - Map and list of BMP Tour Sept 2017.pdf
  - Description of BMPs on Tour Sept 2017.pdf



- 2017 Summer Employee Newsletter.pdf



# MCM #6 Project Plan

- BMP 6.1

Description:

Identify and document all facilities and activities that are owned or operated by the permittee and have the potential for generating stormwater runoff to the regulated small MS4. This includes activities conducted by contractors for the permittee. Activities may include the following: street sweeping; snow removal/deicing; inlet/outfall cleaning; lawn/grounds care; general storm sewer system inspections and maintenance/repairs; park and open space maintenance; municipal building maintenance; new construction and land disturbances; right-of-way maintenance; vehicle operation, fueling, washing and maintenance; and material transfer operations, including leaf/yard debris pickup and disposal procedures. Facilities can include streets; roads; highways; parking lots and other large paved surfaces; maintenance and storage yards; waste transfer stations; parks; fleet or maintenance shops; wastewater treatment plants; stormwater conveyances (open and closed pipe); riparian buffers; and stormwater storage or treatment units (e.g., basins, infiltration/filtering structures, constructed wetlands, etc.).

Measurable Goal:

By the end of the first year of permit coverage, new permittees shall identify and document all types of municipal operations, facilities and activities and land uses that may contribute to stormwater runoff within areas of municipal operations that discharge to the regulated small MS4. Renewal permittees should have completed this list during the previous permit term. For all permittees, this information shall be reviewed and updated each year of permit coverage, as needed. Part of this effort shall include maintaining a basic inventory of various municipal operations and facilities.

Action Plan:

York City has developed an inventory of all City owned facilities. A GIS based map showing their locations is attached to this plan.

**PARKS**

- Albemarle Park - Albemarle, Edison & Lehman Streets
- Allen Park - Hay & Tremont Streets
- Allen Fields - Hay & Tremont Streets
- Arles Park - King & Pattison Streets
- Bantz Park - Salem Ave. Extended
- Campus Park - S. Duke St. & College Ave.
- Cherry Lane Park - Downtown
- Farquhar Park - N. Newberry St.
- Foundry Plaza/Codorus Boat Basin - West Philadelphia Street
- Girard Park - Girard Ave. & E. Maple St.
- Heritage Rail Trail - Downtown
- Hoffman Softball Complex - Vander & Rockdale Avenues
- Hudson Park - Ridge Ave. & Hay St.
- Kiwanis Lake - North Newberry St. & Parkway Blvd
- Lincoln Park - Roosevelt Ave., Fahs & Lincoln St.
- Little Jimmy's Park - Cottage Hill Rd.
- Martin Luther King Park - Penn St. & College Ave.
- Noonan Field - Parkway Blvd. & Penna. Ave
- Odeon Fields/Rotary - College Avenue Extended
- Penn Park - 100 West College Ave.
- Renaissance Park- Poplar and Susquehanna St.



- Salem Square Park
- Thackston Park
- Veteran's Memorial Park - Boundary Ave. & Edgar St.
- Westminster Park - N. Queen & Arch Streets
- Williams Park - Cottage Hill Rd.
- Yorktown Park - 1059 Kelly Dr.

#### RECREATION BUILDINGS

- Grimes Gym - 125 E College Ave.
- Princess Center - 368 West Princess St
- Rotary-Kranich Hall - 120 South Lehman St.
- York City Ice Arena - 941 Vander Ave
- Yorktowne Center - 1059 Kelly Dr.

#### FIRE STATIONS

- Fire Dept. Headquarters - 43 S Duke St.
- Rex/Laurel Fire Station #1 - 49 S Duke St.
- Vigilant/Union Fire Station #2 - 273 W Market St.
- Goodwill Fire Station #5 - 833 E Market St.
- Lincoln Fire Station #9 - 800 Roosevelt Ave.

#### PARKING FACILITIES/LOTS

- Market St Garage - 41 E Market St.
- Philadelphia St Garage - 25 W Philadelphia St.
- King St Garage - 15 W King St.
- Lot #1- 40 E Gas Ave.
- Lot #2 - 300 W King St.
- Lot #3 - 150 S Duke St.
- Lot #4 - Newton & Howard Ave.
- Lot #7 - 600 W Mason St.
- Lot #8 - 200 W Philadelphia St.
- Lot #9 - 100 W King St.
- Lot #11 - 100 E Princess St.
- Lot #14 - St Paul and Penn St.
- Lot #15 - 300 W. Princess St.
- Lot #17 - 200 W Market St.

#### HEALTH BUREAU FACILITIES

- Albert S. Weyer Health Center/Bureau of Health - 435 W Philadelphia St.

#### PUBLIC WORKS FACILITIES

- Electrical Bureau/Sewer Maint. Building - 1625 Toronita St.
- Highway Bureau/Salt Dome - 118 N Broad St.
- Parks Office/Parks Maint. Building - 900 Vander Ave.
- Waste Water Treatment Plant - 1701 Black Bridge Rd.

#### POLICE FACILITIES

- Police Department - 50 W King St.
- Eagle Fire Station/Community Services - Jackson & Jessop St.
- George St. Resource Center - 426 S George St.
- Reinecke Place Resource Center - 327 Reinecke Place

#### CITY GOVERNMENT FACILITY



- York City Hall - 101 S George St.

The City has identified the following activities which currently occur within the MS4:

#### ROUTINE MAINTENANCE

- Street Sweeping
- Inlet Cleaning
- BMP Maintenance
- Storm Sewer Inspections
- Leaf and Christmas Tree Collection
- Snow Removal/Deicing
- Neighborhood Focused Clean-ups

#### EMERGENCY MAINTENANCE

- Spill Response

#### VEHICLE AND EQUIPEMENT

- Vehicle Maintenance
- Vehicle Fueling
- Vehicle Washing

- BMP 6.2

#### Description:

Develop, implement and maintain a written operation and maintenance (O&M) program for all municipal operations and facilities that could contribute to the discharge of pollutants from the regulated small MS4s, as identified under BMP #1. This program (or programs) shall address municipally owned stormwater collection or conveyance systems, but could include other areas (as identified under BMP #1). The O&M program(s) should stress pollution prevention and good housekeeping measures, contain site-specific information, and address the following areas:

- Management practices, policies, procedures, etc. shall be developed and implemented to reduce or prevent the discharge of pollutants to your regulated small MS4s. You should consider eliminating maintenance-area discharges from floor drains and other drains if they have the potential to discharge to storm sewers.
- Maintenance activities, maintenance schedules, and inspection procedures to reduce the potential for pollutants to reach your regulated small MS4s. You also should review your procedures for maintaining your stormwater BMPs.
- Controls for reducing or eliminating the discharge of pollutants from streets, roads, highways, municipal parking lots, maintenance and storage yards, waste transfer stations, fleet or maintenance shops with outdoor storage areas, and salt / sand (anti-skid) storage locations and snow disposal areas.
- Procedures for the proper disposal of waste removed from your regulated small MS4s and your municipal operations, including dredge spoil, accumulated sediments, trash, household hazardous waste, used motor oil, and other debris.

#### Measurable Goal:

During the first year of permit coverage, new permittees shall develop and implement a written O&M program that complies with BMPs #1 and #2. Renewal permittees shall continue to implement their existing program. All permittees shall review the O&M program annually, edit as necessary, and continue to implement during every year of permit coverage.

#### Action Plan:

The City has created Operation and Maintenance procedures for the facilities and activities listed under BMP 6.1 above. This plan, along with the tracking and reporting mechanisms currently in



place, are attached to this plan.

- BMP 6.3

Description:

Develop and implement an employee training program that addresses appropriate topics to further the goal of preventing or reducing the discharge of pollutants from municipal operations to your regulated small MS4s. The program may be developed and implemented using guidance and training materials that are available from federal, state or local agencies, or other organizations. Any municipal employee or contractor shall receive training. This could include public works staff, building / zoning / code enforcement staff, engineering staff (on-site and contracted), administrative staff, elected officials, police and fire responders, volunteers, and contracted personnel. Training topics should include operation, inspection, maintenance and repair activities associated with any of the municipal operations / facilities identified under BMP #1. Training should cover all relevant parts of the permittee's overall stormwater management program that could affect municipal operations, such as illicit discharge detection and elimination, construction sites, and ordinance requirements.

Measurable Goal:

During the first year of permit coverage, new permittees shall develop and implement a training program that identifies the training topics that will be covered, and what training methods and materials will be used. Renewal permittees shall continue to operate under their existing program. All permittees shall review the training program annually, edit it as necessary, and continue to implement it during every year of permit coverage.

Your employee training shall occur at least annually (i.e., during each permit coverage year) and shall be fully documented in writing and reported in your periodic reports. Documentation shall include the date(s) of the training, the names of attendees, the topics covered, and the training presenter(s).

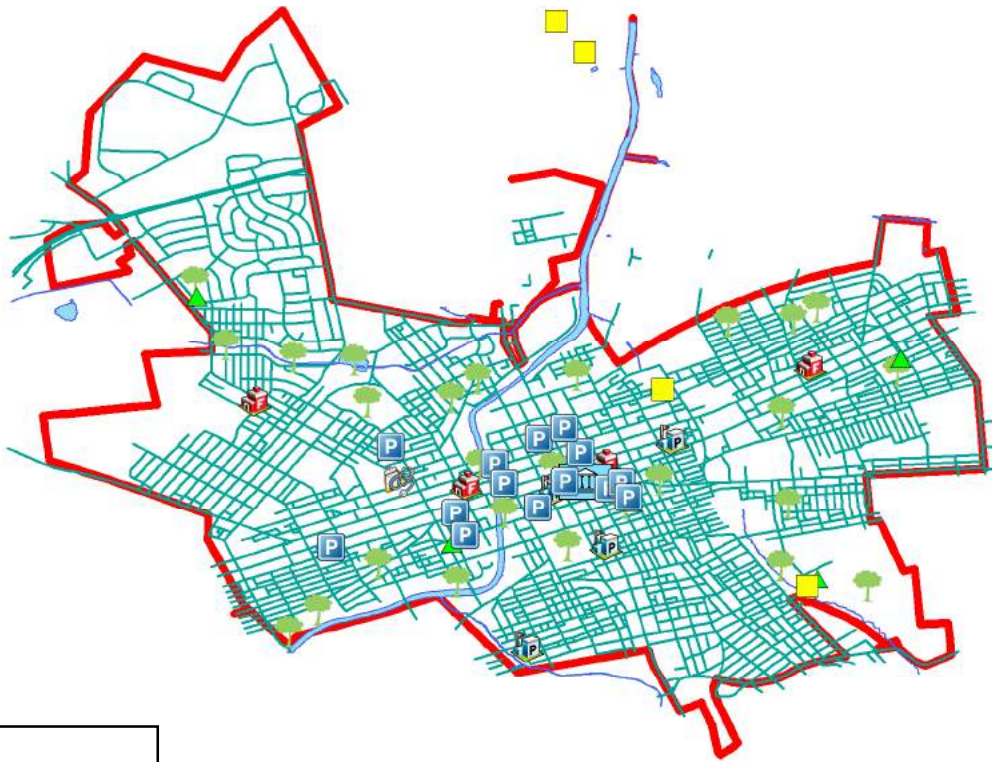
Action Plan:


A list of municipal employees who need to receive MS4 training is captured in the attached York City Employee Training Plan.

Records of all training events attended shall be maintained by the City. This training can include formal or informal training provided by government agencies, non-profit groups, consultants or internal staff. The proposed goals of the training program are outlined in the attached York City Employee Training Plan.



# YORK CITY PROPERTIES



Legend	
	Parking Facilities
	Health Bureau Facilities
	City Government Facility
	Police Facilities
	Fire Stations
	Public Works Facilities
	Recreation Buildings
	York City Parks
	CLINE-ROAD
	WATER
	CITY_L





Inlet Report April 1, 2017 through June 30<sup>th</sup> 2018

Inlets Cleaned: 9,617

Inlets Cleaned with Vactor: 95

Inlets Repaired: 31



## YORK CITY PROPERTY CHECKLIST FOR MS4

### CITY PARKS AND OUTDOOR PARKING FACILITIES

- \*Check all inlets on property. All inlets should be clear and structurally sound.
- \*Check perimeters of all parks for potential sediment run-off areas.
- \*Check any creeks banks for erosion and report on vegetation condition

### CITY BUILDINGS, STORAGE AREAS AND PARKING GARAGES

- \*Check all downspouts for possible blockage or connection to SSS
- \*Check all inlets on property. All inlets should be clear and structurally sound
- \*Check all floor drains inside of property. All drains should be connected to SSS

### HIGHWAY GARAGE

#### 1. Fueling Station

- \*Emergency Spill Procedure Signs-in place and legible
- \*Spill Kit and Absorption material –in place
- \*Trash Receptacle –empty

#### 2. Main Yard

- \*Yard free of loose debris including salt
- \*Inlets at the rear of the shop clear and cleaned out
- \*Sand and cold patch under roof

#### 3. Garage

- \*Drains clear of debris
- \*Fluid recycling area labeled and in working order
- \*Inlet in back garage clear and working

#### 4. Salt Dome

- \*Inlet free of debris
- \*All salt inside of dome
- \*All trash picked up and loaded in dumpsters



HAZARDOUS  
WASTE  
STORAGE  
AREA

WASTE OIL  
MAY CONTAIN  
THE FOLLOWING:  
ASTM D4  
SEMI-  
SYNTHETIC  
TRANSDUCER FLUID  
FUEL OIL

WASTE  
ANTI-FREEZE  
ONLY

WASTE  
MISCELLANEOUS  
SOLVENTS  
PAINT THINNER  
CARBURETOR &  
BRAKE CLEANER





CITY OF YORK  
HIGHWAY GARAGE  
118 N BROAD ST  
YORK CITY YORK PA  
717 849-2320

EMERGENCY PROCEDURE  
IN CASE OF FUEL SPILL OR FIRE  
USE EMERGENCY STOP BUTTON  
LOCATED BESIDE GARAGE DOOR  
REPORT INCIDENT BY CALLING 911  
REPORT LOCATION LISTED ABOVE  
USE SPILL KIT  
LOCATED BESIDE GARAGE DOOR





**EMERGENCY PROCEDURE**  
**IN CASE OF FUEL SPILL OR FIRE**  
A. USE EMERGENCY STOP BUTTON  
LOCATED BESIDE GARAGE DOOR  
B. REPORT INCIDENT BY CALLING 911  
C. REPORT LOCATION LISTED ABOVE  
D. USE SPILL KIT  
LOCATED BESIDE GARAGE DOOR







**CITY OF YORK  
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717-849-2320**

**EMERGENCY PROCEDURE  
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LOCATED BESIDE GARAGE DOOR  
B. REPORT INCIDENT BY CALLING 911  
C. REPORT LOCATION LISTED ABOVE  
D. USE SPILL KIT  
LOCATED BESIDE GARAGE DOOR



A red and white circular object, possibly a light or a sensor, is mounted on the wall above the sign.

**NO  
OUTSIDE  
VEHICLE  
WASHING**



# OPERATIONS AND MAINTENANCE REPORT

## PART 2 – VEHICLE MAINTENANCE, FUELING AND WASHING

### 1. VEHICLE MAINTENANCE

As noted in our operations program, vehicle maintenance is performed at the city highway garage located at 118 N. Broad St York, PA 17403. All city owned vehicles are maintained at this facility with the exception of all Fire Dept vehicles. The Fire Dept uses a commercial facility to make needed repairs and perform maintenance. Repairs that are beyond the abilities of staff mechanics at the Highway Garage are performed by local commercial repair facilities

Commercial oil dry absorbent material is used to clean up all oil and other fluid spills. It is stored on a skid in the garage

Cintas Services has been retained as a provider of shop rags for the garage. Dirty/oily rags are stored in a metal container provided by the vendor. They are picked up and cleaned on a weekly basis.

Mechanics use drip pans to collect used oil and other spent fluids. This material is collected in 55 gal drums and a caged plastic cube which is later picked up by a local vendor, currently, REC Oil Service. The drums are stored in the garage on concrete away from any storm drains. This area is designated by floor markings and wall signs. The signs indicate where each type of fluid should be disposed of. Used batteries are stored inside the garage on a wooden skid. They are then returned for a core deposit.

### 2. VEHICLE FUELING

All vehicle fueling takes place at the city highway garage. The city's fueling facility is equipped with double walled fiberglass tanks with interstitial monitoring, double walled piping and suction pumps. The tanks are equipped with overfill protection and have overfill alarms installed in the leak monitoring system. The tanks are inspected every three years and registered annually with the state. Emergency spill procedures and contact numbers are listed on a sign at the pumps. Spill clean-up kits and commercial oil dry is also provided in the fueling area.

### 3. VEHICLE WASHING



The majority of city owned vehicles are washed at local commercial facilities. Currently, the city has a contract with both Apple Automotive(1090 Marbrook Dr.) and Mister Hotshine(2720 E Market St) for washing vehicles. Maintenance vehicles are washed inside over drains that are connected to the city's sanitary sewer system. There are indoor washing facilities at both the highway garage and the sewer maintenance department. A sign at the highway garage has been posted stating "NO OUTSIDE WASHING". The staff understands why we no longer regularly wash vehicles outside. Exceptions are made for oversized or disabled vehicles only if the street sweeper is used control run off and remove debris.



# OPERATIONS AND MAINTENANCE PROGRAM

## PART 1 – STORM WATER FACILITIES OPERATION AND MAINTENANCE IMPLEMENTATION

### ROUTINE MAINTENANCE

#### 1. STREET SWEEPING

The City of York has a comprehensive street sweeping plan in place. Two Elgin sweepers are maintained to allow for coverage if there is a breakdown. City streets are swept on a regular basis between March and April. Targeted areas are also swept throughout the year as weather permits. Sweeping grit removed from the streets is deposited in a dumpster and disposed of at Modern Landfill in compliance with the York County Municipal Solid Waste Management Act.

#### 2. INLET CLEANING

The City of York inlet cleaning program is achieved by cleaning off the top of inlets before and after significant rain events and on an as needed basis. The material collected is disposed of at Modern Landfill. While inlet tops are being cleaned the operator does a visual inspection to ensure proper working order. The operator will take note on a provided worksheet if the inlet needs to be repaired or vacuumed out. The worksheet is then used to generate a list for repairs and a list for inlets that need vacuumed out. The vac truck is then used to remove any debris inside of the inlet. This material is also disposed of at Modern Landfill.

#### 3. BMP MAINTENANCE

The City of York maintains five drainage basins within the city limits. One is in Memorial Park and the other four are in the Industrial Park. An annual mowing program maintains all these.

An infiltration facility is located at the N.E. corner of N George and Gay. A shallow trench is covered by a plastic plate that is bolted down. The trench empties into a stone infiltration pit. The plate is removed and the trench is cleaned out on a regular basis. The line to the infiltration pit is also cleaned at that time.

The Jackson Street bio retention areas are under construction and will need regular cleaning of trash and litter and care of vegetation in the future. The inlets contained within these areas will also need regular



cleaning and maintenance. These bio retention areas have been implemented in 3 intersections of a 4 block stretch of W. Jackson St.

#### 4. INSPECTION ACTIVITIES

Inspection activities of the city's storm water collection and conveyance system takes place regularly. As staff perform their regular maintenance duties of cleaning off inlet tops and mowing around the BMP's inspection of the area is done to determine if maintenance or cleaning is needed.

#### 5. LEAF AND CHRISTMAS TREE COLLECTION

City residents are encouraged to rake their leaves into piles along the curb lines. Public works crews use 3 leaf loaders with dump trucks to collect the leaves throughout the city in both streets and alleyways. Christmas trees are also placed out for collection. Public Works crews use pick up trucks and one ton dump trucks to collect the trees. This organic matter is hauled to the city compost site where it is the picked up by a local vendor and processed into mulch.

#### 6. DEICING OPERATIONS

Road salt applied by operators is done according to manufacturer's recommendations. All trucks are equipped with control boxes that allow the operator to adjust application rates based on the road width, traffic concentration, temperature and other factors to avoid over application

The salt storage area is under roof in our salt dome. Salt is pushed back in as needed throughout the winter. A large clean up of the salt dome area is to be performed each spring.

#### 7. NEIGHBORHOOD FOCUSED CLEAN-UPS

A regularly scheduled program designates areas throughout the city for a "clean sweep". City staff removes all trash and overgrown brush and debris from these areas. Small trash and debris is blown out into the street ahead of the street sweeper. Items that are too large for the sweeper are loaded into dump trucks and hauled to city dumpsters. Brush is sent to a local mulch producer.

### EMERGENCY MAINTENANCE

#### 1. SPILL RESPONSE



Upon notification the York City Fire Dept and/or Public Works crews respond to reported spills. Absorbent materials are utilized to prevent oil and other fluids from reaching the storm water collection system. The street sweeper is then used to sweep up the absorbent material.

## 2. RAIN EVENTS HEAVY

During heavy rain events public works crews respond as needed for flooding. Inlet tops are cleaned of debris or the inlet is vactored out if needed.



## York City Employee Training Program

All City employees who are required to receive annual MS4 training are as follows:

- All Highway Staff
- All Parks and Recreation Staff
- All Wastewater Treatment Plant Staff
- All Police Officers and Administration Staff
- All Firemen and Administration Staff
- All City of York Department Managers
- All Permits, Planning, and Zoning Staff
- All Electrical Bureau Staff
- All City of York Human Resources Staff
- All Temporary, Contractor, and Part Time Staff

Goals of training all York City staff are as follows:

- To ensure knowledge of what MS4 is and why it is important
- How to effectively spot and report any Illicit Discharges
- How to prevent stormwater runoff from all properties within the City
- To ensure the City remains compliant with DEP and our NPDES regulations
- To encourage conversation about water conservation and pollution prevention with others
- To ultimately keep our creeks, streams, rivers, and Chesapeake Bay clean



Center for Watershed Protection 2018 Conference – Attended by City of York MS4 Coordinator

April 20 2018 – Baltimore Maryland Maritime Conference Center

Agenda:

1. The Impervious Cover Model after 25 Years (Tom Shueler)
2. The Role of Monitoring in Helping to Meet Watershed Goals (Sadie Drescher, Chesapeake Bay Trust (The Trust))
3. New and Improved BMP's Round Table (Storm Drain Outfalls, Storm Drain Inlets and Road-Side Ditches) (Scott Lowe, McCormick Taylor, Inc., Kelly Lennon, WSP; Dr. James Hunter, Morgan State University; Dr. Dong Hee Kang, Morgan State University).
4. National Webcast 1: It Ain't Easy Getting Greet: Incentivizing Watershed Programs
5. Paying for Watershed and Stormwater Management Programs (Stacey Berahzer, NC Environmental Finance Center)
6. Case Study of the Washington DC Stormwater Retention Volume Credit Program (Greg Hoffman, Center for Watershed Protection)
7. Case Study of Clean Water Services in the Tualatin River Watershed (Antonia Machado, Hillsboro, OR Clean Water Services)
8. Session 2: Local Hub – TMDL's:
  - a. How Will the Phase 6 Watershed Model Affect Your and Other Updates From the Chesapeake Bay Program (Jeff Sweeney, EPA, Chesapeake Bay Program)
  - b. Maryland Phase III WIP Progress (Kathy Stecker, Maryland Department of the Environment)
  - c. TMDL's: Lessons Learned (Jeff White, Maryland Department of the Environment)
9. Stream Restoration FAQ's (David Wood, Chesapeake Stormwater Network)
10. Ask the Expert Stream Restoration Roundtable (Erik Michelsen, Anne Arundel County MD; Scott Lowe, McCormick Taylor; Rich Starr, Ecosystem Planning and Restoration, LLC; Kathy Hoverman, KCI Technologies, Inc.; Scott McGill, Ecotone, Inc.)



June 11, 2018

On June 3<sup>rd</sup> to June 6<sup>th</sup> I attended the 2018 PennTech conference in Hershey Pennsylvania. My agenda was as follows:

- Sunday June 3 2018 – Participated in the 1<sup>st</sup> Community Service Project. The project took place at the Boat House Road Park at 9am in Hershey PA. I was among 40-50 volunteers who planted 300 tree seedlings at the edge of a meadow near a creek.
- Monday June 4 2018 – Attended an Active Shooter training which directed the attention to potential vulnerabilities at our facilities and things we should think about. We also went through actual active shooter specifics.
- Tuesday June 5<sup>th</sup> 2018 – I attended both morning and afternoon stormwater programs
  - Morning
    - Complementary Design Approaches Using Both Green and Gray Design Solutions to Reduce Flooding and CSO in the City of Pittsburgh
    - Integrating Green Infrastructure, Traffic Re-Design, and Pedestrian Safety at 53<sup>rd</sup> and Baltimore Avenue in Philadelphia
    - Regional Approach to Stormwater Management
    - Triple Bottom Line Approved Alternative to Infiltration Design
    - A Green Infrastructure Case Study: Overcoming Maintenance Challenges with Responsive Restoration
  - Afternoon
    - Updating Your PRP or TMDL Plan with New Projects
    - Evaluating the Technical and Administrative Capacities of MS4 Municipalities to Implement a Regional Pollutant Reduction Plan
    - Starting a Stormwater Utility – From Scratch
    - Not your Father's Buick – Beyond Traditional Delivery of Stormwater
    - The City Beautiful H2O Program Plan: Rehabilitating and Enhancing Infrastructure through an Integrated Wet Weather Plan for Harrisburg
- Wednesday June 6<sup>th</sup> 2018 – Left conference



Log Brown

## MEETING SIGN-IN SHEET

**Project:** Firemen MS4 Training

**Meeting Date:** June 11 2018

**Facilitator:** Lettice Brown

**Place/Room:** Station 9

Name (please print)	Department/Platoon
William Collins	YORK CITY FIRE / D
GARY Landis	YORK City Fire / D
Zachary Culvert	York City Fire / D
Anthony Caruso	YORK City Fire / D
Johnathan Brown	York City Fire / D
Brandon Sawyer	York Fire / D
Anthony Jones	YORK city Fire Rescue / D
Malachi Cochran	YORK FD / D
STEVEN BOWMAN JR	YORK CITY FIRE / D
KEITH RAMSAY	YORK CITY FIRE / D
Jonathan Spencer	York City Fire / D
PATRICK J. ROSE	YORK CITY FIRE / RESCUE / D

Garage 256  
234  
236  
256  
6  
905



# MEETING SIGN-IN SHEET

**Project:** Fireman MS4 Training 2018

**Meeting Date:** June 7 2018

**Facilitator:** Lettice Brown

**Place/Room:** Station 9

Name (please print)	Department/Platoon
Glenn Jansen	Fire Dept. / C Plt.
Chris Grove	Fire Dept - C
Wade Fleming	Fire / B
Steve Bowman Sr	Fire / C
DAVE FERGUSON	Fire / C
/KEE SWARTZ	FIRE / B
Donald Newcomer	Fire / B
SHAWN FIRESTONE	FIRE / B
MARK J Bowman	FIRE C platoon
BRANDON HYDER	FIRE / B
Rolando Suarez	fire c plt
Timothy Golden	Fire / C PLT



## MEETING SIGN-IN SHEET

**Project:** Fireman MS4 Training 2018

**Meeting Date:** June 18 2018

**Facilitator:** Lettice Brown

Place/Room: Station 9

[illegible]



# MEETING SIGN-IN SHEET

**Project:** MS4 Training for Firemen 2018

**Meeting Date:** June 13 2018

**Facilitator:** Lettice Brown

**Place/Room:** Station 9

Name (please print)	Department/Platoon
Shawn Caruso	A
TODD STORLGM	C
Robert Bievenour	C
RANDY RAUHAUSER	A
Kevin Holtzaple	A
Charles E Sleeper Jr	A
EDWIN D. HAMILTON	A
William SLEEGER	A





# MS4 Training for Firefighters

Lettice Brown, CSI





# Agenda

- Refresher
- Whats new for 2018 permit and changes
- Fire fighting activities
- Emergency fire fighting activities
- Post-emergency fire fighting activities
- Wash downs
- Fire training activities
- Illicit discharges - revisited
- Recap
- Questions/Concerns/Phone Numbers



# Refresher...

- What is MS4?
  - Stands for Municipal Separate Storm Sewer System
  - Storm system and sewer systems are SEPARATE
- Why do we care?
  - To keep the environment clean, especially the Chesapeake Bay
  - To continue compliance with our NPDES permit issued by the PA DEP and EPA
- Describe an Illicit Discharge
  - Anything that is not composed entirely of stormwater except for allowable discharges set by EPA and DEP



# 2018 Permit

- March 2018, new permit and contents take effect for another 5 year period
- There are a few changes that will be important to all of you, but most of them will be changes for me
- Most of the changes were clarifications, text rearrangements, additions, and subtractions to the permit language



# A Few Important Changes

- Additions, subtractions and clarifications to the ALLOWABLE DISCHARGE LIST
  - Added the discharge of non-contaminated water from geo-thermal systems
  - Clarified that discharges from individual car washing is allowable IF CLEANING AGENTS ARE NOT UTILIZED
  - Removed de-chlorinated swimming pool discharges because the DEP Fact Sheet for Swimming Pool Discharges states that the water MUST be discharged to the sanitary sewer system, NOT the MS4
  - Adds non-contaminated hydro-static test water discharges that do not contain TRC (Total Residual Chlorine)



# Firefighting Activities

- Firefighting activities are an ALLOWABLE discharge according to DEP, however, fire training and other activities are NOT.
- Wastewater from hydrants, fire suppressant chemicals, and training activities can all cause pollution to the MS4.
- So, even though actual firefighting may be allowed by DEP, the training and other activities done by fire departments may not.



# Emergency Firefighting Activities

- Emergency: exists from alarm notification until, in the opinion of the incident commander, the emergency has concluded
  - Again, flows necessary for the protection of life and property do not require BMPs and are not prohibited under the NPDES permit but we should be mindful and perform these activities in a manner that avoids or minimizes discharges to the MS4 to the maximum extent practicable.
- What can you do?
  - Minimize use of water on the fire or use foam
  - Block storm drains with booms, berms, or sandbags to prevent runoff into MS4



# Emergency Firefighting Activities Cont...

- Avoid directing flows onto erodible surfaces if the runoff will go into the MS4s
- Apply fire fighting flows such that the runoff will flow over vegetated areas prior to entering receiving waters or MS4





# Post-Emergency Firefighting Activities

- If possible, use covers, wattles, rock socks, berms, booms, or sand bags to prevent flows from reaching storm drains or surface waters.
- Never flush any materials into storm drains. Chlorinated water, dirt and sediment are ILLICIT DISCHARGES
- Do not dump hazmat contaminated waters onto the streets, parking lots, or storm drains
- Without compromising the health and safety of personnel or the public, inspect potential non-stormwater flow paths and clean/clear any debris or pollutants found.
  - For example, remove trash, leaves, sediment, wipe up liquids or spills



# Wash downs

- Vehicle fluids should NEVER be washed down any storm drains
  - Should use dirt, sand, or absorbent material to soak the fluid, then sweep it up. (DO NOT LEAVE THE ABSORBENT ON THE ROAD)
- Use a bleach disinfectant solution
  - A new solution should be used for each incident
  - Keep solution away from heat, out of sunlight, and keep air tight
    - Unused solution should be discarded at the end of the day
  - Mix: 2oz of bleach for every 18oz of water
    - Should be dispensed with a spray bottle
  - Spray solution liberally over the area and let solution stand for AT LEAST 10 minutes. Then wash down the blood and bleach disinfectant into the nearest storm drain or sewer system



# Fire Training Activities

- Be aware of the location of storm drains and protect them from any discharges (except potable water)
- During fire extinguisher training, spray only in areas where the foam can be collected. Sweep up any spilled foam and dispose properly. Do not hose down waste extinguisher materials
- Hydrant flushing is done by the York Water Company and is an allowable discharge, however, no TRC (Total Residual Chlorine) should be detected.



# Illicit Discharges Revisited...Grass Clippings

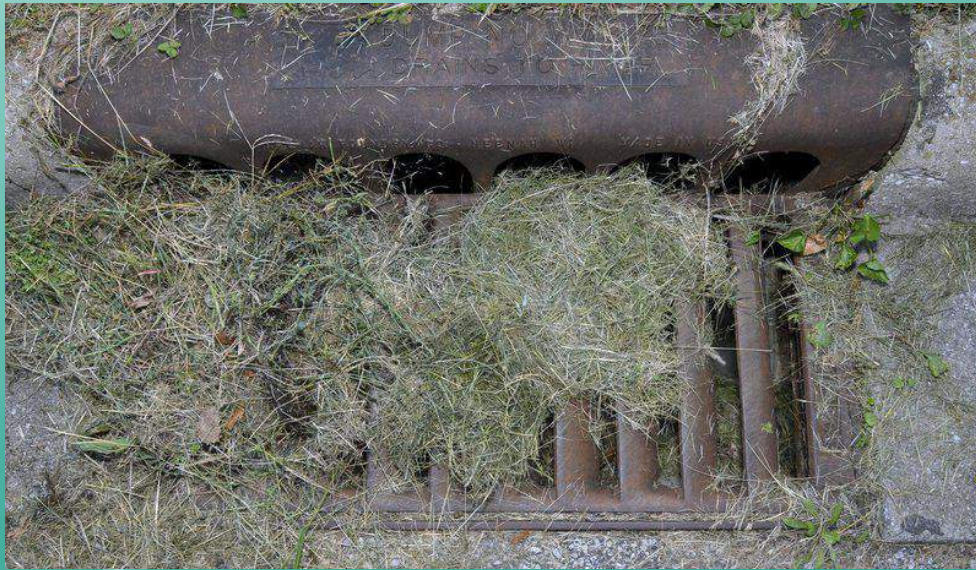
- Encourage mowing away from the street
- Sweep or blow clippings back onto grass
- Will clog storm drains and cause algae blooms if they reach a lake or other body of standing water, killing fish



UNHEALINGMEDIC 2012



# Grass Clippings Example





# Sewage

- Take necessary precautions in preventing any sewage from getting into storm drains
- Call MS4 Coordinator and PPZ if you find a sewage leak
- Sewage not only smells and looks bad, it contains harmful bacteria that could kill fish and organisms





# Sewage Example





# Sanitary Sewer Overflows

- SSOs are illegal and dangerous to the environment (York City Ordinance 942 and DEP Chapter 91, Section 33)
- If a resident has sewage in their home, encourage them to call a plumber or a private vacuum contractor to vacuum the sewage out and haul it away
- If it is an emergency, you can pump the sewage into the sanitary sewer manhole - NOT the stormwater sewer or the street
- Notify Sewer Maintenance at the emergency number, MS4 Coordinator (If necessary), PPZ, or the Public Works Director (If everyone above is unreachable) as soon as possible - If all are unreachable, call DEP Emergency number
- Under no circumstances should sewage be pumped into the streets, sidewalks, stormdrains, or creeks
- Time is of the essence when notifying
  - DEP has to be notified within 4 hours of ANY Sewer Overflow into a stormdrain or creek or we could be fined
  - DEP Reporting Sheet



# Cement/Concrete Cutting (Slurry)

- Concrete cutting and cementing can cause pollution if it is allowed to discharge onto sidewalks and streets. Take note of where the washwater is flowing, do they have booms around the inlets?
- This washwater will suffocate fish and other organisms. Call MS4 Coordinator.





# Cement/Concrete Cutting (Slurry) Example





# Motor Oil/Grease

- Use some absorbent to ensure the flow does not get into a storm drain
- Call the Highway Department for clean up. If the substance reaches a drain or swale, call MS4 Coordinator
- We all know oil and water do not mix. Oil and grease do now allow fish to breathe and will suffocate





# Motor Oil/Grease Examples





# Sediment (Dirt)

- Sediment buildup is the greatest concern for the City of York's creeks and streams.
- Most of the sediment is coming from unsecured construction areas that are allowing the loose ground to run off with rainfall
- Sediment also can clog storm drains causing flooding as well as cutting off creek flow



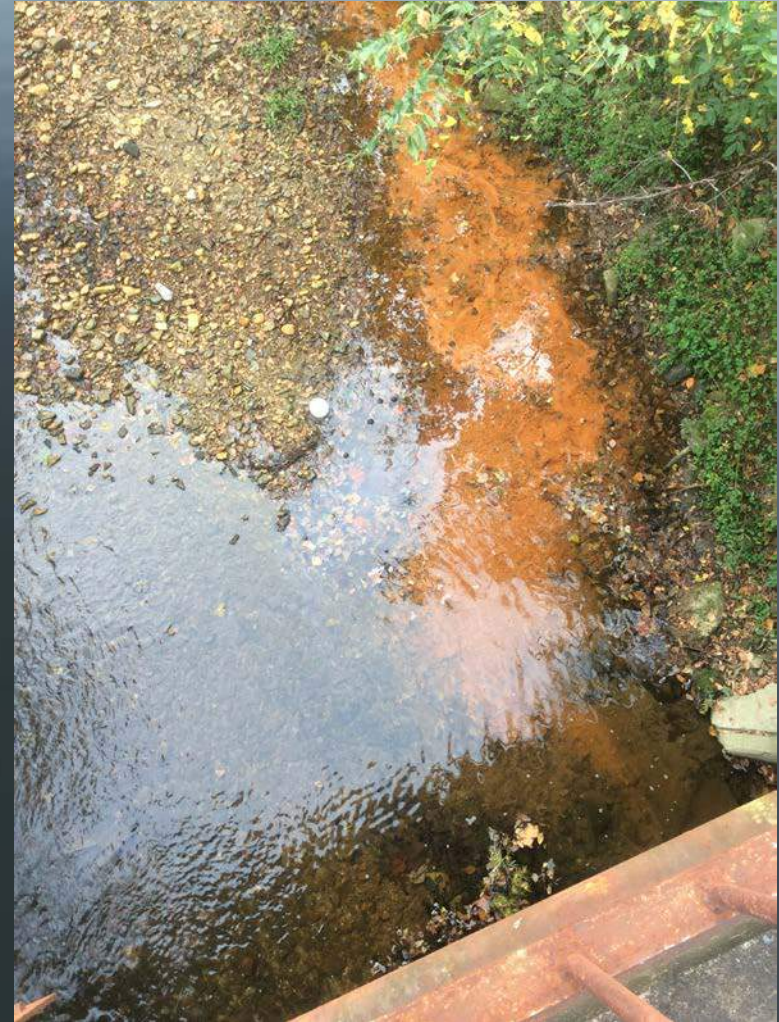


# Sediment Example





# Is this an Illicit Discharge?





# Iron-Loving Bacteria



- Iron-Loving Bacteria
- Naturally occurs
- Feeds off of impurities in the water
- Has an oily smell to it
- Completely harmless to the water and environment



# Recap

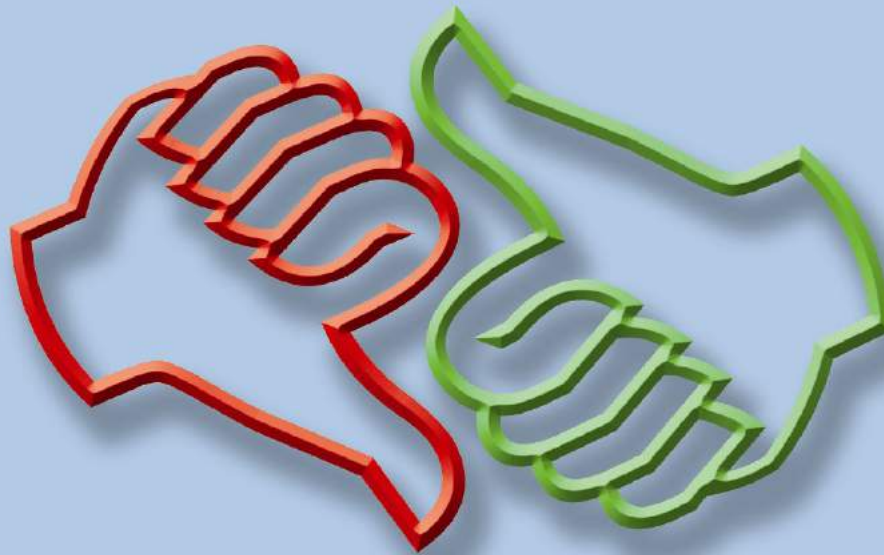
- Firefighting emergency activities and hydrant testing are ALLOWABLE discharges
- Fire training and extinguisher testing need to be contained and not allowed to flow into MS4
- Ensure drains leading to MS4 are bermed or sandbagged to help keep the pollutants out
- Identifying illicit discharges, examples, and finding out what to do





# Questions or Concerns?

COMPLAINTS  
COMMENTS  
COMPLIMENTS





# Important Phone Numbers

- Lettice Brown - MS4 Coordinator - (717) 324-6532 - [lbrown@yorkcity.org](mailto:lbrown@yorkcity.org)
- Chaz Green - Director of Public Works - (717) 324-6599
- Steven Buffington - Permits, Planning, Zoning - (717) 324-6545
- DEP Emergency Number - 1-866-825-0208
  - This number is found on Google as well if you do not have it on hand while on a call



# MEETING SIGN-IN SHEET

**Project:** MS4 Task Force Meeting

**Meeting Date:** May 22 2018

**Facilitator:** Lettice Brown

**Place/Room:** Public Works Conference Room

[illegible]



## MS4 Task Force Meeting

May 2018

- Introduction
  - MCMs 1-6
- New Permit 2018-2023 – Reporting Period (current) – April 1<sup>st</sup> 2017 – June 30<sup>th</sup> 2018. New reporting period – July 1 – June 30 of each year. Annual Reports are now due on September 30<sup>th</sup> of each year
- Grass Clippings – Have to get the word out! Warning letters take up a lot of time. Employees need to ensure clippings are not left in the streets or on sidewalks.
- BMPs the City is Responsible For
  - IB Abel Parking Lot – Infiltration Facility
  - Vogelsong Bus Transfer – Storage Basin
  - George Street and Gas Avenue – Infiltration Trench
  - Odeon Park – Infiltration Pit
  - Veterans Memorial Park Basin✕
- Ordinance change about car washing
- BANCS Assessment update
- Procedure for incoming LD plans. MS4 Coordinator needs plans as well as CS Davidson so they may commence inspections.
- ✕ Receiving some signed O&M Agreements – What to do about those who do not return the signed agreement? City takes over?
- Good Housekeeping\*\*
  - Refer to MCM 6 pages

*Industrial Park*

\*\*For next meeting, please bring any questions or concerns you may have.



## MEETING SIGN-IN SHEET

**Project:** MS4 Training

**Meeting Date:** April 18, 2018

**Facilitator:** Lettice Brown

**Place/Room:** WWTP Training Room

Name (please print)	Department
Paul D Walters	WWTP
Galen Thomas	WWTP
Vince Catalano	WWTP
Sarah J. Larache	WWTP
CHHOEUTH YENG	W.W.T.P
Jesse Arzund	W.W.T.P
Hector Lopez	W.W.T.P
Itidalgo Diaz	WWTP
JAN MARKEY	WWTP



# MEETING SIGN-IN SHEET

**Project:** MS4 Training

**Meeting Date:** April 12 2018

**Facilitator:** Lettice Brown

**Place/Room:** WWTP Training Room

Name (please print)	Department
Sally Hoh	miff
Channon Rivera	WWTP
Chip Leux	WWTP
Jared Prestopine	WWTP
RONALD SHAFFER	WWTP
James Hoffnagle	sewer Main.
Erin Longstreet	WWTP-lab
Joe Yeatts	Sewer Maint.
John Eric Stoudt	WWTP
ERVIN GWYNN	WWTP
Garry Brooks	WWTP
Eugene Maszczak	WWTP
Kevin Howell	sewer maint.
James Paulson	Sewer maint.
Pam Laroche	WWTP-LAB
Nancy Griffin	Finance WWTP
JOE CONCINO	WWTP
ERIC HARRIS	<del>sewer</del> Sewer maint



# MEETING SIGN-IN SHEET

**Project:** MS4 Training

**Meeting Date:** April 12 2018

**Facilitator:** Lettice Brown

**Place/Room:** WWTP Training Room

[illegible]



**From:** [Daniel Aikey](#)  
**To:** [Lettice Brown](#)  
**Subject:** RE: Update on MS4 Training for Police Officers  
**Date:** Wednesday, June 13, 2018 3:05:47 PM  
**Attachments:** [image001.png](#)  
[image002.png](#)

---

A told of 87 officers completed the training.

The remaining are sick, injured or in the academy.

Lt. Dan Aikey  
Training/Accreditation  
York City Police Dept.  
50 W. King St. Box 509  
York Pa. 17405  
Work- 717-852-0701  
E-mail: [daikey@yorkcity.org](mailto:daikey@yorkcity.org)

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---

**From:** Lettice Brown  
**Sent:** Wednesday, June 13, 2018 8:25 AM  
**To:** Daniel Aikey  
**Subject:** Update on MS4 Training for Police Officers

Good Morning Sgt.

Could I have a final tally of how many officers/detectives/personnel have completed the MS4 training please? Our reporting period ends June 30<sup>th</sup> so I am collecting the data to add to our annual report to DEP.

Thanks a bunch!

*Working with you for a better York.*





Lettice Brown  
MS4 Coordinator  
Stormwater Management Program  
York City Department of Public Works  
1625 Toronita Street  
York PA 17402  
Cell: (717) 324-6532  
Fax: (717) 845-7342  
[www.yorkcity.org](http://www.yorkcity.org)

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# MS4 Training for Police Officers

By Lettice Brown, CSI





# Refresher...

- What is MS4?
  - Stands for Municipal Separate Storm Sewer System
  - Storm System and Sewer System are SEPARATE
- Why do we care?
  - To keep the environment clean, especially the Chesapeake Bay
  - To continue compliance with our NPDES permit issued by the PA DEP and EPA
- Describe an Illicit Discharge
  - Anything that is not composed entirely of stormwater except for allowable discharges set by EPA and DEP



# 2018 NPDES PERMIT

- March 2018, new permit and contents take effect for another 5 year period
- There are a few changes that will be important to all of you, but most of them will be changes for me
- Most of the changes were clarifications, text rearrangements, additions, and subtractions to the permit language



# A Few Important Changes

- Additions, subtractions and clarifications to the ALLOWABLE DISCHARGE LIST
  - Added the discharge of non-contaminated water from geo-thermal systems
  - Clarified that discharges from individual car washing is allowable IF CLEANING AGENTS ARE NOT UTILIZED
  - Removed de-chlorinated swimming pool discharges because the DEP Fact Sheet for Swimming Pool Discharges states that the water MUST be discharged to the sanitary sewer system, NOT the MS4
  - Adds non-contaminated hydro-static test water discharges that do not contain TRC (Total Residual Chlorine)



# Illicit Discharge Detection and Elimination Revisited

- Litter is an illicit discharge
  - Trash will accumulate in and around storm drains after heavy rainfall and cause flooding during the next rain event
  - We should be actively reminding residents that they are responsible for their trash when it is out for pickup and for ensuring their streets, gutters, and sidewalks are free of trash.
  - We should also be speaking with people who litter from their vehicles, while walking, or any other activities and reminding them to throw their trash away or possibly be fined for littering.





# Litter is an Illicit Discharge





# Illicit Discharge Detection and Elimination Revisited

- Sewage is also an illicit discharge
  - Should a sewage leak be found, it should be reported to the MS4 Coordinator and/or to Permits, Planning, and Zoning staff.
  - Photos of the leak and location is greatly appreciated when notifying us of a sewage leak.
  - Sewage leaks are time sensitive and should be reported immediately, so that clean up could be started immediately.
  - Be sure to look for wet areas near homes during dry weather, this is a good indication of a problem or leak. There may be an odor and pieces of paper present as well.





# Sewage leak should be reported immediately





# Sanitary Sewer Overflow

- SSOs are illegal and dangerous to the environment (York City Ordinance 942 and DEP Chapter 91, Section 33)
- If a resident has sewage in their home, encourage them to call a plumber or a private vacuum contractor to vacuum the sewage out and haul it away
- If it is an emergency, you can pump the sewage into the sanitary sewer manhole - NOT the stormwater sewer or the street
- Notify Sewer Maintenance at the emergency number, MS4 Coordinator (If necessary), PPZ, or the Public Works Director (If everyone above is unreachable) as soon as possible - If all are unreachable, call DEP Emergency number
- Under no circumstances should sewage be pumped into the streets, sidewalks, stormdrains, or creeks
- Time is of the essence when notifying
  - DEP has to be notified within 4 hours of ANY Sewer Overflow into a stormdrain or creek or we could be fined - DEP Reporting Sheet - READ **RED** PRINT ON NEXT 2 SLIDES



# DEP Reporting Requirements.



## Reporting Requirements for Spills and Pollution Incidents Under Pennsylvania's Clean Streams Law

The Department of Environmental Protection's (DEP's) regulations at Chapter 91, Section 33 under Pennsylvania's Clean Streams Law requires that DEP be notified "immediately" when there is an accident or incident in which a toxic substance or other substance that could cause pollution is discharged into "waters of this Commonwealth." Furthermore, the person responsible for the discharge must 1) notify known downstream users of the waters if reasonably possible to do so, 2) immediately take or cause steps to be taken to prevent injury to downstream users of the waters, and 3) remove any residual substances from waters of the Commonwealth within 15 days from the incident. The purpose of this fact sheet is to explain DEP's interpretation of this regulation and practical expectations of those who may cause pollution incidents. Note that the information contained in this fact sheet is not an adjudication or a regulation and does not affect regulatory requirements. For owners and operators of oil and gas wells and regulated storage tanks, please consult DEP's Chapter 78 and Chapter 245 regulations and corresponding policies, respectively, for reporting requirements, which are specific to spill incidents related to these activities.

### What Incidents are Reportable?

DEP's Chapter 91 regulations do not include a threshold on when a spill or pollution incident must be reported to DEP. Always exercise caution and contact DEP whenever there is a potential for a spill containing pollutants to enter waters of the Commonwealth. Waters of the Commonwealth include not only streams, wetlands and other surface waters, but also groundwater, storm sewers and ditches. Pennsylvania's Clean Streams Law charges DEP with determining when a discharge constitutes pollution. If DEP determines that a spill or incident has resulted in pollution and the person responsible has not notified DEP immediately, DEP may, under its legal authority, impose civil penalties up to \$10,000 per day for failure to notify.

If a sewage or industrial waste facility is authorized to discharge to waters of the Commonwealth under a National Pollutant Discharge Elimination System (NPDES) or Water Quality Management (WQM) permit issued by DEP, exceedances of effluent limitations in the permit generally do not constitute incidents subject to immediate reporting unless specifically required by the permit or there is a plant upset, spill or other incident that caused the exceedance. Examples could be an accidental release of chlorine into the effluent, or a release from an indirect user connected to a sewer system that cannot be treated by the sewage treatment plant, such as a release of fuel oil, in which the permittee should notify DEP immediately.

### What Does "Immediate Reporting" Mean?

When a person first becomes aware of a spill or other pollution incident, the first step is to evaluate whether it is possible to stop the continued discharge of pollutants to the environment. Regardless of whether ceasing the discharge can or cannot be accomplished, consider contacting the phone number for emergency services (911) as soon as possible, and then contact DEP at the appropriate emergency contact number, below. If the person is able to stop the release of pollutants, follow up with notification to DEP by telephone as soon as possible.

If the spill or incident occurs at a facility with an NPDES permit, DEP's regulation at Chapter 92a, Section 41 (b) specifies that the permittee must provide oral notification to DEP as soon as possible, but no later than four hours after the permittee becomes aware of the incident causing or threatening pollution. In addition, a written report on the incident must be reported to DEP within five days of when the permittee becomes aware of the incident. DEP's [Non-Compliance Reporting Form](#), or equivalent, should be used for this purpose.

### DEP's Emergency Contact Numbers:

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# DEP Reporting Req. Cont...

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Notification may also be made to the Pennsylvania Emergency Management Agency at 800-424-7362.

#### **If a Person Causing Pollution Notifies DEP "Immediately," is the Person Still Liable for the Pollution?**

Yes. Sections 201, 301 and 401 of the Clean Streams Law prohibit the discharge of sewage, industrial waste and other polluting substances without a permit. DEP may pursue an enforcement action against anyone who violates these sections of the Clean Streams Law, including civil penalties up to \$10,000 per day for each violation. DEP will separately consider the timeliness of notification to DEP under Chapter 91, Section 33 and Chapter 92a, Section 41(b). If notification is considered "immediate," DEP may still pursue civil penalties for the unauthorized discharge of pollutants. Accidental spills or discharges with "immediate" notification may result in lower penalties than accidents that are not reported to DEP.

#### **Examples of Accidents or Other Incidents That May Not Require Immediate Notification to DEP:**

The following are examples of incidents that may not require immediate notification to DEP because the threat of pollution to waters of the Commonwealth is minimal under most circumstances. Nonetheless, when in doubt it is in a person's best interests to notify DEP.

- Minor spills of herbicides, gasoline or other pollutants onto the ground by a homeowner.
- Other minor spills or small leaks onto the ground where there is no reasonable possibility of reaching groundwater or surface waters through a conveyance such as a storm drain.
- A sewage or industrial waste treatment facility that discharges naturally-occurring amounts of foam to surface waters as a result of aeration.

#### **Examples of Accidents or Other Incidents That Require Immediate Notification to DEP:**

- A spill of chemicals, petroleum products, manure, sewage sludge, biosolids, milk, chlorinated water or other pollutants near or into a sinkhole, storm sewer, surface waters or drainage feature leading to surface waters.
- Unanticipated bypasses of raw sewage or industrial wastes to surface waters.
- Vehicular accidents in which pollutants are released to the ground or surface waters.
- Sanitary sewer overflows.

#### **What if a Person is Not Sure Who Downstream Users are?**

The largest concern in the event of a major spill incident is that local public drinking water supplies could be affected. Such local drinking water suppliers should be notified as soon as possible. Facilities in Pennsylvania should generally have an "emergency response plan" in place that identifies downstream users of water and their contact information.

#### **For More Information Contact:**

DEP, Bureau of Clean Water

Phone: 717-787-5017

For more information, visit [www.dep.pa.gov](http://www.dep.pa.gov). Select: Report an Incident.



# Illicit Discharge Detection and Elimination Revisited

- Motor fluids are also common illicit discharges
  - If you see an activity that has the risk of becoming an illicit discharge, please stop and tell them they need to take better precautions.
    - For example, if someone is working on their car in front of their home, stop and ensure they are using drip pans and disposing of the auto fluids properly or otherwise be fined.
  - If an oil or grease slick is found on the ground or sidewalk, please let the MS4 Coordinator know.
  - Photos and location are very helpful
- \*If you respond to a motor vehicle accident, it is important to call the MS4 Coordinator, ONLY IF, fluids have leaked into a storm drain. Otherwise the normal cleanup procedures can be utilized





# Automobile Fluids





# Illicit Discharge Detection and Elimination Revisited

- Grass clippings are an illicit discharge
  - The clippings clog storm drains producing flooding
  - Encourage mowing with the discharge pointing AWAY from the curb/street
  - Sweep or blow the clippings back onto the lawn or bag them up
- Individual car washing while using cleansers is an illicit discharge
  - Encourage residents to use automatic or self facilities that recycle the water OR
  - Encourage residents to pull their cars onto the grass to wash their vehicles
    - This will need to be enforced city-wide and further instructions on how to enforce will come at a later date



# Grass clogs drains





# Encourage these practices





# Is this an Illicit Discharge?



Creek on Eberts Lane



Inside of Sample Bottle



# Answer...

- This is NOT an illicit discharge!
- It is actually Iron-Loving Bacteria that naturally occurs
- At the scene, we noticed that the substance was not “flowing” with the water, but was “sitting” at the bottom of the creek bed
- Even though it looks like something major is going on, it is completely safe – this was corroborated by DEP a few years ago
- When you are out in the field, you may not know whether something is harmful or not. Don't hesitate to contact me when in doubt



# Questions/Comments

- Any questions or comments about this training, please contact me at:
  - Lettice Brown (MS4 Coordinator, Certified Stormwater Inspector)
  - (717) 324-6532
  - [lbrown@yorkcity.org](mailto:lbrown@yorkcity.org)
- Thank you for your time in completing this training!





# TRAINING SIGN-IN SHEET

**Project:** 2018 Employee MS4 Training

**Meeting Date:** Feb 21 2018

**Facilitator:** Lettice Brown

**Place/Room:** Council Chambers

Name (please print)	Department
ANDREW MULLINS	PARKS AND REC
Rashawn Smallwood	Maint. Electrical
<i>[Signature]</i>	Maint/Parking, Electrical
Bill Ruby	Highway
Ralph L. Glover Jr	Highway
JERRY JOHNSON	Highway
George Jennings	Parks
Joel Collier	Parks
Mel Bonnes Jr.	Parks + San.
Keith Gerber	Parks + San.
Paul Bievenue	ELECTRICAL
Chip Rodgers	PARKS
Pete Rodriguez	Parks & Rec
RAY SMITH	PARKS
Ricardo Nichols	Highway
Nichelle Painter	PP&Z
Jason Sandmeyer	PP&Z
Montanez McMillion	PP&Z
Patricia Maher	P, P & Z



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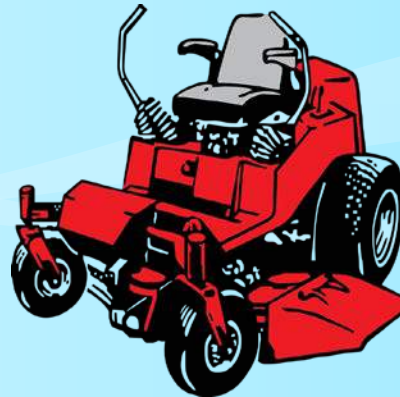
Name (please print)	Department
Artemos G WALLS	PARKS
<del>B. Bush</del>	PARKS
Cliffonda Stokes	PP&Z
Shelton Scott	PP&Z
<del>Randy Fager</del>	BM
Carl Sanku	PPZ
Nicole Gallup	Planning
David Shiner	Park's
Taues Outen	Highway
JEFF SUNDAY	BM
Kendale Harris	E/C.
Keith Hunkle	Highway
JOHN HEDRICH	HIGHWAY





# MS4 2017-2018 Training for City Employees and Managers

By Lettice Brown, CSI





# Agenda

- Review
- A look at the 2018 NPDES Permit
- Note few important changes
- MCM 6 – Pollution Prevention and Good Housekeeping
  - BMPs 1 and 2 only
- What is PAG-03 and why is it important?
- Illicit Discharges Revisited with more examples
- Recap
- Questions/Comments/Suggestions
- Video on Good Housekeeping (14 mins)



# Refresher...

- What is MS4?
  - Stands for Municipal Separate Storm Sewer System
  - Storm system and sewer system are SEPARATE
- Why do we care?
  - To keep the environment clean, especially the Chesapeake Bay
  - To be in compliance with our NPDES permit issued by the PA DEP
- Describe an Illicit Discharge
  - Anything that is not stormwater, discharged to a MS4, except for the allowable discharges



# 2018 NPDES Permit

- March 2018 new permit and contents take effect for another 5 year period
- There are a few changes that will be important to all of you, but most of them will be changes for me
- Most of the changes were clarifications, text rearrangements, additions, and subtractions to the permit.



# A Few Important Changes

- Additions and Subtractions to ALLOWABLE Discharge list
  - Added the discharge of non-contaminated water from geo-thermal systems
  - Clarified that the discharge from individual car washing is allowable IF CLEANING AGENTS ARE NOT UTILIZED
  - Removed de-chlorinated swimming pool discharges because the DEP Fact Sheet states that the water MUST be discharged to the sanitary sewer system, not the MS4
  - Adds non-contaminated hydro-static test water discharges that do not contain TRC (Total Residual Chlorine)



# MCM 6 - Pollution Prevention and Good Housekeeping

- BMP 1 - Identify and modify all operations that are owned by the permittee (The City) and have the potential for generating pollution in stormwater runoff to MS4. (Permit definition)
  - Street Sweeping
  - Snow removal
  - Inlet/outfall cleanings
  - Lawn care/mowing
  - General MS4 outfall inspections/maintenance and repair
  - Municipal building maintenance
  - Right-of-way
  - Vehicle Operations, fueling, and washing
  - Etc....(A lot more listed but you get the idea)



# MCM 6 Continued....

- BMP 2 – Written O&M program for all operations that could contribute to pollution to MS4
  - Management practices, policies, and procedures developed and implemented
    - Should consider eliminating maintenance area discharges from floor drains and other drains if they have the potential to discharge to MS4 waters
  - Maintenance activities, schedules, and inspection procedures to reduce potential pollutants from entering MS4
  - Controls for reducing or eliminating the discharge of pollutants from streets, roads, highways, parking lots, maintenance and storage yards, waste transfer stations, fleet shops, salt dome etc.
    - Controls for solid chemical products stored and utilized for the principal purpose of de-icing roads must be consistent with BMPs for existing salt storage and distribution sites contained in the PAG-03 NPDES Gen Permit.



# PAG-03

- Stormwater Discharges Associated with Industrial Activity
  - Pollution prevention and exposure minimization
    - Use grading, berming, or curbing to prevent runoff
    - Locate materials, equipment, and activities that could potentially leak or spill and are contained or diverted before entering a MS4
    - Clean up spills and leaks promptly using dry methods (absorbents)
    - Store leaky vehicles and equipment INDOORS or use drip pans if must be kept outdoors to catch the leaky fluids
    - Use spill/overflow protection equipment
    - Perform all vehicle and/or equipment cleaning operations indoors, under cover, or in bermed areas
    - Drain fluids from equipment and vehicles that will be decommissioned or remain unused for extended periods of time, and inspect monthly for leaks.



# PAG-03 Continued

- Keep all dumpster lids closed when not in use. Dumpsters and roll-offs that may not have lids, must use a secondary containment or treatment. (Permit does not authorize ANY discharges from dumpsters or roll-offs)
- Minimize contamination from fueling areas by implementing these:
  - Cover fueling areas, install oil/water separators or oil and grease traps in fueling area storm drains, berms to prevent run-on to and run-off from fueling areas, use spill/overflow protection and cleanup equipment, use dry cleanup methods, and/or treat and/or recycle collected stormwater runoff.
- Train employees routinely (no less than annually)



# PAG-03 Cont...

- Good Housekeeping
  - Implement a routine cleaning and maintenance program for all impervious areas of the facility where particulate matter, dust or debris may accumulate
    - Must include areas where material loading, unloading, storage, handling and processing occur.
  - Store materials in appropriate containers
  - Minimize potential for waste, garbage, and floatable debris to be discharged by keeping exposed areas free of these materials or intercepting them before they are discharged
  - Eliminate floor drain connections to MS4s
  - Use drip pans, drain boards, and drying racks to direct drips back into a fluid holding tank



# PAG-03 Cont....

- Good Housekeeping Continued...
  - Label and track the recycling of waste material
  - Prohibit the practice of hosing down an area where the practice would result in the discharge of pollutants to a MS4
- Erosion and Sediment Controls
  - Stabilizing any exposed soils
  - When conducting earth disturbances, must maintain all Post-Construction Stormwater Management (PCSM)
  - Must not use polymers or other chemicals to treat stormwater unless written permission by DEP



# PAG-03 Cont...

- Spill Prevention and Responses
  - Maintain an organized inventory of materials on-site. Plainly label containers that could be susceptible to spillage or leakage and encourage proper handling and rapid responses should a spill or leak occur.
  - Implement procedures for material storage and handling including secondary containment and barriers
  - Develop and implement employee and contractor training on procedures for quickly stopping, containing, and cleaning up spills and leaks. No less than annual training.
  - Keep spill kits on-site, located nearest any potential spills or leaks could occur.



# PAG-03 Cont....

- Spill Prevention and Responses Cont...
  - Notify appropriate facility personnel when a leak, or spill occurs
  - Eliminate or reduce the number and amount of hazardous materials and waste by substituting non-hazardous materials of equal function
  - Clean up leaks, drips, and spills without using large amounts of water or liquid cleaners. Use absorbents!
- Routine Inspections - Should visually inspect:
  - Areas where industrial materials or activities are exposed
  - Areas identified in the Preparedness, Prevention and Contingency (PPC) Plan



# Pag-03 Cont....

- Routine Inspections Cont...
    - Areas where spills or leaks have occurred in past 3 years
    - Stormwater outfalls and locations where authorized non-stormwater discharges may comeingle
    - Physical BMPs
- \*\*Routine inspections must be conducted during a period when a stormwater discharge is occurring at least ONCE a year\*\*



# Illicit Discharges Revisited

- Examples of Illicit Discharges:
  - Grass Clippings
    - Encourage mowing away from the street, and/or blow the clippings back onto the grass. May sweep up and discard into regular waste receptacle.
    - Why? Will flow into the storm drain and clog it. Or will wash into the nearest creek or lake and create algae blooms which kills fish and other wildlife.
  - Sewage
    - Take necessary precautions to prevent the leak from reaching a storm drain. Call MS4 Coordinator AND notify PPZ immediately.
    - Why? It not only smells and looks bad, but it contains dangerous bacteria that could kill organisms if reaches a body of water



# Sanitary Sewer Overflows

- SSOs are illegal and dangerous to the environment (York City Ordinance 942 and DEP Chapter 91, Section 33)
- If a resident has sewage in their home, encourage them to call a plumber or a private vacuum contractor to vacuum the sewage out and haul it away
- If it is an emergency, you can pump the sewage into the sanitary sewer manhole – NOT the stormwater sewer or the street
- Notify Sewer Maintenance at the emergency number, MS4 Coordinator (If necessary), PPZ, or the Public Works Director (If everyone above is unreachable) as soon as possible – If all are unreachable, call DEP Emergency number
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- Time is of the essence when notifying
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  - DEP Reporting Sheet



# DEP Reporting Sheet



**pennsylvania**  
DEPARTMENT OF ENVIRONMENTAL  
PROTECTION

## Reporting Requirements for Spills and Pollution Incidents Under Pennsylvania's Clean Streams Law

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**FACT SHEET**



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#### **For More Information Contact:**

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For more information, visit [www.dep.pa.gov](http://www.dep.pa.gov). Select: Report an Incident.



# Illicit Discharges Revisited

## Cont...

- Cement/Concrete Cutting (Slurry)
  - You may speak with the site manager and suggest putting socks or berms around the storm drains to prevent the substance from getting into them
  - Why? That washwater contains hazardous waste that will be washed into the nearest storm drain and kill fish and other wildlife
- Motor Oil/Grease
  - Let MS4 Coordinator know, then use absorbent to soak up the spill and street sweep up the mess later
  - Why? We all know oil and water do not mix. Oil and grease do not allow fish to breathe and they will suffocate
- Sediment (Dirt)
  - Sediment buildup in our creeks and streams is a major problem in our area.
  - Creates backups and cuts off flowing water which can cause significant flooding

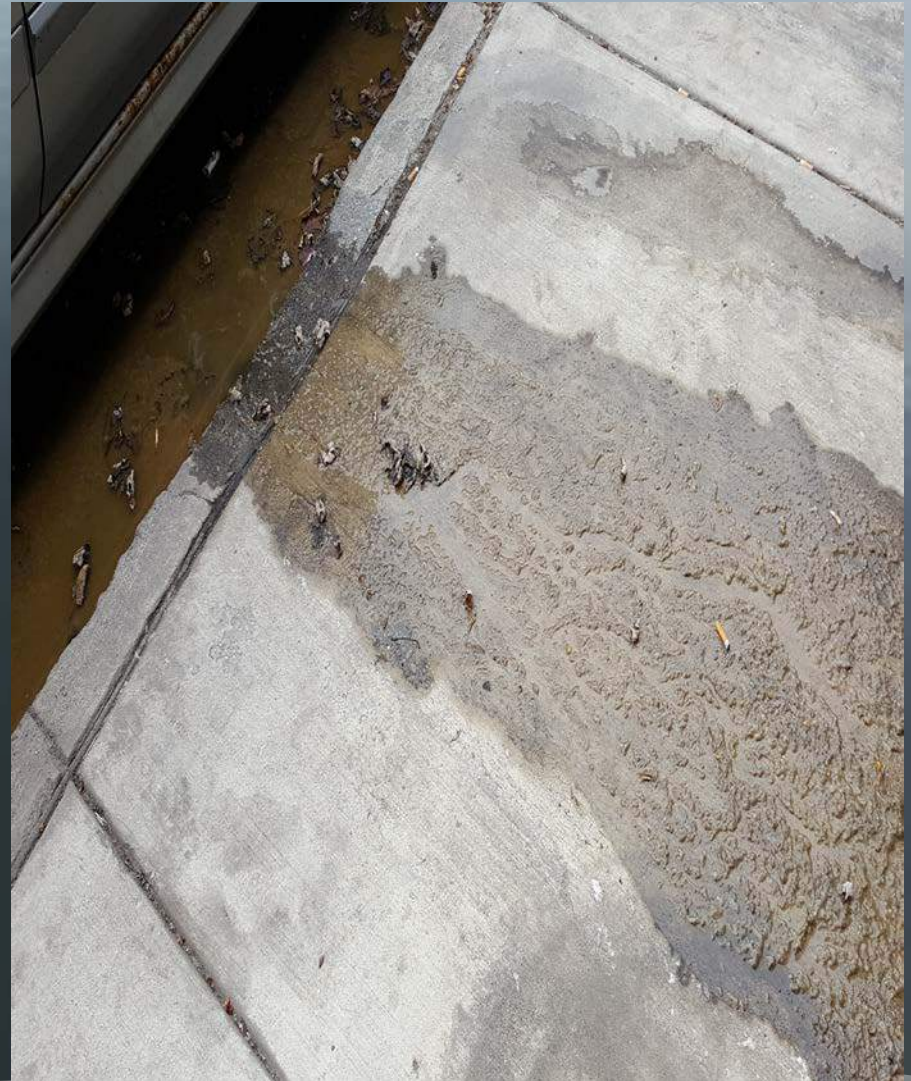


# Grass Clippings





# Sewage





# Cement/Concrete (Slurry)



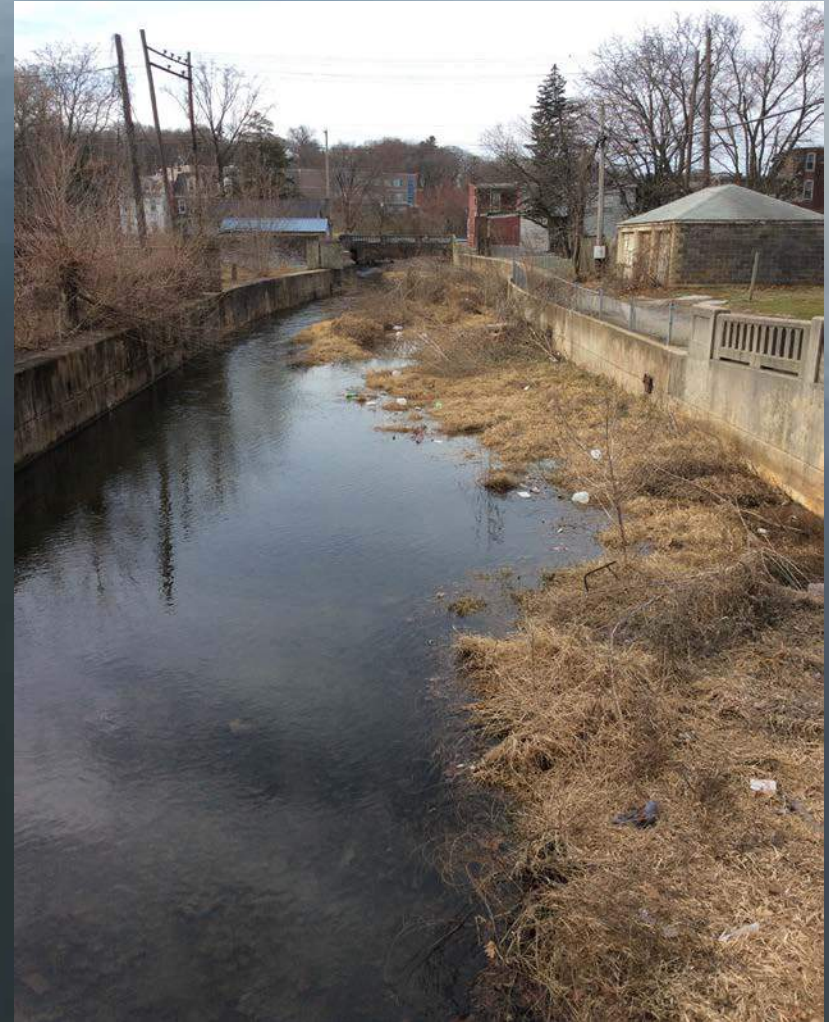


# Motor Oil/Grease



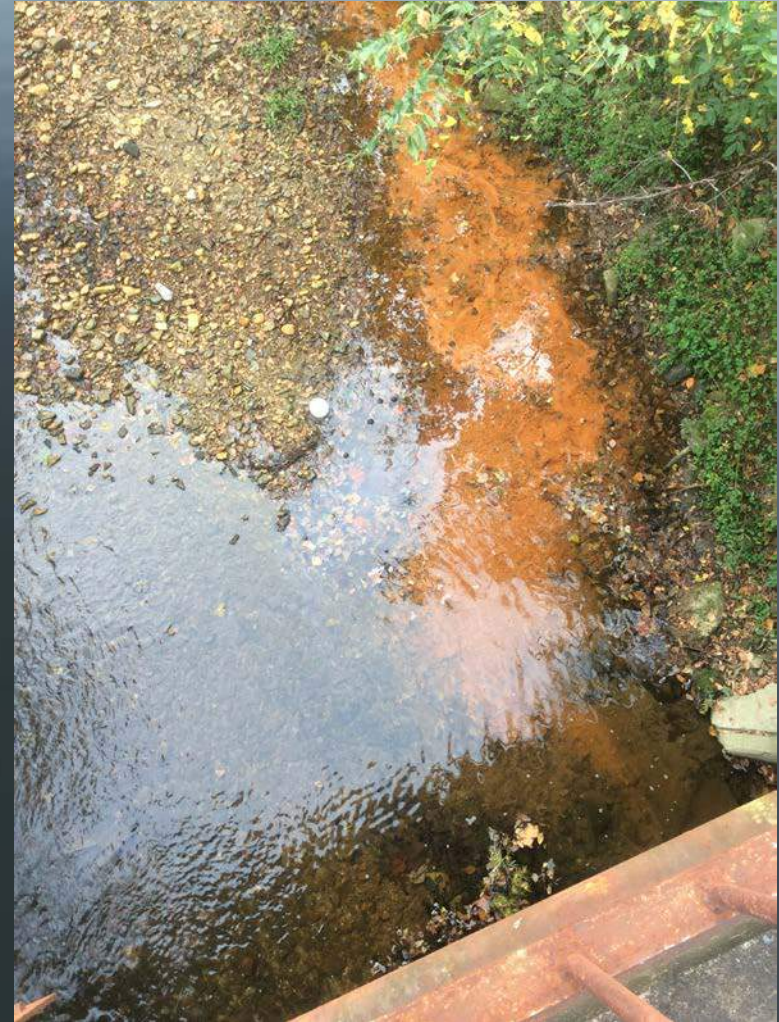


# Sediment





# Is this an Illicit Discharge?





# Iron-Loving Bacteria



- Iron-Loving Bacteria
- Naturally occurs
- Feeds off of impurities in the water
- Has an oily smell to it
- Completely harmless to the water and environment



# Recap

- Ensuring that we as City employees are not contributing to pollution of our MS4
  - Pollution Prevention and Exposure Minimization
  - Good Housekeeping
  - Erosion and Sediment Controls
  - Spill Prevention and Responses
  - Routine Inspections
- Make sure we have records of everything from inspections, spills, cleanups, and other activities.
- Identifying Illicit Discharges and what to do about them



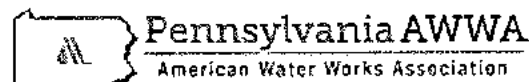




# Important Phone Numbers

- Lettice Brown - MS4 Coordinator - (717) 324-6532 - [lbrown@yorkcity.org](mailto:lbrown@yorkcity.org)
- Chaz Green - Director of Public Works - (717) 324-6599
- Steven Buffington - Permits, Planning, Zoning - (717) 324-6545
- DEP Emergency Number - 1-866-825-0208
  - This number is found on Google as well if you do not have it on hand while on a call
  - When this number is called, you will be required to leave a 30 second or less message with your name, phone, and nature of call. A human will return your call within 5 minutes.





# Stormwater Management Summit:



## Building Partnerships for Clean Water

Co-sponsored by Pennsylvania's leading  
organizations representing the state's  
drinking water and wastewater sectors

**November 13 & 14**  
**The Penn Stater Conference Center**  
**State College, PA**

**YOU CAN PARTICIPATE AS A.....**

✓ registrant

✓ exhibitor

✓ sponsor

**[www.pwea.org](http://www.pwea.org)**



# Stormwater Management Summit

**MONDAY, NOVEMBER 13**

**8:30 – 9:30am: Registration and Welcome Hour with Exhibitors**

**9:30 – 9:35am: Welcome**

Nathan Walker, AICP, Amec Foster Wheeler, PWEA Stormwater Committee Chair

**9:35 – 10:00am: Keynote Presentation - Navigating the Changing Regulatory Landscape**

Chris French, Director of the Water Environment Federation's Stormwater Institute  
The diversity of national and state stormwater regulations and permit programs can provide opportunities for agile stormwater professionals to protect our water resources. In addition, financing stormwater programs is one of the greatest challenges facing the stormwater sector today. Chris will provide an overview on current stormwater regulation and funding trends and what this could mean for the future.

**10:00 – 10:30am: Legal and Regulatory Requirements Applicable to Municipal Stormwater Programs**

Steven A. Hann, Esquire (PMAA East Region Solicitor),  
Hamburg, Rubin, Mullin, Maxwell & Lupin, P.C.

Implementing a successful Municipal Stormwater Program is dependent upon an understanding of the Federal/ State legal and regulatory requirements related to stormwater. This presentation will provide attendees with a basic understanding of such requirements, and address compliance issues and options that are germane to a municipality's stormwater obligations.

**10:30 – 11:00am: Lessons Learned in Improving TMDL and Pollutant Reduction Plans**

Beth Uhler, Cedarville Engineering Group, LLC

TMDL and Pollutant Reduction Plans should contain BMPs that are practical, economical, and environmentally beneficial, while addressing the regulatory thresholds. This presentation will share lessons learned in improving these continually evolving documents by comparing and contrasting challenges in urban, suburban, and more rural MS4 case studies.

**11:00 – 11:15am: Break with Exhibitors**

**11:15 – 11:45am: Cloudburst Analysis: Tools and Methods**

Zachary Ranstead, PE, LEED-AP, T&M Associates

Cloudbursts are extreme amounts of precipitation occurring for a short duration over a small area. Presentation investigates an instance of extreme precipitation/flooding that occurred in Allentown, PA and demonstrates fast-processing of public NOAA NEXRAD Radar Precipitation Data to quantify a cloudburst event. Data used to consider storm-sewer infrastructure performance.

**11:45am – 12:15pm: Upkeep and Upgrades: Lessons Learned in Maintaining Green Infrastructure**

Kate Austin, Ruth Ayn Hocker, and Kurt Lefever, all with the City of Lancaster

Six years into Lancaster's Green Infrastructure Plan, inspections, maintenance, and retrofits are key to keeping the City's GI practices functioning at optimum. Staff will present on the challenges of operating and maintaining GI practices in parks, right of ways, and public properties and opportunities to improve upon previously implemented designs.

**12:15 – 1:30pm: Lunch with Exhibitors**

**1:30 – 2:00pm: A Community-Based Approach to Green Infrastructure**

Claire Maulhardt, Capital Region Water, and Andrew Dobshinsky and Mary Morton, both with WRT

With its Community Greening Plan, Capital Region Water has committed to the implementation of green stormwater infrastructure throughout Harrisburg as part of its stormwater management strategy. While facing common stormwater issues, Capital Region Water is taking a novel approach to implementation—empowering Harrisburg residents to partner in public realm transformation.

**2:00 – 2:30pm: Places + Performance: Integrating Green Infrastructure into Pittsburgh's Urban Fabric**

John Ross, Arcadis, and Christine Mondor, evolve EA

With completion of their comprehensive Sewershed Urban Design Study, Pittsburgh Water and Sewer Authority is consciously shaping their greenspace to be ecologically high performing amenities that are not only economically viable solutions to the City's wet-weather needs, but also sustainable and adaptive benefits to the City's urban fabric.

**3:00 – 3:30pm: Break with Exhibitors**

**2:30 – 3:00pm: Embracing Stormwater: Overcoming the Challenges to Benefit Residents, the Municipality, and an Authority's Own Operations**

Wayne Schutz and Michael Caillahan, both with Derry Township Municipal Authority

Many authorities are cautious about adding stormwater management to their responsibilities because of uncertainty about the number and condition of assets they'll be taking on and the resources and staffing required to manage them. Derry Township Municipal Authority's example shows how open, collaborative communication with municipal staff and a holistic assessment of the municipality's MS4 permit, stormwater program and assets can help an authority move beyond its concerns toward the opportunity stormwater acquisition presents.

Stormwater continues to demand more attention and resources from municipal and environmental professionals across Pennsylvania in order to meet regulatory requirements and improve water quality. Moving into the next decade, the need for affordable and sustainable stormwater management will require practitioners to avoid thinking in the silos of water, wastewater, and stormwater services, and take a unified approach to managing all of our water resources.

That is why PWEA, PMAA, and PA-AWWA have joined together in presenting an integrated approach to water resource management. The Pennsylvania Stormwater Management Summit: Building Partnerships for Clean Water includes presentations on regional planning, sediment reduction, permit compliance, and multi-disciplinary methods to water management.

**Looking forward to seeing you in State College this fall!**

**All sessions and activities are held in Presidents Hall.**



# Stormwater Management Summit

## **3:30 – 4:00pm: How the Wyoming Valley Sanitary Authority is Cutting MS4 Compliance Costs with a Regional Approach to Stormwater Management and Watershed Planning**

Adrienne Vicari, PE, Herbert, Rowland & Grubic, Inc., and Jim Tomaine, PE, Wyoming Valley Sanitary Authority  
Wyoming Valley Sanitary Authority's approach to regional stormwater management includes local, county, state, and federal partnerships that significantly reduce the cost of Pollution Reduction Planning and MS4 compliance. This presentation provides insight for how municipal personnel can implement similar strategies and yield cost savings that benefit their municipality's bottom line.

## **4:00 – 4:30 pm: Stormwater Retrofits on School Properties: Going From Assessment to Construction, and Navigating Through Constraints**

Mike Galvin and Jeremy Koser, both with Johnson, Mirmiran & Thompson

This presentation will describe the process of assessing a parcel for stormwater management opportunities, maximizing treatment, ensuring the design intent is carried through during construction and navigating all the constraints along the way! This project included the construction of one rain garden, two bioswales, two bioretentions and eleven microbioretention facilities.

## **4:30 – 6:00pm: Reception with Exhibitors**

Enjoy complimentary beer and snacks while you network with your colleagues and the vendors.

## **TUESDAY, NOVEMBER 14**

### **7:30 – 8:30am: Breakfast with Exhibitors**

### **8:30 – 9:00am: Long Term Control Plan Affordability for Public 'Buy-In'**

Michael J. Hope and Jean Malafronte, both with Greeley and Hansen

Determining a Permittee's and the rate payers' financial capability are an integral part in implementing CSO controls and long term control measures that are affordable to all contributing parties. This presentation will discuss the elements of a Financial Capability Assessment and present three case studies as well as lessons learned for various size systems.

### **9:00 – 9:30am: Integrated Watershed Management: The Challenges and Opportunities for Collaboration**

Ruthann L. Omer, PE, Gateway Engineers, Inc., and Lisa Werder Brown, Saw Mill Run Watershed

This presentation focuses on creating an Integrated Watershed Management Plan for Stormwater in an urbanized watershed that includes 12 separate municipalities. In early 2015, the Saw Mill Run Watershed began to develop an Integrated Watershed Management Plan. Progress has been made but the IWMP has not been without challenges.

### **9:30 – 10:00am: Major Regulatory Issues Arising with EPA/DEP Mandates on MS4 Permits**

John C. Hall, Gary B. Cohen, and William T. Hall, all with Hall & Associates

DEP has recently begun issuing MS4 Permits to address TMDL requirements and/or downstream water quality impairments. Many permits have begun to include requirements that exceed regulatory authority, create unattainable/inappropriate pollution reduction mandates and cause ongoing non-compliance, limiting future growth. This presentation addresses legal concerns associated with such MS4 permit provisions.

### **10:00 – 10:30am: Break with Exhibitors**

### **10:30 – 11:00am: Authorities Taking on Stormwater**

Tim Dean, PE, Amec Foster Wheeler

Municipalities across Pennsylvania are looking to amend the structure of their existing water and wastewater authorities to take on growing stormwater responsibilities. What does this mean for you? Will it change staffing needs? Will it increase your exposure to growing water quality regulations? Learn about how four authorities in Pennsylvania are answering these questions and how they are gearing up to provide stormwater services to their ratepayers into the future.

### **11:00 – 11:30am: The Role of Environmental Non-profits in Implementing Stormwater Management**

Alice R. Baker, PennFuture, and Susan Myerov, Pennsylvania Environmental Council

This presentation will provide an overview of the ways in which nonprofits and watershed groups engage on stormwater management, the range of expertise these groups can bring to the table and can be leveraged to comply with regulatory requirements, and how municipalities can take advantage of these resources.

### **11:30am – Noon: MS4 Pollutant Reduction Plan Implementation and How to Utilize Your GIS Asset Management Tools**

Kevin A. Brett, PE, and Shawn R. Wingrove, EIT, both with Lennon, Smith, Souieret Engineering, Inc.

As municipalities begin implementation of their Pollution Reduction Plans (PRPs), a GIS and asset management program will be a critical tool in efficiently tracking PRP compliance, including locations, pollutant reductions, and maintenance of PRP BMPs. This presentation will focus on the usefulness of GIS tools in managing documentation of PRP compliance.

### **Noon – 12:15pm: Closing Remarks: Current State and Future of Stormwater Management in Pennsylvania**

Hear from the leaders of PMAA, PWEA and PA AWWA on the state of stormwater management in Pennsylvania

### **12:15pm: Adjourn**



# Stormwater Mini-Conference

## MS4 Regulations & the Impacts in Pennsylvania

**November 2, 2017**

*Sheraton Harrisburg Hershey Hotel*



**THERE'S NO DOUBT ABOUT IT:** stormwater management in Pennsylvania is a multi-layered, multi-jurisdictional, ever-changing quagmire of rules, regulations, and requirements.

Since the passage of the Clean Water Act (CWA), the quality of our Nation's waters has improved dramatically. Despite this progress, however, degraded water bodies still exist. According to the 2000 National Water Quality Inventory, approximately 40% of surveyed U.S. water bodies are still impaired by pollution and do not meet water quality standards. *A leading source of this impairment is polluted stormwater runoff.*

Learn about the challenges and opportunities to reducing stormwater pollution within your community/ municipality, and about the future of stormwater management in Pennsylvania.

*Who should attend?*  
**Borough, Township & City Managers**  
**Wastewater Facility Managers**  
**Road Masters**

**Limited number of seats available!**

**Sign up today!**

**COST:**

**\$40 Per Person**

**Lunch included**

**LOCATION:**

**Sheraton Harrisburg Hershey Hotel**  
**4650 Lindle Road**  
**Harrisburg, PA 17111**  
**Dauphin County**

### Schedule

**8:00 am - 8:45 am**  
**Registration**

**9:00 am - 9:30 am**

**What Is Stormwater & Why Is It Important to Manage?\***

Stormwater is a natural source of fresh water that originates during heavy precipitation events. When it lands, it infiltrates through the soil and recharges the aquifers that we get drinking water from. But when stormwater can not infiltrate, it starts to create issues. Learn about stormwater and why it needs to be managed.

**9:30 am - 10:15 am**

**Challenges and Benefits of Creating a Multi-municipal Stormwater Coalition**

**Presentation of the processes the Blair County groups used to manage their stormwater needs**

**10:15 am - 10:30 am**

**Break**

**10:30 am - 11:30 am**

**Is A Stormwater Authority Right for You?\***

In 2014, PA Governor Corbett signed into law an amendment that expressly authorizes the creation of municipal stormwater authorities. While this power, among others, does have its benefits, it isn't always the best option for a municipality. Learn if a stormwater authority is beneficial to you and your community.

**11:30 am - 1:00 pm**

**Lunch & Vendor Showcase (Included with registration)**

Stormwater vendors and industry experts will be available to answer your questions and demonstrate products that can provide solutions to your stormwater needs.

**1:00 pm - 2:00 pm**

**Stormwater Regulation Requirements\***

The EPA manages the permitting process in some states, but in PA, the PA DEP administers the program and establishes permits for MS4s, industrial sites and any construction activities which disturbs more than one acre of land. While this may sound straightforward, the many facets to stormwater can make the coordination and management of stormwater water programs complicated.

**2:00 pm - 2:15 pm**

**Break**

**2:15 pm - 3:00 pm**

**Stormwater Mapping Requirements\***

Understanding the location of your separate storm sewer system (MS4) outfalls is the key to effectively managing stormwater runoff and protecting water quality. System maps will not look alike, but they should contain the same basic information and ultimately serve as a tool for implementing the IDDE Program (MCM #3), as well as other components of a Stormwater Management Plan.

**3:00 pm - 4:00 pm**

**Question & Answer Session**

A panel of experts for you to get answers to your questions about stormwater and how it's impacting or will impact you.

*\*No contact hours are associated with these classes*





# SANITARY SEWER OVERFLOWS

Lettice Brown, CSI – MS4 Coordinator



# TABLE OF CONTENTS

- What is a sanitary sewer overflow (SSO)?
- Why it is bad? – yes, it is also illegal
- What you should NOT be doing
- What you should be doing
- Who should be notified of a SSO?
- Wrap up





# WHAT IS A SANITARY SEWER OVERFLOW?

- A sanitary sewer overflow occurs when there is a blockage in the sanitary sewer pipe and the blockage causes the sewage to flow outside of the pipes.
  - The overflow could be a main line or a lateral (from the main to the home)
  - The overflow could flow into the ground (potentially create a sinkhole), or into basements or other areas
- Sanitary Sewer Overflows (SSO) can be identified by grey or brown water that has a foul odor. You may also see particles of toilet paper and other debris in it.



# EXAMPLE OF SEWAGE OVERFLOW





# MORE EXAMPLES OF SSO





# WHY IS IT BAD? – IT IS ALSO ILLEGAL

- Sewage contains bacteria that can have harmful effects on the environment, including killing fish
- Sewage is considered an illicit discharge
  - According to DEP, sewage, under any circumstances, cannot flow into stormdrains that lead to creeks and streams
  - There could possibly be fines for those who discharge sewage onto the street, sidewalk, or into stormdrains – York City Ordinance 942: Illicit Discharge Detection and Elimination



# WHAT YOU SHOULD NOT BE DOING

- DO NOT spill, pump, or otherwise dump sewage onto streets, gutters, sidewalks, or stormdrains
- It is of best interest not to assist residents with pumping sewage from their basements but if its necessary – pump the sewage into the sanitary sewer manhole



# WHAT YOU SHOULD BE DOING

- Notify proper employees that need this information as soon as possible
- If a resident is pumping sewage from their home onto the street, you should tell them to stop, and that it is illegal to discharge sewage into the street – Then try to contain the discharge and prevent it from entering storm drains
- If you must help a resident pump out their basement (only in emergency situations), ensure the discharge is going into the sanitary sewer manhole OR is being pumped out by a contract company with a tanker truck
  - We should be recommending a private contractor to vacuum out their basement into a tank whenever possible



## ALSO...

- Lime is commonly used to disinfect an area after a sanitary sewer overflow.
- Minor spills requiring immediate attention may be disinfected with regular garden lime from a garden shop. **Follow the lime container's label instructions.**
- Sprinkle the lime onto the spill so the spill is dusted mostly white on the surface. If the residue is thicker in some places use a rake to mix the lime and the residue. After a day, rake up the thicker residue and place it in a trash bag for disposal with the other trash. Use a sprinkler or hose to water the lime and residue into the soil. Let the area dry in the sun a day before allowing access. If there is still white lime dust visible on the yard, water it in until the white dust is gone. (This should only be done when the spill is on the grass or other porous/pervious surface)
- If the spill is on an impervious surface, be cautious about using lime (I would suggest NOT using it at all) – Alternatives would be kitty litter or other absorbent. Ensure none of it gets into the storm drains, and ensure there is no leftover residue. When it rains, the residue will wash directly into the storm drain



# WHO SHOULD BE NOTIFIED OF A SSO?

- The more people notified of the event, the better
  - Sewer Maintenance Emergency Number
  - MS4 Coordinator – Lettice Brown (Only if the sewage has reached a stormwater inlet or a “Water of the Commonwealth”)
  - Permits, Planning, Zoning – Steven Buffington
  - Public Works Director – if you cannot get ahold of anyone above
  - DEP Emergency Line – If anyone above cannot be reached
- Time is of the essence when notifying
  - DEP has to be notified within 4 hours of ANY Sewer Overflow into a stormdrain or creek or we could be fined – DEP Reporting Sheet
- You may be asked for your report for my records



# WRAP UP

- SSOs are illegal and dangerous to the environment (York City Ordinance 942 and DEP Chapter 91, Section 33)
- If a resident has sewage in their home, encourage them to call a plumber or a private vacuum contractor to vacuum the sewage out and haul it away
- If it is an emergency, you can pump the sewage into the sanitary sewer manhole – NOT the stormwater sewer or the street
- Notify Sewer Maintenance at the emergency number, MS4 Coordinator (if necessary), PPZ, and Public Works Director (If someone is unreachable) as soon as possible – If all are unreachable, call DEP Emergency number
- Under no circumstances should sewage be pumped into the streets, sidewalks, stormdrains, or creeks



# IMPORTANT NUMBERS

- Sewer Maintenance Emergency Number – (717) 894-1187
- MS4 Coordinator – Lettice Brown – (717) 324-6532
- Permits, Planning, and Zoning – Steven Buffington – (717) 324-6545
- Sanitary Sewer Manager – Frankie Champagne – (717) 324-6572
  - Scott Millar – (717) 318-2686
- Public Works Director – Chaz Green – (717) 324-6599
- DEP Emergency Number – 1-866-825-0208 (if NO ONE is able to be reached)
  - You can also Google DEP Emergency Number and it will come up as well, be sure to use the one for South Central Region
  - You will be answered by a machine, leave a short 30 second message and your call back number. An actual person will call you back in usually less than 5 minutes



QUESTIONS/CONCERNS???

**BURNING QUESTIONS**



# SSO TRAINING SIGN-IN SHEET

**Project:** Firemen SSO Training

**Meeting Date:** November 21 2017

**Facilitator:** Lettice Brown

**Place/Room:** Fire Station 9

Name (please print)	Platoon
Adam Smith	B
Cody Sanfrago	EMA
William Collins	D
MARK J Bowman	C
DAVE J. FERGUSON	C
PATRICK J. ROSIE	D
Mike SHANABROOK	EMA
Gen King	FP
William STEEGER	A
EDWIN D. HAMILTON	A
CHAD A. DEARDORFF	ADMIN
DAVID P MICHAELS	Admin
Trish McQuinn	Admin



# Stormwater BMP Bus Tour September 29, 2017

	Name	Municipality	Position	email	number
✓	1 Connie Stokes	<del>Dallastown</del>	Secretary	conniestokes@aol.com	
✓	2 David Garabedian	Dallastown	ZO	d.w.garabedian@gmail.com	717-244-6626
✓	3 Joe Joines	Dallastown	Pub Works		
✓	4 Sophie Simon	Dover WWTP		doverwwtp@comcast.net	717-292-4911 ext 21
✓	5 Paul Groff	Fairview		pgroff@twp.fairview.pa.us	
✓	6 Paul Rodrigo	Fairview	MS4 Coordinator	prodrigo@twp.fairview.pa.us	877-5029
✓	7 <del>Patricia Trout</del>	<del>GLB</del>	Engineer	ptrout@glba-engineering.com	
✓	8 John Runge	GLB (Windsor Boro Park)	Engineer	jrunge@glba-engineering.com	717-741-4621
✓	9 Zach Steckler	Hanover	Engineer	zsteckler@hanoverboroughpa.gov	717-637-3877
✓	10 Roger W. Coleman	Jacobus	BC Pres	councilpresident@mail.com	717-428-1752
✓	11 Andrew Birmingham	JMT	Engineer	abirmingham@jmt.com	443-798-1919
✓	12 Ted Evgeniadis	Lower Sus Riverkeeper		lowsusriver@hotmail.com	609-571-5278
✓	13 Jodi Sulpizio	Master Watershed Steward Coordinator		jrb143@psu.edu	717-840-7408
✓	14 Shawn Garrett	Penn Twp	ZO	pennadmin@comcast.net	717-632-7366
✓	15 Brett Patterson	Red Lion	Public Works	bpatterson@redlionpa.org	717-244-3475
✓	16 Dianne Price	Red Lion	Manager	Dprice@redlionpa.org	717-244-3475
✓	17 Kelly Henshaw	Red Lion	BC Pres	khenshaw@redlionpa.org	717-244-3475
✓	18 Paul Solomon	Shrewsbury Twp	Supervisor	manager@shrewsburytownship.org	717-235-3011
US	19 Tom Johnston	Skelly & Lox (Nixon Park)	Engineer	tjohnston@skellyloy.com	717-576-3877
✓	20 Ben Marchant	Springettsbury	Manager	Ben.Marchant@Springettsbury.com	717-757-3521 ext. 421
✓	21 Zane Williams	W. Manheim	ZO	zwiliams@wmtwp.com	717-632-0320
✓	22 Mike Gasswint	Warrington Twp	ZO	office@warringtontwp.org	717-432-9082
✓	23 Alan Vandersloot	West York Boro	council	alan.vandersloot@wyborough.org	717-846-8889
✓	24 Linda Diaz	West York Boro	Manager	linda.diaz@wyborough.org	717-846-8889
✓	25 Kip Allison	Windsor Twp	ZO	kallison@windsortwp.com	717-244-3512
✓	26 Matt Deitz	Windsor Boro	Pres BC	mdeitz@windsortwp.com	717-244-6615
✓	27 Tina Gleim	YCC4CW	MWS/MG	tina.gleim@aol.com	717-432-2387
✓	28 Gary Peacock	YCCD		gpeacock@yorkccd.org	717-840-7430
✓	29 Albert Murray	York City	HWY bureau	amurray@yorkcity.org	
✓	30 Lettice Brown	York City	MS4 Coordinator	lbrown@yorkcity.org	324-6532

10/1/2017  
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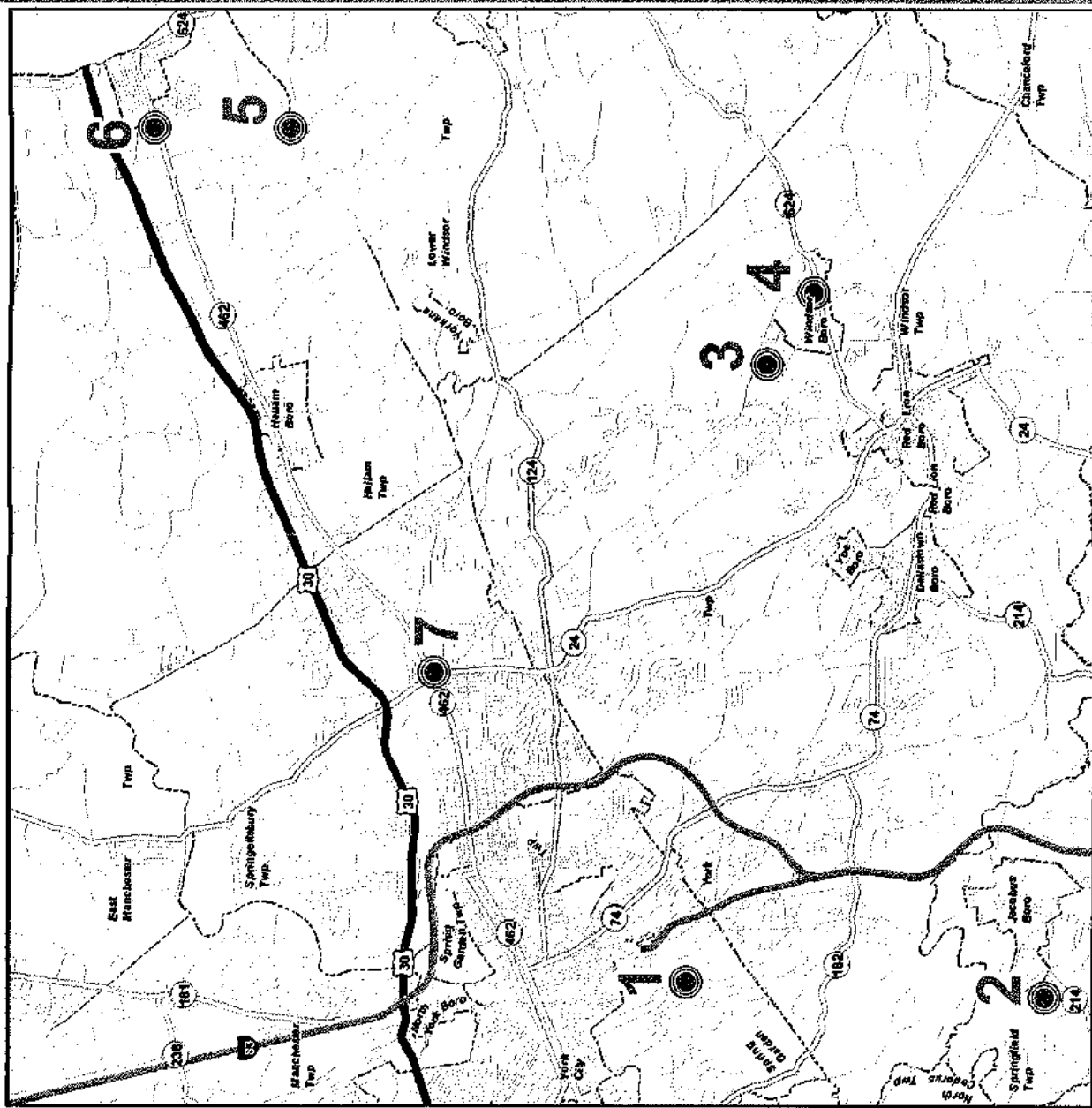


✓	31	Nicole Gallup	York City	Planner	ngallup@yorkcity.org	758-0273
✓	32	Thomas Landis	York City	HWY bureau	tlendis@yorkcity.org	
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✓	35	Scott Keech	York Twp		s.keech@yorktownship.com	717-741-3861
✓	36	Carl Fehrenbach	YCC4CW		carl@fehrehnbach.com	717-840-1940
✓	37	Eliecia Dell	YCPC	Director	fdell@ycpc.org	717-771-9870
✓	38	John Seitz	YCPC	Water Res. Coord.	jseitz@ycpc.org	717-771-9870
✓	39	Lindsay Gerner	YCPC	Senior Planner	lgerner@ycpc.org	717-771-9870
✓	40	Pam Shellenberger	YCPC	Chief	pshellenberger@ycpc.org	717-771-9870
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✓	42	Stephen Lentz	YCC4CW	PSU	skl6@psu.edu	717-771-4000
✓	43	Keith Hollenberg	Bailey Coach	Driver		717-968-6814
✓	44	ERIC BOLINGER	Red Lion Twp	enrolment	ebolinger@redlionpa.org	717-476-7611
✓	45	Diane Oleson				
	46	<del>Barbara</del>	<del>Red Lion</del>			

OK



# Featured Stops



Swanton, Vermont Borough

## 1 The York Water Company

Regenerative Stormwater Conveyance

## 2 Nixon County Park

Stream Restoration and Constructed Wetland

## 3 The Smith Residence

Residential Stormwater Detention Basin

## 4 Laucks Memorial Park/Windsor Borough

Stream Restoration and Riparian Buffer

## 5 The Kin Residence

Green Roof

## 6 Wrightsville Dodge

Pervious Pavement

## 7 Rite Aid

Rain Gardens



# York County Stormwater BMP Tour

## September 29<sup>th</sup> 2017



### **Site #1- York Water Company: Regenerative Stormwater Conveyance**

Open channel stormwater conveyance system utilizing a step pool/riffle network. Reduction of stormwater runoff energy, volume reduction through infiltration, and micro habitats are potential benefits. In appearance, think of a set of cascading pools.

### **Site #2- Nixon Park: Stream Restoration and Constructed Wetlands**

Streams naturally perform important hydraulic and ecological functions. Human land use impacts disrupt this natural performance. Stream restoration attempts to restore the natural functions stream provide, one of the most prominent being a connection with the floodplain. Stream restoration often includes construction of wetlands that were historically present in the floodplain prior to the disconnection of the stream from the floodplain due to human land use impacts. This project consists of the restoration of an existing stream and horse pasture, converting the area into constructed wetlands with a walking path for visitors and students and restoring the heavily eroded stream to its original streambed. The project predominantly focused on stream restoration as a method of improving water quality. The existing stream was very tortuous and continually eroded the sediment along its banks. By restoring the streambed to its original location and providing natural protective measures along the streambanks, the amount of sediment entering the stream has been dramatically reduced.

### **Site #3- Private Property: Stormwater Detention Basin Retrofit**

The 1.5-acre property includes a stormwater detention basin collecting runoff from over 25 acres of a residential community. The detention area functions as a wetland surrounded by a mix of trees, shrubs and herbaceous plants. The property includes additional rain gardens. Certifications and recognitions include National Wildlife Federation's Backyard Wildlife Habitat, Monarch Waystation, Audubon at Home and Penn State Certified Pollinator Friendly Garden.

### **Site #4- Windsor Borough Park: Stream Restoration**

The Fishing Creek Rehabilitation Project is located along the southern border of Laucks Memorial Park in Windsor Borough stretching from Gable Avenue approximately 500 feet east to Baseball Alley. The existing creek conditions consisted of deteriorated stone walls, embankment erosion, and channel scouring along with a structurally unstable pedestrian bridge and an open concrete aqueduct that was a community hazard and created stormwater runoff issues. Corrective action involved the removal of the existing deteriorated stone walls and creation of a small graded and stabilized riparian buffer, installation of fish habitats (modified mud sills and stone cross vanes with a double throat), toe rock stabilization, installation of two (2) rain gardens, conversation of the existing concrete aqueduct into a BMP infiltration facility and installation of a new pedestrian bridge across the creek with ADA handicap accessibility. The Borough also installed split rail fencing at the top of the newly graded riparian buffer and installed natural stone steps at two access points down to the creek that accent the improvements.





### **Site #5- Private Property: Green Roof**

A green roof involves growing plants on a rooftop, thus replacing the vegetated footprint destroyed when the building was constructed. It continues to function as a conventional roof, while reducing stormwater runoff. Performing routine preventive maintenance is essential to keep the green roof healthy. The maintenance activities conducted depend on the type of plantings and climate.

### **Site #6- Susquehanna Chrysler Dodge Jeep Ram: Pervious Pavement**

In order to keep up with their growing business, Susquehanna Chrysler Dodge Jeep Ram needed to expand their service department and also provide additional parking/storage areas for new vehicles. A variety of BMPs were used to control stormwater runoff from the expansion. In order to control the peak runoff rates from the site, a combination infiltration/detention basin was designed. Because the site is in an area of underlying karst geology, loading ratios of impervious cover to infiltration area were a primary concern when designing the BMPs for controlling runoff volume. This factor required the infiltration BMPs to be scattered throughout the site. The basin itself has a large footprint and retains a relatively shallow depth of runoff to be infiltrated. The other primary method of controlling the runoff volume is the porous paving. The parking aisles were chosen for the porous paving and are used primarily for the storage of new vehicles. The porous paving has a stone bed underneath it to store the rainfall and allow it to infiltrate into the ground over time. A stone infiltration trench is also used to collect and store rainwater and allow it to soak into the ground. These BMPs are used in concert to control the stormwater runoff rate and volume from the new construction on the site.

### **Site #7 Rite-Aid Rain Garden**

A rain garden is a depressed area in the landscape that collects stormwater runoff from a roof, driveway or street (impervious surfaces) and allows it to soak into the ground. Planted with grasses and flowering perennials, rain gardens can be a cost effective and beautiful way to reduce/manage runoff from your property.

THERE ARE OTHER BMPs - THE TOOL THAT WE REPELABLE - IT  
TODAY TO ADDRESS THE STORM WATER RUNOFF THE STORM WATER RUNOFF  
TO CHECK OUT THE LINK TO MORE WEBSITE. <http://arq.is/2hiXdQu>

*Financial and other support for this project is provided by the Pennsylvania Association of Conservation Districts, Inc. through a grant from the Pennsylvania Department of Environmental protection under Section 319 of the Clean Water Act, administered by the U.S. Environmental Protection Agency.*



YORK COUNTY  
CONSERVATION DISTRICT







**CITY OF YORK**  
**EMPLOYEE SUMMER NEWSLETTER**

**JUNE JULY AUGUST**

**2017**



## MAYOR BRACEY ON THE MOVE



Mayor Bracey stops by **3rd Base**, located at 512 North George Street, to name them April's Merchant of the Month. 3rd Base is well known for their Famous Fried Chicken and Mambo Sauce.



The City of York has partnered with Fulton Bank to provide housing assistance opportunities and banking benefits to City employees. Contact Human Resources for additional information.

Councilwoman Judy Ritter-Dickson joined Mayor Bracey to celebrate **Comfort Zone Mattress**, 131 North Duke Street, as the Mayor's Merchant of the Month for March. Comfort Zone Mattress also carries furniture for dining, living and bed rooms.





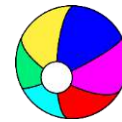
# HAPPY BIRTHDAY!



JUNE 2017

1	Nicholas Figge	Police
	Joseph Portner	Fire
2	William Ruby	Parking
3	Michael Fuller	Building Main.
5	Sean Walker	Recreation
6	Peter Rodriquez	Recreation
7	Jehu Johnson	Highway
	Tammy Harvey-Bethea	Housing
8	Gary Brooks	Highway
9	Kenneth Swartz	Fire
10	Bryon Mayberry	Police
11	Orazio Riccobono	Police
13	Cheryl Grant	Parking
16	Christopher Roosen	Police
18	Paige Nenstiel	Health
19	Justin Main	Police
20	William Sleeper	Fire
	Patrick Rose	Fire
	Charly Forrest	PP & Z
22	Cary Hollis	Health
23	Mike Shanabrook	Emer. Planner
	Daniel Lentz	Police
	Johanna Ramirez	HRC
	Rebecca Schweitzer	Parking
24	Timothy Clymer	Police
26	Kevin Holtzaple	Fire
28	Chasity Frederick	Health
29	Mark McCartney	Police
	Nicholas Hansel	Police
	Nancy Gonzalez	Parking
	Robert Washington	Parking
30	Steven Butler	Police

JULY 2017



3	Cassandra Wile	Highway
	Kelli Hill	PP&Z
4	Scott Ross	Police
5	Christen Medeiros	Police
6	Stephen Aderhold	Police
8	Joy Miller	Parking
	Jeremy Fultz	Police
	Steven Bowman Jr	Fire
11	Edwin Hamilton	Fire
	Paul Walters	WWTP
13	Christopher Perry	Police
20	James Knarr	Police
21	Sheldon Hooper	Police
24	Brandon Hyder	Fire
27	Susan Frey	Parking
28	Brian Lehman	Police
28	Shelton Scott	PP&Z
29	John Hedrick	Env Services
30	Shawn Kelly	Police
	Marilou Yingling	Health
	Shilvosky Buffaloe	Economic Dev
31	Cassandra Dennis	Env Services



AUGUST 2017

1	Joseph Concino	WWTP
3	Frank Clark	Police
4	Malachi Cochran	Fire
7	Wesley Kahley	Police
	Jonathan Hatterer	Police
	Helen Parks	Human Res.
	Steven Pickel	Police
9	Judy Ritter-Dickson	City Council
	Michelle Cocklin	Public Works
10	Matthew Luchko	Police
	India Banks	Public Works
	Nancy Griffin	WWTP
11	Andy Baez	Police
	Clayton Glatfelter	Police
	Montanez McMillion	PP&Z
13	David Shirey	Parking



14	Patricia McDowell	Fire
15	Hector Lopez	WWTP
16	Anthony Fetrow	Police
	Raymond Ferguson	Bldg Main
	Dakota Fauver	Police
18	Jan Markey	WWTP
19	Cynthia Wolford	Parking
20	Artemus Walls	Parks/Rec.
21	Robert Bievenour	Fire
23	Troy Bankert	Police
	Michael Adzema	Police
25	Allen Henty	Police
26	Jan Bowman	Police
27	Timothy Utley	Police
	Josh Houston	IT
	Charles Shireman	WWTP
	Ricardo Richards	Highway
28	Jeffrey Gilliland	Police
30	Louis Woodyard	Recreation



**TO THE FOLLOWING EMPLOYEES THAT  
HAVE 10 YEARS AND MORE OF SERVICE**

#### JUNE 2017

Mary Shoff	10 years	Parking
Jeremy Fultz	10 years	Police
Jonathan Hatterer	10 years	Police
Jeffrey Laughman	11 years	Highway
Mayor Bracey	14 years	Mayor
Rhoda Dickerson	14 years	Police
Shanell Newman-Barnes	17 yrs	Revenue
Renae Kent	17 years	Police
Barb Kovacs	24 years	Health
Tina Groff	28 years	Police
Joseph Concino	29 years	WWTP
Elfreda Hernandez	37 years	Parking

#### JULY 2017

Cheryl Rascoe	10 years	Zoning
Kenneth Fogleman	11 years	Police
John Stoudt	11 years	WWTP

Matthew Tunall	13 years	Police
Daniel Craven	13 years	Police
Brian Winters	19 years	IS
Jehu Johnson	20 years	Highway
Joy Miller	21 years	Parking
Nicholas Figge	24 years	Police
Gregory Altland	27 years	Fire
David Michaels	27 years	Fire
Thomas Landis	27 years	Highway

#### AUGUST 2017

James Crosby	11 years	Housing
Jan Bowman	12 years	Police
Shawn Caruso	16 years	Fire
Brandon Hyder	16 years	Fire
Charles Sleeper	16 years	Fire
Kenneth Swartz II	16 years	Fire
Todd Stough	17 years	Fire
Allen Fuentes	17 years	Fire
Kevin Pflaum	17 years	Fire
Fred DeSantis	17 years	Fire
Keith Ramsay	17 years	Fire
Anthony Caruso	18 years	Fire
Erik Swanson	19 years	Fire
Timothy Golden	20 years	Fire
Joseph Portner	20 years	Fire
Rolando Suarez	23 years	Fire
Shelby Pierre	28 years	Police
Eugene Lewis	42 years	WWTP
David Silk	42 years	WWTP
Jan Markey	47 years	WWTP

### **3<sup>rd</sup> Year of City of York's Summer Youth Employment Program**

The **Legacy Builders Summer Youth Employment Program**, is designed to provide an opportunity to City of York high school students, aged 16 - 18 with the opportunity to obtain meaningful employment, while gaining valuable employable skills. Students are employed for a period up to 10 (ten) weeks in the program.

Please welcome the students as you work with them this summer.





Please welcome the following new employees!

**Brenda Brady**, Community Resource Assistant; **Frankie Campagne**, WWTP General Manager; **Tanner Canfield**, Batting Cage Attendant; **Karl Coughlin**, Superintendent Recreation, Parks, Sanitation; **Patrick MacEachen**, Seasonal Laborer; **D'Erik Michael**, Seasonal Laborer; **Louis Orth**, Seasonal Laborer; **Tavares Outen**, Equipment Operator II; **Raquan Smith**, Accounting Assistant; **Cliffonda Stokes**, Property Maintenance Inspector; **Azmar Sullivan**, Parking Enforcement Officer; **Galen Thomas**, Plant Operator II; **Margarita Yambo-Baez**, Food Sanitarian; **Tisha Grove**, Intern Finance; **Melissa Colon**, Intern Finance/ED; **Brent Herring**, WWTP Operations Manager; **Ervin Gwynn**, WWTP Maintenance Mechanic



**Jody Trimmer**, Recreation and Parks will be competing in softball in the Senior Olympics June 2 - 15, in Birmingham Alabama. There will be a total of 10,000 athletes participating in over 20 sports. Good luck Jody!



**Mayor Kim Bracey**, **Coach Bruce Ariens**, **Commissioner Susan Byrnes** and **Councilwoman Sandie Walker** recently met to discuss the Parks Conservancy program. Exciting news to follow!



**Cliffonda Stokes**, PMI, (far right) with her daughters and granddaughter enjoyed the private opening at Isaac's on the Fly for city employees on March 23<sup>rd</sup>. Isaacs is now open to the public from 7 am to 7 pm, Monday - Sunday. Dine in or take-out.





The official ribbon cutting and grand opening for the **Salem Square Library**, 596 West Princess Street was held on Sunday, April 9<sup>th</sup>. The neighborhood was out in full force to tour the new facility and celebrate the occasion.

The library is the first neighborhood, or "satellite," facility for York County Libraries and opens nearly six years after the city purchased the former Gus' Bar building, located at 596 W. Princess St. in York City. The building was previously designated as blighted and went through years of renovations to become a community resource center.

\*\*\*\*\*



**Community Family Game Night** at the Voni Grimes Gym was a huge success. Families and youth came out to play various board games. City employees from the Police Dept., Fire Dept., ECD and the Mayor's office were there as well. Game Night will continue this fall, plan to join in the fun.



If you haven't had the opportunity to check out the 3-D cardboard collage of York, be sure to add it to your "to do" list. (located in the lobby at City Hall) The detail is remarkable and you'll be amazed to discover all the York landmarks past and present that are represented.

### **Join Mayor Bracey With A Walk In The Park**



Mayor Bracey is planning monthly walks in Penn Park. Walking is great exercise and a great way to re-energize yourself in the company of family, friends, neighbors, and colleagues.

Join Mayor Bracey for her next walk on Friday, June 22<sup>nd</sup> from noon till 1 pm at Penn Park

No registration required.....just comfortable shoes!







**Barb Kovacs**, Health Bureau Director, traveled to San Francisco to meet her new grandson, Bo Max Kovacs, pictured here at 4 weeks old. Bo is Barb's son Ben's first child and her 3rd grandson. Congratulations!



Take time to visit **Kiwanis Lake Rookery** in the heart of York City. Kiwanis Lake was designated as the 82nd Important Bird Area site in York City in 2004. Three different Pennsylvania state endangered bird species roost at Kiwanis Lake. Kiwanis Lake Rookery is the only location in Pennsylvania with heron and egret species (yellow-crowned night heron, black crowned night heron and great egret). This site is one of only two in Pennsylvania with breeding yellow-crowned night heron colonies, one of two great egret colonies, and only one of four black-crowned night heron colonies



**Cliff Kern**, WRCT sent this for the newsletter - I've wanted bees for a long time. So Bethany and I decided this spring to give it a try! We ordered all the gear, equipment, and our bees! Thus far it has been a very fun and rewarding hobby. We have our lawn chairs set out by the hives and can sit for hours just watching them come and go! It's like having 60,000+ little pets that make us free honey! However the first year they are busy building up the hive and are not expected to produce much honey :( Bees are fascinating creatures.

Here are some interesting facts: Bees can travel up to 5 miles to find nectar. It takes 556 bees and 2 million flowers to make 1 pound of honey. Honey bees are responsible for over 80% of the pollination needs of the world's farming industry. They communicate by dancing in circles; one bee that found a good nectar source can tell the rest exactly where it's at, and they don't have a GPS! In general honey bees are not aggressive. So next time you see a honey bee don't hurt it, it may be one of our pets!







RayAh, daughter of **Edquina Washington**, Community Relations Director, graduated from Lincoln Charter School and will be attending 6<sup>th</sup> grade in the Fall. Where did the time go!



King, Edquina's son, is so proud that he graduated from Pre-K and is now ready for Kindergarten in the fall. Class of 2030!

**Congratulations to both  
RayAh and King!**

## RECREATION & PARKS NEWS

### 2017 SUMMER MOVIE SERIES



The 2017 Summer Movie Series will be held at Kiwanis Lake, located at N.

Newberry St. and Parkway Blvd., on Wednesday evenings starting at dusk, around 8:30 p.m. (Rain date is Thursday night of each week.)

The movie series will run from **June 7<sup>th</sup> to July 26<sup>th</sup>**. All are welcome to attend this **FREE** family oriented movie series.

June 21<sup>st</sup> - The Jungle Book

June 28<sup>th</sup> - Angry Birds

July 5<sup>th</sup> - Sing

July 12<sup>th</sup> - Finding Dory

July 19<sup>th</sup> - Moana

July 26<sup>th</sup> - The Secret Life of Pets

Bring a lawn chair or blanket and refreshments, sit back, relax and enjoy the show! For more information please call 854-1587.

### PENN PARK SPLASH PAD OPEN NOW!



Just in time for the heat wave! The Penn Park Splash Pad is now open and will operate from 11 am to 7 pm, seven days a week, weather permitting. The hours have been expanded this year so even more children can enjoy this unique water feature.



## Summer Parks & Playgrounds

June 19<sup>th</sup> -  
July 27<sup>th</sup>  
Day Camp  
Hours



Monday - Thursday, 10:00 am to 4:00 pm

Park Sites: Allen Park, Bantz Park, James E. Gross Park, Memorial Park Complex, and Yorktown Park.

Activities: Arts & crafts, games and field trips

**FREE Lunch** provided at all park sites.

## Art in the Park Program



Art in the Park will be celebrating 23 years of offering free art and craft programs to City Youth, ages 3 -12. No sign up necessary. The program will be held Monday through Friday from 6:30 to 7:30 pm in the following parks:

June 19 - 23 @ ALLEN PARK

June 26 - 30 @ YORKTOWNE PARK

July 3-7 @ ALBEMARLE PARK

(no park on July 4)

July 10 - 14 @ JAMES E. (Jim) GROSS PARK

July 17 - 21 @ PENN PARK

## JAMES E. (JIM) GROSS PARK CONCERT SERIES



The concert series at the James E. (Jim) Gross Park band stage will be held June 29<sup>th</sup>, July 20<sup>th</sup>, August 3<sup>rd</sup>, and August 23<sup>rd</sup> at 7 pm. Bring a

blanket or a lawn chair and enjoy the free entertainment in the beautiful park setting.

*A bigTHANK YOU to Recreation and Parks for organizing all these great summer activities for our community!*

## SPECIAL EVENTS ROCK !!!!!!!!!!!!!!!!!!!!!!!

Did you know that Mary Yeaple is the driving force behind the City's special events? Mary makes sure everything is in place and goes off as planned. She has spent many a sleepless night preparing before an event (and checking the weather forecast). Hat's off to Mary!



### BOX LUNCH REVUE

Cherry Lane

Tuesdays and Thursdays

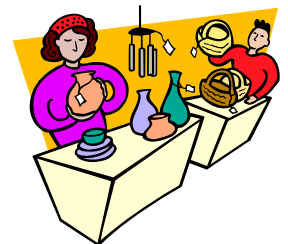
11:30 AM to 1:30 PM

Box Lunch Revue is in full swing! Each Tuesday and Thursday, now through August, enjoy FREE musical entertainment in Downtown York's Cherry Lane from 11:30 am to 1:30 pm. Many musical genres are represented, including jazz, folk, indie, country, classic hits, Irish, Hawaiian, blues, cigar box guitar, hip hop, and more.

In the event of inclement weather, most performances are moved indoors to Central Market.

## YORKFEST FINE ARTS FESTIVAL

York's premier fine arts and music festival along the Codorus River (surrounding the Colonial Courthouse) takes place in historic



downtown York. Yorkfest features a weekend of over 100 fine artists from all around the country, free family entertainment and hands-on arts activities, and a free community jazz concert. This event is held rain or shine.



Streets closed: Pershing Avenue from Market to Philadelphia Street. Don't miss this once a year unique event!

**Saturday, August 26<sup>th</sup> - 10:00 am to 5:00 pm**  
**Sunday, August 27<sup>th</sup> - 10:00 am to 4:00 pm**

**Yorkfest Community Jazz Concert**  
**Saturday, August 26 (6 to 9 p.m.)**  
*All events are free and open to the public*



This year, we are excited to partner with York artist **Polly Stetler** as our **2017 Yorkfest Fine Arts Festival featured artist**. Polly's fiber creation entitled "Wishful Thinking" will be used as the event image in print advertisements, postcards, billboards, and festival merchandise this year.

Polly was chosen for her unique art work. She has taken a traditional craft and made it into a wonderful creative art form by making her own cloth and then designing and sewing fabulous works of art. Polly could easily compete with any contemporary artist of our time. We are lucky to have such a talented artist in York.

The **Yorkfest Juried Art Exhibition**, sponsored by Glatfelter Insurance Group, will be housed at the Agricultural and Industrial Museum, 217 West Princess Street, again this year. The museum is located just steps away from the south entrance to Yorkfest. The public is invited to a reception for art and literary award winners at the museum on Friday, August 25 (6 to 8 p.m.).

## 23<sup>rd</sup> ANNUAL BIKE NIGHT

**Friday**  
**September 29<sup>th</sup>**  
**6:00 to 10:00 PM**  
**Continental Square**  
**Downtown York**



Wear leather if you got it! This street party surrounding the Harley Davidson Open House weekend features a 2,000-motorcycle parade, live entertainment on four stages, and food vendors in downtown York.

Market Street, from Pershing to Duke, and George Street, from Philadelphia to King are closed for this event.



**Do you moonlight by providing a service to others such as**

**lawn/landscape services, tax preparation, plumbing, electrical, catering, photography, tailoring, carpentry, painting, etc.?**

**Starting with the Fall Newsletter, your service along with your contact information can be included. Please send a brief description of the service you provide along with your contact information (a non-city email address or phone number) to Deb Busch, [dbusch@yorkcity.org](mailto:dbusch@yorkcity.org)**



## DEPARTMENT OF PUBLIC WORKS



Summer is here and many residents and employees will be cutting their lawns. York City Stormwater wants to remind employees and residents that sweeping or blowing your grass clippings into the street and/or storm drains is illegal by city ordinance. It is recommended that you collect the clippings with a bag on your mower or sweep them up into your normal trash bags or cans; you may also just blow or sweep them back onto your lawn.

Why? Grass clippings may clog storm drains during the next rainstorm causing flooding. When the clippings make it into our creeks, streams, and lakes, they may also cause algae blooms. Algae blooms not only look bad but can suck the oxygen out of the water causing fish and other wildlife to suffer. If you see a resident or contractor/lawn company blowing or sweeping grass clippings into the street or storm drain, explain to them why it is bad to blow the clippings into the street or call the MS4 Coordinator.

### YARD WASTE FACILITY

**Memorial Stadium:** This site is open April - December the first Saturday of each month, 10 am-2 pm, weather permitting. (Bring proof of residency) **NO GRASS!**

**Open:** 7/2; 8/6; 9/3; 10/1; 11/5; 12/3



The James E. (Jim) Gross Park was officially dedicated on April 19<sup>th</sup>. Public Works employees were there to help celebrate.

### **York County Solid Waste Authority Provides Residential Electronics Recycling Program**



The York County Solid Waste Authority has a Residential Electronics Recycling Program for all of York County. The program is free and open to York County residents ONLY

and is conducted **Tuesdays, Wednesdays and Thursdays from 3:00 p.m. to 6:30 p.m.** every week at the Authority's Yard Waste Site located off of Flour Mill Road in Manchester Township. Saturday events are no longer held.

Electronics accepted in the program include televisions, desktop and laptop computers, computer monitors and computer peripherals (anything that connects to a computer such as a mouse, keyboard, printer, etc.) as well as other electronic recyclables including cell phones, vacuum cleaners, alarm clocks, irons and coffee makers or anything with a plug that does not contain Freon. Examples of Freon containing items include refrigerators, freezers, air conditioners and dehumidifiers.

Electronics from nonresidential sources will not be accepted. For more information visit the YCSWA website: [www.ycswa.com](http://www.ycswa.com).



The baseball themed **Retirement Party** for **Jim Gross, Public Works Director** was held May 25<sup>th</sup> in the Ice Arena community room.

Employees, retirees, business associates, and community members, all turned out to thank Jim for the amazing job he has done and to let him know how much he will be missed.



Jim reading his "top ten" list of the things he will not miss...snow was mentioned at least twice!

What will he miss the most? All the city employees that he has worked with over the years.



Jim is all smiles as he gets ready to cut his cake.



Downtown, the York Revolution mascot presented Jim with a team shirt for their number one fan.



Mayor Bracey gets in on the fun at the photo booth.



It was a full house at the ice arena to wish Jim well.





## CITY OFFICES CLOSED FOR

### THESE HOLIDAYS

Tuesday, July 4th

Monday, Sept. 4<sup>th</sup>, Labor Day

### HOLIDAY CURBSIDE COLLECTIONS

No collections on Monday, 7/4 and 9/4

All collections those holiday weeks will be delayed by 1 day.

### LARGE- ITEM COLLECTION

York City Curbside

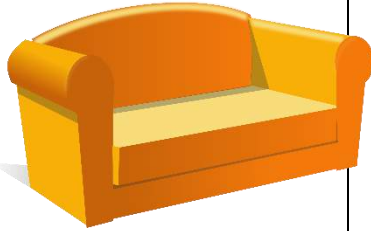
Customers may call

**843-1240** Mon-Thurs,

9:00 a.m. to 3:30 p.m. to

schedule up to 5 normal household

furniture/appliance items.



**REFUSE COLLECTIONS** Place trash in plastic or metal can with a lid and handles and/or in securely tied trash bags (Max: 32 gals; 40lbs). (Contractor bags, leaf bags, grocery bags, large "toters" and trash cans over 32 gals, plastic/metal drums, cardboard boxes, milk crates, and laundry baskets should NOT be used for regular trash.) Illegal containers may be disposed of and no refunds/replacements will be given.

### **CONTAINERS, BAGS OR BUNDLES PLACED CURBSIDE:**

All normal curbside items placed for collection (trash, recycling, and yard waste) should not exceed: **32 gallons** (contents should never extend beyond the top edge of any container),

**40 pounds and 3' long**



**CONTAINERS & BAGS FOR SALE** to individual residents with proof of residency. Quantities will not be sold to landlords or management companies.

Green Recycling Bin..... \$3.00/each

Yard Waste Cans.....\$3.00/each

Yard Waste Kraft Paper Bags.....\$5.00/10 pack

Above items are available at the Public Works office, 101 S George Street, 2<sup>nd</sup> floor, M-F, 8 am - 5 pm.



"If there's something strange in your neighborhood

Who you gonna call?

If there's something weird

And it don't look good

Who you gonna call?"



Ghost Busters won't be able to help you with any of the problems listed below but city employees can! Test your knowledge - do you know who to call for these concerns? (Answers on the last page.)

Potholes

Sewer backup

Cracked sidewalk

Overgrown tree

Abandoned vehicle, on private property

Abandoned vehicle on public property

Trash on property

Street light out/not working

Park permit

Building permit

List of RDA properties for sale

Street signs

Broken parking meter

Trash/recycling/yard waste wasn't picked up

Schedule large item for pickup

Yard sale permit

Parking Ticket

Electrical Inspection

Restaurant Inspections

Right to Know Request

Free Smoke Detectors

Tall weeds and grass





# Police Department

## Community Services Division Is Gearing Up For National Night Out

### *HELP TAKE A BITE OUT OF CRIME*



National Night Out is an annual community-building campaign that promotes police-community partnerships and neighborhood camaraderie to make our neighborhoods a safer, better place to live. Together, we are making that happen. National Night Out enhances the relationship between neighbors and law enforcement community and provides a great opportunity to bring police and neighbors together under positive circumstances. The York City Police Department, Community Services Division is accepting registrations for this year's National Night Out which will be celebrated on Tuesday, August 1<sup>st</sup>.

Residents are encouraged to host an event in their neighborhoods to help improve community ties. Law enforcement, fire departments and emergency service workers also take an active role by visiting the parties and answering home security and general safety questions.

Last year 35 different parties were hosted throughout the city. Some of the larger parties were hosted by area churches and area agencies, while many were smaller neighborhood or block party events. For more information contact Jackie Marrero at [jmarrero@yorkcity.org](mailto:jmarrero@yorkcity.org)

## YORK CITY POLICE CELEBRATES 36 YEARS OF SUMMER BOWLING!!!!



Summer Bowling  
is held Monday,  
June 12 to  
August 11, 2016  
9 AM to 1 PM.

All bowlers ages 5 to 17 are welcome, but must be registered. An adult must accompany any child under 7 years of age. All who attend are expected to bowl, practice good behavior and fair play.

## Police Officer of the Year

The Police Officer of the Year Award is given annually to that officer who embodies a high moral character and demonstrates exemplary performance in all areas of police work, and more importantly, strives to help the community in which he serves grow and flourish. This officer gives more of himself than asked, and often makes sacrifices to benefit the greater good, without expectation of acknowledgement.



**Officer Richard Kehler**  
was awarded the "2016  
Police Officer of the  
Year" Award at the  
Police Award Ceremony  
on May 12<sup>th</sup>.

Officer Richard Kehler has transformed and revitalized the position of Downtown Business District Officer, and has continuously worked as "that extra man on the roster" that everybody needs, in both patrol, neighborhood enforcement and the detective bureau. Officer Kehler's friendly reserved approach, and willingness to assist, contributes to his ability to relate effectively with all officers within the department.



As a seventeen year veteran officer, Richard knows what his supervisors expect and he delivers a solid effort, and does so for the good of the team. He readily accepts assignments without hesitation and can be relied upon to complete them without problem. During the year, Officer Kehler was taken off of assignment to assist patrol with manpower staffing. During that time, seven months, Officer Kehler answered 758 calls, filed 84 reports, filed 32 citations and made 13 criminal arrests in measurable statistics.

What cannot be measured is his work ethic that he puts forth for the greater good of the department and the Downtown business district. Items such as: routinely reading reports related to the business district and helping officers solve incidents they investigate; taking over reports from patrolman for incidents involving the downtown business district; offering assistance for repeated events, surveying for possible witnesses to reported incidents and conducting searches for suspects in various incidents. Additionally, with the help of various businesses and their I.T. departments, Officer Kehler has expanded the camera coverage in the Downtown business district. 442 cameras are available for officer investigations, along with mapping to show camera views and owners of those cameras. This information as well as links to the camera systems were passed along to officers who use them to investigate various incidents. During 2016, Officer Kehler conducted and/or assisted in numerous investigations including: retail thefts of local merchants; robberies, assaults; and lengthy fraud cases involving credit cards, ATM withdrawals and bad checks.

Officer Kehler has used his friendly and open personality to make great inroads into the business community. He has made himself available to the community and is aware of the

needs of the people he serves and is able to capitalize on his knowledge of police works in satisfying the personalities of the community. He routinely frequents downtown businesses on and off duty and has developed an unparalleled rapport with the community.

Officer Kehler puts this department in the most positive light possible and represents what true "community policing is about.

### Mayor's Medal of Distinction

The Mayor's Medal of Distinction is awarded to an employee who has rendered distinguished service, demonstrated an exceptional degree of good judgement, initiative and competence in his or her field of endeavor, and has sustained this record of outstanding service over a period of years. **Detective Anthony Fetrow** has met these requirements and was awarded the Mayor's Medal of Distinction.



Anthony Fetrow was hired as a probationary police officer with the York City Police on January 19, 1988. Upon his hiring he served in the patrol division on various platoons where he performed exemplary in daily tasks and with conducting investigations. The skill

and tenacity that he showed during his time within the patrol division followed him when he took an assignment from 1997 - 2002 with the Street Crime Reduction Unit more commonly known as the "Red Shirts". During this time period Officer Fetrow proved his ability to lead and take part in proactive details and investigations. This unit was responsible for attacking street level drug dealing and violent



crime in order to make the streets of York safer for citizens.

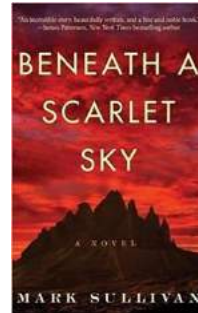
On February 18, 2002 Officer Fetrow was promoted to the rank of Detective. He again put his investigative skill and tenacity to use in investigating every major crime put before him while assigned to the Crimes against Property section. While assigned to this section, Detective Fetrow was also tasked with investigating assaults and homicides making himself a true team member to the rest of the investigative division. Detective Fetrow serves as the departments Latent Fingerprint Expert and verifies the ridge detail on latent prints used in criminal cases brought by the York City Police Department.

Detective Fetrow served many years with the York County Quick Response Team as an entry team member working on armed barricaded suspects and high risk warrant services.

Throughout his career Detective Fetrow has received awards and recognition for his excellent service and work to include ten (10) Unit Commanders Commendations/ Letters of Recognition, twenty five (25) Chiefs Commendations for major felony arrests, two (2) Directors Award of Achievements, one for arrests in a large burglary spree in York and Lancaster and one as a member of the Street Crime Reduction Unit. He has also received several letters of recognition from other law enforcement agencies for assistance in burglary sprees due to his willingness to drop what he is doing in order to help others with their work.

Detective Fetrow has consistently outperformed the standard set within the agency throughout his career. His personal hard work ethic has given him the reputation for dogged tenacity and as someone who will not quit until the criminal he is after is brought to justice working tirelessly for the crime victims and families he serves on a daily basis.

## Summer Reading

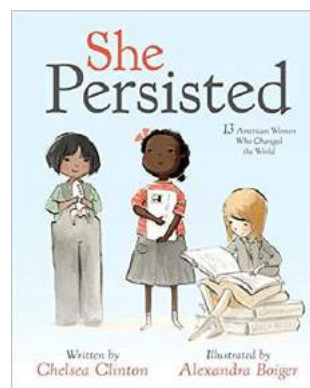
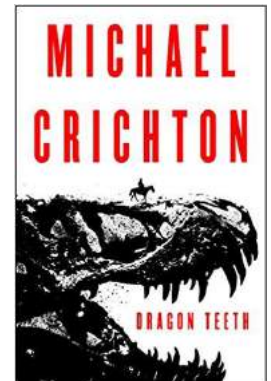


Action, adventure, love, war, and an epic hero—all set against the backdrop of one of history's darkest moments—Mark Sullivan's *Beneath a Scarlet Sky* has everything one can ask for in an exceptional World War II novel



Recommended by Mayor Bracey, *The Shack* is a novel that has literary integrity and spiritual daring.

Michael Crichton, the #1 *New York Times* bestselling author of *Jurassic Park*, returns to the world of paleontology in this recently discovered novel—a thrilling adventure set in the Wild West during the golden age of fossil hunting.



Chelsea Clinton introduces tiny feminists, mini activists and little kids who are ready to take on the world to thirteen inspirational women who never took no for an answer, and who always, inevitably and without fail, *persisted*.





## BUREAU OF HEALTH

The Health Bureau did a 6-week **Walking to Wellness Challenge**. Health Bureau employees walked a total of 1,980,291 steps which is about 990 miles!

That means we walked from York to the Tampa Area in Florida! Many of us are still walking each day and would love to have fellow employees join in on the fun!



The City of York - Bureau of Health observed World TB Day on March 24th. Together we can make a difference!

### City of York A Bicycle-Friendly Community

York City is such a great place to ride that it has been awarded a designation as a Bicycle Friendly Community by the League of American Bicyclists, one of only 6 cities in the state of Pennsylvania. Whether it be biking on the

Heritage Rail Trail, the King Street Bikeway, or the Broad Street Greenway, the City of York has great places to ride for bicyclists of all abilities.

Biking is a great addition to a healthy lifestyle, an active way to make your daily commute, and a great way to simply have fun! Biking benefits your health, supports a healthy environment (reducing that carbon footprint!), and keeps money in your pocket from fuel savings.

Just remember:

- Be Safe - always wear a helmet and obey traffic laws.
- Be Seen - use lights and reflectors as well as high visibility clothing.
- Be Alert - keep your head up and eyes on the road and trail. Don't text and ride.

Also, please be mindful and don't ride your bike on the sidewalk in Downtown York and other high-pedestrian areas. This is dangerous for you and pedestrians and it is also against the law. When on the road, ride your bike in the same direction as traffic.

In addition to the many improvements and trail projects that continue to take place around the City, we look towards other initiatives and opportunities to become even more "bikeable." For example, wouldn't it be great if York City had a bike share program? Stay tuned for more to come! Also, keep an eye out for an upcoming Bike York brochure that will highlight all of the bike amenities the City of York has to offer. So it's time to get those bikes out of the basement, check your tires, brakes, and chain, and ride some of the great trails and bike routes throughout the City of York.





## 2018 MISSION TRIP PLANNED

**Nicole Smith**, Community Health Specialist, will be traveling to Guatemala City, February 15-19, 2018, with Living Word Community Church for a medical mission trip.

Living Word has traveled to Guatemala for nearly a decade sending various teams throughout the year.

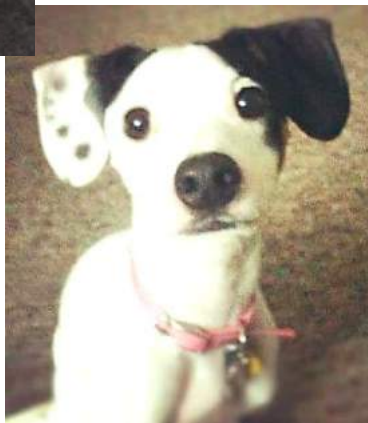
On this trip, half of the team is comprised of medical people who will be having a three-day medical clinic, and the other half are non-medical individuals who will be working among people and children in the village. Nicole will learn more about her specific duties this Fall.

If you wish to be part of her "support team" or would like more information please contact Nicole.

No doubt Nicole will be missing her two sweet little dogs, Jax and Lily Grace while she is away.



Jax



Lily Grace

## FAMILY PREPAREDNESS CLASS

### Emergency Preparedness for Your Whole Family

Blizzard Jonas (2016), Valentine's Day Ice Storm (2014), Hurricane Sandy (2012), Tornado (2011). These storms were notable for the way they caught many city and county residents off guard, both in their severity and the length of time it took to restore services and return life to "normal". That's why it's so important to be ready to survive on your own during an emergency. This may mean having another place to stay, extra food, water, first-aid and other basic needs. We can't control natural disasters, emergencies, or terrorist attacks, but we can be ready for them and know what to do to take care of ourselves and our loved ones.

This September, for National Preparedness Month, we will be offering a no-cost Family Emergency Preparedness class. This program is for you, your family, your significant other, teen age children, parents or other extended family are welcomed. Any combination. Preparedness is a family activity. We should not expect Mom or Dad to be the only ones that know what to do in an emergency.



Sessions will cover such topics as basic disaster preparedness, developing a family emergency plan, emergency first aid, search and rescue, animal and pets in a disaster. The schedule is still being finalized at this time.

The class will run one night a week for four evenings in September. The program is open to the public with city employees and residents will be given the first opportunity to sign up. Children attending the class must be at least in middle school and accompanied by a parent enrolled in the class.



If you or anyone you know is interested in participating in the classes please contact either Cary Hollis at 849-2296, [chollis@yorkcity.org](mailto:chollis@yorkcity.org) or Mike Shanabrook at 849-2441, [mshanabrook@yorkcity.org](mailto:mshanabrook@yorkcity.org). Have a safe summer!

### Health Bureau Provides Information at Community Event



**Nicole Smith**, Community Health Specialist shares tips for a healthier lifestyle at the Black History Program & Health Fair sponsored by The Orchid Club of Deborah Chapter #26 O.E.S, York PA.

### SWIM LESSONS AT THE GRAHAM AQUATIC CENTER

The **York YMCA** is offering free swim lessons at the **Graham Aquatic Center** this summer to city residents ages 6-12 years. The family must meet the income requirements. For more information, contact Denise Johnson: 717-843-7884.

## ASPCA DOG BITE PREVENTION WEEK *tips*

### Ask First!

When meeting an unfamiliar dog, don't reach out to pet her—ask her pet parent first, "May I pet your dog?"



### Get Permission

With permission, let the dog sniff your closed hand, then pet her shoulders or chest.



### Don't Touch!

Don't touch a dog who is sleeping, eating, or chewing a toy.



### Stay Away

Stay away from a dog who is barking or growling, as well as one who is loose, behind a fence or tied up.



According to the AMVA, over 4.5 million people are bitten by dogs each year. You can help ensure safety by sharing these tips with children and parents. For more information on canine body language, visit:

[ASPCA.org/DogBitePrevention](http://ASPCA.org/DogBitePrevention)



Left to right; Rachel Spaulding – summer intern from York College, Paige Nenstiel – Community Health Specialist, Nicole Smith – Community Health Specialist

City of York - Bureau of Health staff made healthy smoothies featuring local strawberries at the 2017 Farmers' Market Nutrition Program Kickoff Event. The event was in partnership with CPC/WIC.





## FIRE DEPARTMENT NEWS



On Saturday, March 11, 2017, members of the Department braved the cold weather and participated in the annual **St. Patrick's Day Parade** held in downtown York. Members also had the privilege of reminiscing by operating the Department's retired tractor drawn aerial truck which is now privately owned by a retired Deputy Chief in Baltimore County, MD.



L to R: FF Z. Anthony, retired FF G. Sheffer, retired Deputy Chief G. Halpin and Fire Chief D. Michaels.

Retired YFD tractor drawn aerial device lined up for the parade.

On Friday, March 17, 2017, members of the Department of Fire/Rescue Services personnel attended the funeral service of Lieutenant Dennis DeVoe of the Harrisburg Bureau of Fire. Lt. DeVoe who was killed in the Line of Duty.

Members of the Department of Fire/Rescue Services also volunteered that day to man apparatus in the City of Harrisburg so that all their personnel could be released from duty to attend the funeral of their brother and friend.



L to R: FF Z. Anthony, FF G. Jansen, D/C Deardorff, FF J. Spencer, FF K. Holtzapfel, Capt. W. Collins, FF W. Crenshaw & FF A. Jones.



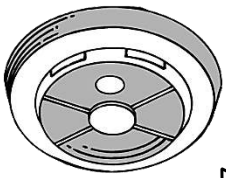
On Friday, March 24, 2017, **Firefighter Matthew Hoblitzell** received the VFW Firefighter Award. Members of the VFW presented the award to Firefighter Hoblitzell in the presence of his peers.





L to R: FF S. Firestone, M. Ott, Andy Polanski (PFIA representative) and Captain Adam Smith.

On Thursday, April 20, 2017, a representative from the Police and Firemen's Insurance Association (FPIA) presented a unit citation to **Captain Adam Smith, Firefighter Marc Ott, Firefighter Shawn Firestone, and Firefighter Shawn Caruso.**



### YORK CITY SMOKE DETECTOR PROGRAM UPDATE



Since the rebirth of the Department's smoke detector program in September of 2013, the Department has installed a total of 2,287 smoke detectors and 193 batteries. The program has benefited approximately 366 City residences.

***Please remember to test your smoke detectors monthly.***

### 141<sup>st</sup> ANNUAL MEMORIAL SERVICE

The Fire Department's 141<sup>st</sup> Annual Memorial Service was held on Sunday, April 30, 2017, at St. Matthew Evangelical Lutheran Church at 839 W. Market St. There was a prelude concert on the portico (porch) by the Kiltie Band of York. This service pays tribute to our Department members who have passed away during the past year with The Rev. Kevin T. Shively, pastor and Department Chaplain, presiding. This was a very beautiful and meaningful service.



Kiltie Band of York playing at annual Department memorial service.



Flowers and trumpet displayed at annual Department memorial service.





Annual photo taken with Department personnel who attended this year's memorial service.

## Summer Fire Safety Tips

Summer time means lots of fun in the sun, entertaining, cooking, and of course fireworks - leaving many opportunities for residential fires to occur. Summer is the time to unwind but not get complacent. As they say the tans will fade, but the memories will last forever. Don't let your summer memories be that of a fire or another horrific event. The Fire Department urges everyone to pay particular attention to fire safety during the summer season.

During the summer season cooking fires are one of the leading causes of damage to residential structures. Specific causes included:

- Ignition of food or other cooking materials
- Unattended Cooking
- Misuse of cooking equipment / unfamiliarity with equipment and safety procedures
- Use of alcohol / drugs / medications before / during cooking
- Powering a cooking appliance via an extension cord

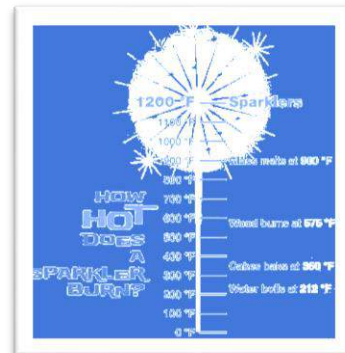
## Fireworks Safety

Use of consumer fireworks can lead to devastating burns, other injuries, fires and even death.



In recent years, fireworks have been one of the leading causes of injuries serious enough to require hospital emergency room treatment. Fireworks

can result in severe burns, fractures, or scars or even death or disfigurement that can last a lifetime. The thousands of serious injuries each year typically harm the eyes, head, or hands, and are mostly reported in states where fireworks are legal. Even sparklers, which are considered by many to be harmless, reach temperatures of more than 1,000° F.



In 2009, fireworks caused an estimated 18,000 reported fires, including 1,300 total structure fires, 400 vehicle fires, and 16,300 outside and other fires. These fires resulted in no reported civilian deaths, 30 civilian injuries and \$38 million in direct property damage.

In 2009, U.S. hospital emergency rooms treated an estimated 8,800 people for fireworks related injuries; 53% of 2009 emergency room fireworks-related injuries were to the extremities and 42% were to the head.

The risk of fireworks injury was highest for children ages 10-14, with more than twice the risk for the general population.

On Independence Day in a typical year, far more U.S. fires are reported than on any other day, and fireworks account for almost half of those fires, more than any other cause of fires.

**LEAVE IGNITING FIREWORKS TO A PROFESSIONAL!!**



## Brush / Grass / Tree Fire Safety

On average, 976 brush, grass, or forest fires were reported per day in the United States.

- Keep weeds and grass cut.
- Provide enough water to keep plants healthy and green. Keep irrigation systems in good working order.
- Remove dead and piled up vegetation, and dispose of it properly.
- Properly dispose of trash and debris.
- Stack any and all that is being put away for storage away from structures, fences, or any other combustible materials.
- Create at least 30 foot safe zone around your home that is free of anything that may ignite and spread to the structure.
- Keep the roof clear. Sweep gutters and eaves, and wash the roof on a regular basis to get rid of dry needles and leaves.
- Trim dead wood off trees that are located close to the residence.
- Avoid parking cars, trucks or recreational vehicles on dry grass or brush. Exhaust systems on vehicles can reach a temperature of more than 1,000 degrees; it only takes about 500 degrees to start a brush fire in hotter weather.
- Maintain a 10-foot area that is free of brush and shrubbery around grills and propane tanks.
- ALWAYS dispose of cigarettes carefully. Do not ever drop cigarettes or matches that are not fully extinguished.
- Make sure to keep a shovel, bucket of water, fire extinguisher, or other fire suppression tools on hand in case of emergency.

## BBQ / Grill Fire Safety

According to the National Fire Protection Association (NFPA): More than one-quarter (29%) of the home structure fires involving grills started on a courtyard, terrace or patio, 28% started on an exterior balcony or open porch, and 6% started in the kitchen.

- Position the grill well away from the residence. Do not place your grill directly next to siding, deck railings, extended eaves, or below overhanging branches / leaves.

- Do not place your grill near or under utility pole wires that may be coming into your house.
- Place the grill a safe distance from any kind of foot traffic.
- Keep children and pets away from the grill area by declaring no less than a 3-foot zone around the grill.
- Make several different types of long-handled grilling tools available to the parties cooking on the grill to ensure plenty of clearance from heat and flames when cooking food.
- Periodically remove grease or fat buildup in trays below grill as well as on the grill rack itself, so it cannot be ignited by open flame / heat.
- Use grill outdoors with the exception of something such as a George Forman grill that is made to be used indoors. If grills are used indoors, or in any enclosed spaces, such as tents, barbecue grills pose both a fire hazard and the risk of exposing occupants to carbon monoxide.

## Charcoal

- Be very careful when using charcoal starting fluid. Follow the directions on the can and never apply any other kind of additional fluid once the fire has been ignited.
- The use of an electronic starter / paper is another method, and pretreated charcoal may also be used.
- Place all ashes generated by the charcoal grill into a metal can.

## Propane

- Before each use, check hoses for signs of wear and tear, and that the connection to the tank is tight.
- Remove excess grease buildup from the unit, to prevent flare ups.
- Periodically check the inside gas tubes for the buildup of spider webs that can cause blockage, causing gas to backflow into the control valves, where it could potentially ignite.
- An orange flame is an indication that there is an obstruction in the gas tubes that lead to the burners. Flame should be blue in color.

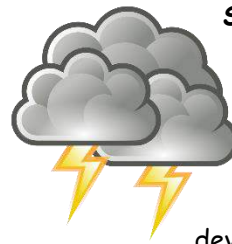




- When igniting the grille, make sure the lid or cover is in the open position.
- Never leave the unit unattended while cooking, and keep children at a safe distance.
- Always shut the tank off after each use.
- If the unit catches fire, do not attempt to extinguish it, especially if propane is burning freely. **CALL THE FIRE DEPT.** Propane will reignite with explosive force.
- Proper location and placement of the unit is very important. Keep the unit away from the sides or back of your home, as well as open windows. If fire occurs, it will spread to the building.
- Use common sense and read the manufacturer's directions.

### Pool Safety

- Liquid and solid chlorine-based oxidizers are commonly sold for home pool care as hydrogen chloride products. These chemicals can spontaneously combust if contaminated by organic materials (such as body fluids, acid rain, etc.) or hydrocarbon liquids such as fuel or motor oil. This type of fire will result in toxic fumes that can be extremely dangerous and require resident evacuation.
- Store and use pool chemicals according to the manufacturer's recommendations, and always store them outside the home, away from any heat source or flame.
- Make sure everyone knows how to swim.
- Keep children under close supervision when at or around the water.
- Do not use alcohol / drugs before attempting to swim.
- Take thought to securing your pool with a barrier of at least four feet in height and securing the pool with a cover when not in use.
- Establish and enforce rules for your pool area such as: no one swims alone, no running around the pool area, stay away from drains, etc...
- Ensure that everyone knows where restrooms are so pools do not get contaminated with urine or fecal matter.



### Summer Storm Fire Safety

A wide range of natural disasters occurs within the United States every year.

Natural disasters can have a devastating effect on you and your

home. The U.S. Fire Administration encourages you to use the following safety tips to help protect yourself, your family and your home from the potential threat of fire during or after a summer storm. You can greatly reduce your chances of becoming a fire casualty by being able to identify potential hazards and following the outlined safety tips.

#### Some Types of Fire-Related Hazards Present During and After a Summer Storm

- Lightning associated with thunderstorms generates a variety of fire hazards. The power of lightning's electrical charge and intense heat can electrocute on contact, splitting trees and causing fires.
- Pools of water and even appliances can be electrically charged.
- Appliances that have been exposed to water can short and become a fire hazard.
- Generators are often used during power outages. Generators that are not properly used and maintained can be very hazardous.

#### Chemical Safety

- Look for combustible liquids like gasoline, lighter fluid, and paint thinner that may have spilled. Thoroughly clean the spill and place containers in a well-ventilated area.
- Keep combustible liquids away from heat sources.

#### Electrical Safety

- If your home has sustained flood or water damage, and you can safely get to the main breaker or fuse box, turn off the power.
- Assume all wires on the ground are electrically charged. This includes cable TV feeds.
- Be aware of and avoid downed utility lines. Report downed or damaged power lines to the utility company or emergency services.
- Remove standing water, wet carpets and furnishings. Air dry your home with good ventilation before restoring power.
- Have a licensed electrician check your home for damage.



## Gas Safety

- Smell and listen for leaky gas connections. If you believe there is a gas leak, immediately leave the house and leave the door(s) open.
- Never strike a match. Any size flame can spark an explosion.
- Before turning the gas back on, have the gas system checked by a professional.

## Generator Safety

- Follow the manufacturer's instructions and guidelines when using generators.
- Use a generator or other fuel-powered machines outside the home. CO fumes are odorless and can quickly overwhelm you indoors.
- Use the appropriate sized and type power cords to carry the electric load. Overloaded cords can overheat and cause fires.
- Never run cords under rugs or carpets where heat might build up or damage to a cord may go unnoticed.
- Never connect generators to another power source such as power lines. The reverse flow of electricity or 'backfeed' can electrocute an unsuspecting utility worker.

## Bike Safety for Kids



If they haven't already, your children are just about to lose those training wheels. Here are a few tips to keep them safe as they soak up the adventure.

### Top Safety Tips

#### Helmets

- We have a simple saying: "Use your head, wear a helmet." It is the single most effective safety device available to reduce head injury and death from bicycle crashes.
- Make sure your child has the right size helmet and wears it every time when riding, skating or scooting.
- You'd be surprised how much kids learn from watching you, so it's extra important for parents to model proper behavior. Wear a helmet, even if you didn't when you were a kid.

- Your children's helmet should meet the U.S. Consumer Product Safety Commission's standards. When it's time to purchase a new helmet, let your children pick out their own; they'll be more likely to wear it for every ride.

#### Bikes

- Ensure proper bike fit by bringing the child along when shopping for a bike. Select one that is the right size for the child, not one he or she will grow into.
- Actively supervise children until you're comfortable that they are responsible to ride on their own.
- Every child is different, but developmentally, it can be hard for kids to judge speed and distance of cars until age 10, so limit riding to sidewalks (although be careful for vehicles in driveways), parks or bike paths until age 10. No matter where you ride, teach your child to stay alert and watch for cars and trucks.
- Long or loose clothing can get caught in bike chains or wheel spokes. Dress young kids appropriately to ensure a safe ride.
- Before the ride, make sure the reflectors are secure, brakes work properly, gears shift smoothly, and tires are tightly secured and properly inflated.
- Teach your kids to make eye contact with drivers. Bikers should make sure drivers are paying attention and are going to stop before they cross the street.
- Tell your kids to ride on the right side of the road, with traffic, not against it. Stay as far to the right as possible. Use appropriate hand signals and respect traffic signals, stopping at all stop signs and stoplights.
- When riding at dusk, at dawn or in the evening, be bright and use lights - and make sure your bike has reflectors as well. It's also smart to wear clothes and accessories that have retro-reflective materials to improve biker visibility to motorists.





## Answers to Who You Gonna Call?

**Potholes** - Highway - 849-2320

**Sewer backup** -Emergency Hotline - 894-1187

**Cracked sidewalk** -PP&Z - 849-2256

**Overgrown tree** - PP&Z - 849-2256

**Abandoned vehicle on private property** - PP&Z- 849-2256

**Abandoned vehicle on street** - Nuisance Abatement Division - 717-668-0487

**Trash on property** - PP&Z - 849-2256

**Street light out/not working** - Building/Electrical- 845-9351

**Park permit** - Public Works - 849-2245

**Building permit** - PP&Z - 849-2256

**List of RDA properties for sale** - Economic, Community Development/RDA - 849-2264

**Street signs** - Highway - 849-2320

**Broken parking meter** - Parking - 849-2230

**Trash/recycling/yard waste wasn't picked up**- Public Works - 849-2245 or 843-1240

**Schedule large item for pickup** - Public Works, Large Item Line - 843-1240

**Yard sale permit** - PP&Z - 849-2256

**Parking Ticket** -Finance - 849-2236

**Electrical Inspection** - PP&Z - 849-2256

**Restaurant Inspections** - Health Inspector - 845-2124

**Right to Know Request** -Solicitor's Office - 849-2250

**Free Smoke Detectors** - Fire Department - 854-3921

**Tall grass and weeds** - PP&Z - 849-2256

## Healthy Chipotle Shrimp



### Ingredients

- 1 1/4 pounds peeled and deveined large shrimp
- 5 garlic cloves, smashed
- 2 teaspoons chipotle hot sauce, plus more to taste
- 2 teaspoons ground cumin
- 1 teaspoon dried oregano
- 1/4 teaspoon ground coriander
- 3/4 teaspoon kosher salt
- 1/2 cup Mexican-style lager, such as Corona
- 2 tablespoons unsalted butter, cut into pieces
- 1 lime, halved
- 1/4 cup chopped fresh cilantro leaves
- 2 cups cooked white rice

### Directions

Prepare a grill for medium heat. Lay out a piece of heavy-duty foil 12 inches by 18 inches. Fold the four sides up to create walls and spread the shrimp in the center of the foil. Toss the shrimp with the garlic, chipotle sauce, cumin, oregano, coriander and salt. Pour in the beer. Dot the butter pieces on top. Cover with another large piece of foil and crimp and fold the edges together to seal tightly.

Transfer the foil pack to the grill, close the lid and cook until the shrimp are pink and cooked through, 4 to 6 minutes. Remove from the heat and let sit for a few minutes. Carefully tear the packet open, being careful not to let the escaping steam burn you.

Squeeze lime juice over the shrimp and sprinkle with cilantro. Serve the shrimp with the rice and pass extra chipotle hot sauce on the side.



# Litter Index 2017

- [KYB Litter Index Travel route 2017.pdf](#)
- [Community\\_Appearance\\_Index Power Point\\_2017.pdf](#)
- [Litter Index 2017 Photo.pdf](#)



# KEEP YORK BEAUTIFUL

LITTER INDEX – Travel Route (Start 445 West Philadelphia Street, Buchart-Horn, Inc.)

- |     |  |                          |
|-----|--|--------------------------|
| 1.  | West Philadelphia to Carlisle<br>Carlisle to West Market   | West Philadelphia Street |
| 2.  | West Market to Newberry  | Doctors Row              |
| 3.  | Newberry to Princess   | West Bank NH Improvement |
| 4.  | Princess to Belvidere<br>Belvidere to College<br>College to Penn   | Salem Square             |
| 5.  | Penn to Jackson<br>Jackson to Duke   | Southwest                |
| 6.  | Duke to College<br>College to Queen<br>Queen to Springettsbury   |                          |
| 7.  | Springettsbury to Pine<br>Pine to Springdale<br>Springdale to Edgar<br>Edgar to Boundary                                       | Veterans Memorial Park   |
| 8.  | Boundary to Dallas<br>Dallas to Sherman<br>Sherman to Princess   | East Side                |
| 9.  | Princess to Lehman<br>Lehman to Philadelphia   | East Side                |
| 10. | Philadelphia to Sherman  | East Side                |
| 11. | Sherman to Hudson<br>Hudson to York<br>York to State<br>State to Philadelphia<br>Philadelphia to Broad                         | East Side                |
| 12. | Broad to Edgar<br>Edgar to East Locust<br>East Locust to Pine  |                          |
| 13. | Pine to Philadelphia   |                          |
| 14. | Philadelphia to Beaver   | Yorktowne                |
| 15. | Beaver to Jefferson  |                          |
| 16. | Jefferson to Newberry  |                          |
| 17. | Newberry to Parkway<br>Parkway to Pennsylvania   | Northwest                |
| 18. | Pennsylvania to Kelly  |                          |
| 19. | Kelly to Atlantic<br>Atlantic to Parkway<br>Parkway to Roosevelt   | Devers                   |
| 20. | Roosevelt to Maryland<br>Maryland to West<br>West to Linden <i>ONE WAY</i><br>Linden to Roosevelt<br>Roosevelt to Philadelphia | The Avenues              |





# Community Appearance Index

[www.kab.org](http://www.kab.org)



KAB.ORG





# Community Appearance Index

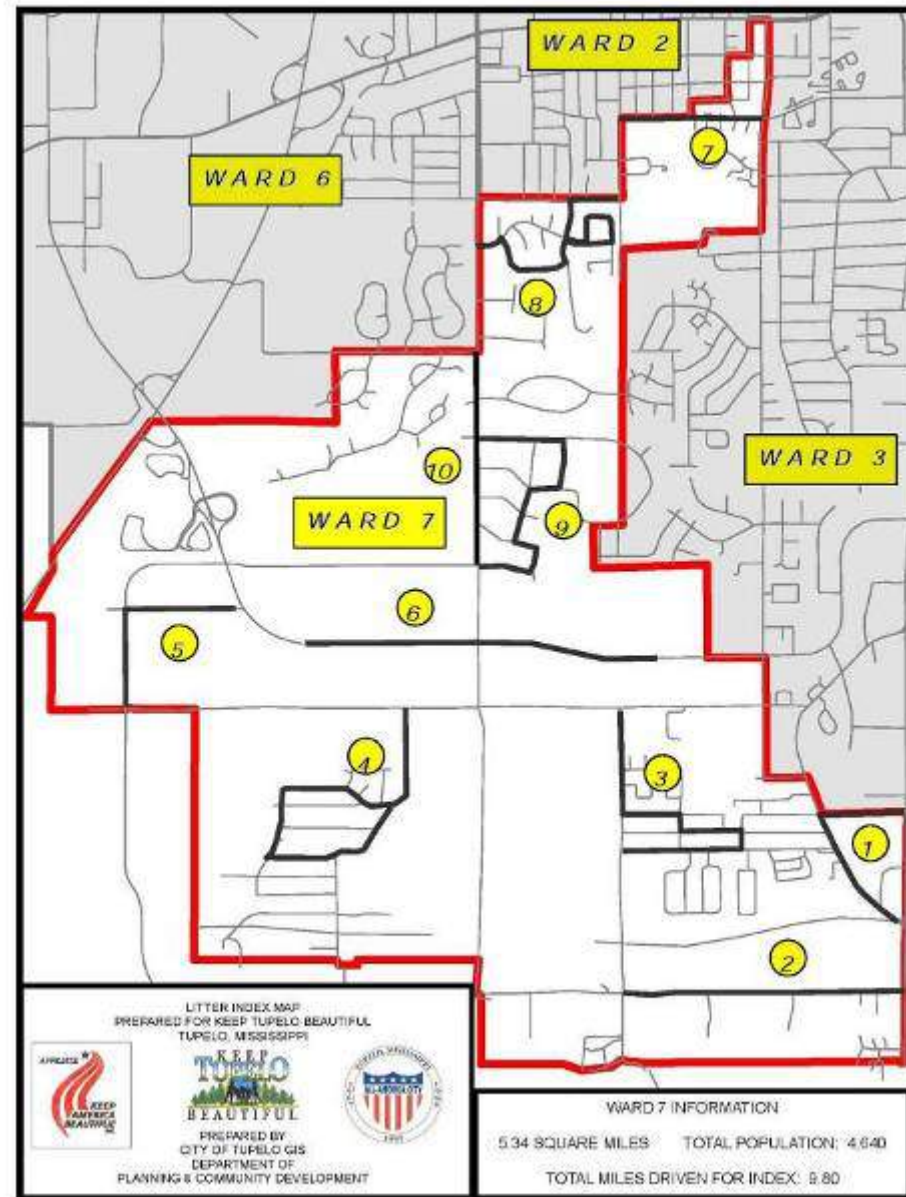
- Litter Index (Required for Good Standing)
- Optional Indices
  - Illegal Signs
  - Graffiti
  - Abandoned/Junked Vehicles
  - Outside Storage
- Focus Area Survey





# Community Appearance Index Litter Index

- Minimum 5 Areas
- 10 Sites in each Area
- Minimum 50 Sites per Community
- Site ½-1 mile length





# Scorers

- Litter Index
  - One (1) team
  - 3-6 individual scorers
  - Same team scores all Areas and Sites
- Optional Indices
  - Each scorer scores 1-2 optional categories
  - These scorers do not score litter
  - Same team scores all Areas and Sites





# Litter Index Scale 1

## Minimal or No Litter

- Virtually no litter
- 1 or 2 small items in a city block or equivalent
- Collected quickly by 1 individual
- Generally neat and tidy





# Litter Index Scale 2

## Slightly Littered

- Small amount of litter
- Eye is not continually grabbed by littered items





# Litter Index Scale 3

## Littered

- Visible litter catches your eye frequently
- Organized effort for removal
- Considerable effort to clean





# Litter Index Scale 4

## Extremely Littered

- Continuous amount of litter
- Litter first thing noticed
- Might include an illegal dump
- Equipment may be required for removal
- Strong impression of a lack of concern about litter





# Litter Index Scoring Sheet

---

Keep \_\_\_\_\_ Beautiful

Area \_\_\_\_\_ Date \_\_\_\_\_ Scorer \_\_\_\_\_

Site	Score (circle score)				Notable Conditions
1	1	2	3	4	
2	1	2	3	4	
3	1	2	3	4	
4	1	2	3	4	
5	1	2	3	4	
6	1	2	3	4	
7	1	2	3	4	
8	1	2	3	4	
9	1	2	3	4	
10	1	2	3	4	
11	1	2	3	4	
12	1	2	3	4	
13	1	2	3	4	
14	1	2	3	4	
15	1	2	3	4	
16	1	2	3	4	
17	1	2	3	4	
18	1	2	3	4	
19	1	2	3	4	
20	1	2	3	4	



# NEIGHBORHOOD ASSOCIATIONS City of York 01/2010



## Area Boundaries

## Area 4

- Neighborhood Associations
- 1 DEVERS AREA NA
  - 2 DOCTORS ROW NA
  - 3 DOWNTOWN EAST NA
  - 4 EAST SIDE NA
  - 5 HISTORIC NEWTON SQUARE NA
  - 6 LOCUST STREET ASSOCIATION
  - 7 NORTHEAST NA
  - 8 NORTHWEST NA
  - 9 OLDE TOWNE EAST
  - 10 SALEM SQUARE
  - 11 SPRINGDALE NA
  - 12 SOUTHWEST NA
  - 13 THE AVENUES NA
  - 14 VETERANS MEMORIAL PARK NA
  - 15 WEST BANK NH IMPROVEMENT ASSN INC
  - 16 WEST PHILADELPHIA STREET NA
  - 17 YORKTOWNE NA
- Major Roadway  
Roadway  
Railline  
Water Feature  
York City  
County Roadway



Prepared By:  
Emergency Planning  
Department of Fire/Rescue Services  
May 2007





# KEEP DALLAS BEAUTIFUL

## LITTER INDEX

Saturday, August 04

Area Four - Sites				Comments	Average Score
Singleton Ave the Trinity River to Loop 12 -1	2	2	2		2
Singleton Ave the Trinity River to Loop 12 -2	2	2	2		2
Industrial Blvd from Downtown to Irving Blvd -1	4	3	4	Dilapidated buildings	4
Industrial Blvd from Downtown to Irving Blvd -2	3	3	3	Tall grass	3
Bachman Lake - N	2	1	2		2
Bachman Lake - S	2	1	2	Trash cans in bad shape	2
N Love field	2	2	2		2
Love Field	2	2	2		2
Marsh Lane from Northwest Hwy to 635 - 1	1	1	1		1
Marsh Lane from Northwest Hwy to 635 -2	1	1	1		1
Spring Valley from Preston to Marsh	1	1	1		1
Harry Hines Blvd from Downtown to 635 n-1	2	2	1		2
Harry Hines Blvd from Downtown to 635 s-2	2	2	2		2
Hampton Rd from the Trinity River to IH-20	4	3	3		3
Northwest Hwy from Preston to IH-35 -1	1	1	1		1
Northwest Hwy from Preston to IH-35 -2	1	1	1		1
Webb Chapel Rd from Harry Hines to 635	1	1	1		1
Regal Row from Harry Hines to Irving Blvd -1	2	2	2		2
Regal Row from Harry Hines to Irving Blvd -2	2	2	2		2
Forest Ln from Preston to IH-35	1	1	1		1
				Total Average Score:	2



# Report Form

---

1. Keep America Beautiful affiliate name
2. Keep America Beautiful affiliate city, county, and state
3. Approximate Keep America Beautiful affiliate population
4. Approximate Keep America Beautiful affiliate size (in square miles)
5. Date(s) of Index scoring
6. Total driving and scoring time (in hours)
7. Indicate on what basis you selected the Areas:
  - a. Political jurisdictions
  - b. Sanitation districts
  - c. School districts
  - d. Neighborhoods
  - e. Other (please identify)
8. Identify litter scorers' profiles:
  - a. Number of board members
  - b. Number of other volunteers
  - c. Number of paid government employees
  - d. Number of Keep America Beautiful affiliate director and staff
  - e. Total Number of litter scorers:
9. Litter Index Results:

Areas	Area Scores (average of Sites)
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	

10. Affiliate Litter Index score (average of Area scores):



# Optional Indices

- Illegal Signs
- Graffiti
- Abandoned/Junked Vehicles
- Outside Storage





# Optional Index Scoring Sheet

Keep \_\_\_\_\_ Beautiful

Area \_\_\_\_\_ Date \_\_\_\_\_ Scorer \_\_\_\_\_

Site	Illegal Signs	Graffiti	Abandoned Junk Vehicles	Outside Storage	Notable Conditions
1	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	
2	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	
3	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	
4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	
5	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	
6	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	
7	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	
8	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	
9	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	
10	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	
11	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	
12	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	
13	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	
14	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	
15	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	
16	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	
17	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	
18	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	
19	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	
20	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	
Scorer Averages					



# Illegal Signs

- Signs on public property
  - Posters or flyers on utility poles/equipment
  - Signs in right-of-way
    - Area between sidewalk and edge of street or
    - under utility poles
  - Messages may include advertising for credit repair, dating services, garage sales, real estate, or for a candidate in an election





# Illegal Signs

Score	Instructions for Scores
1	No illegal signs
2	1-5 illegal signs
3	6-10 illegal signs
4	10+ illegal signs



# Graffiti

- Words, colors, and shapes drawn or scratched on buildings, overpasses, and other surfaces
  - one-color monikers (like a nickname) "tags"
  - complex compositions of several colors
- Done without permission









# Graffiti

Score	Instructions for Scores
1	No graffiti
2	<ul style="list-style-type: none"><li>• 1-2 small graffiti tags. No larger than 6' x 6' could be cleaned up in 1 hour</li></ul>
3	<ul style="list-style-type: none"><li>• 2 long swatches or a combined amount of graffiti of less than 12' long.</li><li>• 2-3 hours to cleanup</li></ul>
4	<ul style="list-style-type: none"><li>• Site predominantly filled with graffiti</li></ul>



# Abandoned/Junked Vehicles

- Abandoned typically on street or right-of-way
- Junk vehicle typically on private property
- Conditions
  - a heavy layer of dust
  - expired registration or license
  - tag, flat tire(s), or missing component(s)
  - inoperable









# Abandoned/Junk Vehicles

Score	Instructions for Scores
1	No abandoned or junk vehicles
2	1 abandoned or junk vehicle
3	2-3 abandoned or junk vehicles
4	4 or more abandoned or junk vehicles



# Outdoor Storage

- Outside a building and visible from right-of-way
  - building materials, furniture, appliances, motor vehicle parts or other materials not customarily used or stored outside or which may deteriorate from exposure to the outside environment.
- Outside Storage may include trash and garbage stored outside prior to or after normal collection.









# Outside Storage

Score	Instructions for Scores
1	No openly stored items
2	<ul style="list-style-type: none"><li>• 1-4 openly stored items. An hour with 1-2 people to clean up</li></ul>
3	<ul style="list-style-type: none"><li>• 5-10 items openly stored that could fill a small shed. Cleaned up in 3-5 hours</li></ul>
4	<ul style="list-style-type: none"><li>• 10 items that would fill a one car garage would require a full day to clean with a full crew</li></ul>



11. Optional Indices scorers' profiles:

- a. Number of board members
- b. Number of other volunteers
- c. Number of paid government employees
- d. Number of Keep America Beautiful affiliate director and staff
- e. Total Number of Optional Indices scorers:

12. Optional Indices Results:

Area	Illegal Signs	Graffiti	Abandoned/ Junk Vehicles	Outside Storage
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
Score Average				



# Happy Scorers





# Focus Area Survey

- An Inventory
  - Education
  - Ordinances
  - Enforcement
  - Resources and Tools
- Community improvement Focus Areas
  - Litter Prevention
  - Beautification
  - Waste Reduction and Recycling





# Focus Area Survey

An Inventory of Existing Education, Ordinances, Enforcement, Resources, and Tools using KAB's three community improvement educational focus areas of litter prevention, beautification, and waste reduction and recycling.

Question	Responses	Contact Information
What impression would a first-time visitor have of your community?		
Positives:		
Negatives:		
<b>Litter Prevention:</b>		
Who are contacts for litter prevention education/enforcement?		
What ordinances/codes/regulation exists in your community related to litter prevention?		
Does your community participate in the Great American Cleanup or any other community litter cleanup?		
Who are contacts for illegal dump cleanup in your jurisdiction?		
What litter prevention programs/activities are used by your schools?		
Who does education related to litter prevention?		
<b>Beautification:</b>		
Who are contacts for beautification programs/activities?		
What ordinances/codes/regulation exists in your community related to beautification and community improvement?		
Has your community recognized anyone for beautification efforts in the past three years?		
Do we have an active Master Gardener program?		
How many Garden Clubs exist in our community?		
Are we a Tree City USA?		
Who does education related to beautification?		
<b>Waste Reduction and Recycling:</b>		
Who are contacts for solid waste management?		
What ordinances/codes/regulation/contracts exist in your community related to solid waste?		
List all the landfills, transfer/convenience stations in our area:		
What is the estimated remaining life of each landfill?		
List the public or private recycling opportunities in our community (be specific):		
Are there any reuse/second-hand shops in our community?		
Do you have a recycling end use business?		
Where does the electronic waste including cell phones and inkjet in our community go?		
Do your schools recycle?		
Who does education on waste reduction and recycling?		







1010 Washington Blvd.  
Stamford, Ct. 06901  
203-659-3000

[www.kab.org](http://www.kab.org)









# **Watershed Alliance of York (WAY)**

- [May 8 2018.pdf](#)
- [March 13 2018.pdf](#)
- [December 12 2017.pdf](#)
- [Board Roster and Minutes from Oct 11 2017.pdf](#)



Keep York Beautiful  
York City Work Group Committee Meeting Agenda

Date: May 8, 2018  
Time: 8:00 AM  
Location: City of York Government Center  
101 South George Street  
Meeting Room #205  
Chair: Tom Smith ✓  
Attending: Cassie Dennis, Craig Walt, Bill Meals, Al Sykes, Annalisa Gojmerac, Susan Liebegott, Christy Chiaro, Ted Evgeniadis, Frank Iati, Lettice Brown, Elsbeth Bupp, Ernesto Perez, Judy Eby

AGENDA

1. Committee Reports

- # Sept 22nd* ✓ Spring Cleanup April 14, 2018 – Cassie Dennis – *138 volunteers, ~1 ton of litter collected*
- ✓ York City Schools Recycling Education Programs – Cassie Dennis
- ✓ Illegal Dump Sites & Cleanup Events – *clean sweep*
- ✓ Public Relations – Bill Meals –
- ✓ Community Gardens – Craig Walt/Annalisa Gojmerac – *united gardens*  
i. Meet & Greet event being planned at Penn Market – *Early - mid June (open to public)*
- ✓ Liberty Garden – Al Sykes – *uptown Rotary mulched + weeded*
- g. Go Green in the City – Tom Smith  
*↳ layout for tri-fold?*
- ✓ Financial Report – Frank Iati – *mulch + annual dues*
- ✓ Other Items?
- a. City of York Clean Sweep efforts – Tom Smith
- b. June 12, 2018, tour new educational center at York County Solid Waste Authority. Meet at YCSWA at 9am. More details to come.
4. Next KYB York City Work Group Meeting: Tuesday, July 10, 2018

2018 Meeting Schedule

August 14, 2018  
December 11, 2018.

September 11, 2018

October 9, 2018

November 13, 2018



Keep York Beautiful  
York City Work Group Committee Meeting Agenda

Date: March 13, 2018  
Time: 8:00 AM  
Location: City of York Government Center  
101 South George Street  
Meeting Room #205  
Chair: Tom Smith  
Attending: Cassie Dennis, Bill Meals, Al Sykes, Annalisa Gojmerac, Susan Liebegott, Christy Chiaro, Chaz Green, Ted Evgeniadis, Frank Iati, Lettice Brown, Craig Walt, Zach Reynolds

AGENDA

1. Committee Reports

- Ne Raindate*  
a. Spring Cleanup April 14, 2018 – Cassie Dennis – T-shirt  
i. United Way Partnership – Tom Smith
- KYB Books coloring*  
b. York City Schools MS4 Education Programs – Cassie Dennis *4 of 7 schools*
- c. Illegal Dump Sites & Cleanup Events – *Eberts Lane - Rotary Club*  
*↳ Bike lanes - Parkway Blvd*
- d. Public Relations – Bill Meals – Flyer
- e. Community Gardens – Craig Walt/Annalisa Gojmerac – *Penn + College Garden - want water service*
- f. Liberty Garden – Al Sykes/Tom Smith – *Spring Cleanup - Uptown Rotary Club*
- g. Go Green in the City – Tom Smith – *Lettice + Ted Books* *April 21<sup>st</sup> 10a-3p*
- h. Willis Run/Noonan Park – Tom Smith – *April 7<sup>th</sup> - Cleanup*  
*Sat. 2 Boy Scouts groups.*

2. Financial Report – Frank Iati –

3. Other Items?

4. Next KYB York City Work Group Meeting: Tuesday, April 10, 2018

2018 Meeting Schedule

May 8, 2018  
September 11, 2018

June 12, 2018  
October 9, 2018

July 10, 2018  
November 13, 2018

August 14, 2018  
December 11, 2018.

*Jim McLure*  
*YDR*  
*may have maps or*  
*can do an investigation*  
*on vacant lot next to*  
*Park + Hartley.*

*June 22nd Day of Action*  
*United Way*  
*Get connected*  
*for non-profits*



**Keep York Beautiful**  
**York City Work Group Committee Meeting Minutes**  
December 12, 2017

**In Attendance:** Tom Smith, Cassie Dennis, Bill Meals, Susan Liebegott, Al Sykes, Annalisa Gojmerac, Chaz Green. **Guest:** Carla Johns, Chesapeake Bay Foundation. *Letitia Brown*

1. Committee Reports
  - a. Poster Contest –
    - i. **Craig Walt – not present, no report.**
  - b. Spring Cleanup – Cassie Dennis – Date will be Saturday, April 14, 2018.
  - c. Illegal Dump Sites –
    - i. **Tom Smith-Planning Eberts Lane cleanup with Rotary Club of York, January 20<sup>th</sup>.**
  - d. Public Relations – Bill Meals – **Will be completed for January meeting.**
  - e. Community Gardens –
    - i. **Annalisa – Continued funding for Royal Square and Cottage Hill gardens. New project working at United Way site.**
2. Financial Report – Frank Iati - **not present, no report.**
3. Other Items?
  - a. **Al Sykes – Still working on recommendations for Liberty Garden Funds.**
  - b. **Annalisa – Working on possible Codorus Critter Walking Trail.**
  - c. **Carla Johns – shared details of CBF has grants available for educational programs, possibly for some tree planting events. Tom Smith to contact Chaz Green about possible project locations.**
4. Next KYB York City Work Group Meeting: Tuesday, March 13, 2018
5. 2018 Meeting Schedule

April 10, 2018	May 8, 2018	June 12, 2018	July 10, 2018
August 14, 2018	September 11, 2018	October 9, 2018	November 13, 2018
December 11, 2018.			



# WATERSHED ALLIANCE OF YORK

## Board of Directors Members 2017

Updated 10/11/2017

OFFICERS					
	Gary Peacock	2017	PRESIDENT (INTERIM)	Executive* Board Development Finance Nominating	See below
	Brita Runkle	2017	VICE-PRESIDENT	Executive Board Development Finance Nominating	See below
	Gary Peacock	2017	TREASURER (INTERIM)	Executive Board Development Finance	See below
	Gary Peacock	2017	SECRETARY	Executive Board Development Finance	See below
BOARD OF DIRECTORS					
NO.	NAME	TERM	POSITION	COMMITTEES	CONTACT INFORMATION
1.	Brown, Lettice	2017-2019	Director	Facilitation	Dept. of Public Works - Stormwater City of York Pennsylvania 101 South George Street York, PA 17401 Phone: (717) 849-2221 Cell: E-mail: <a href="mailto:lbrown@yorkcity.org">lbrown@yorkcity.org</a>
2.	Dell, Felicia	2016-2018	Director	Facilitation	York County Planning Commission 28 East Market St. York, PA 17401-1580 Phone: (717) 771-9870 (work) Cell phone: E-mail: <a href="mailto:fdell@ycpc.org">fdell@ycpc.org</a>
3.	Evgeniadis, Ted	2015-2017	Director	Education & Outreach	Stewards of the Lower Susquehanna, Inc. 2098 Long Level Rd Wrightsville, PA 17368 Phone: (717) 252-6777 Cell: (609) 571-5278 E-mail: <a href="mailto:lowsusriver@hotmail.com">lowsusriver@hotmail.com</a>
4.	Helwig, Jeffery	2016-2018	Director	Technical Assistance	BioLynceus, LLC, Helwig's Operations, Inc. 115 Andersonstown Road Dover, PA 17315 Phone: (717) 880-2016 Cell: E-mail: <a href="mailto:jkhelwig@paonline.com">jkhelwig@paonline.com</a>
5.	Hyson, Duane	2017-2019	Director	Facilitation	Master Watershed Steward 5246 Woods Rd. Stewartstown Pa 17363 Ph: 717-993-6026 (home) Cell: 717-569-0770 E-mail: <a href="mailto:duanehyson@hotmail.com">duanehyson@hotmail.com</a>
6.	Leisses, Matt	2017-2019	Director	Technical Assistance	Gannett Fleming 7133 Rutherford Road, Suite 300, Baltimore, MD 21244 Ph: 443-348-2017 x8425 Cell: 717.968.0808 E-mail: <a href="mailto:mleisses@gfnet.com">mleisses@gfnet.com</a> <a href="mailto:mleisses@gmail.com">mleisses@gmail.com</a>



7.	Longstreet, Jack	2015-2017	Director	Education & Outreach	The York Water Company 130 E. Market St. York, PA 17401 Phone: (717) 654-1326 Cell: E-mail: <a href="mailto:jlongstreet100@yahoo.com">jlongstreet100@yahoo.com</a>
8.	Merkel, Nate	2015-2017	Director	Facilitation	The Arro Group 4750 Delbrook Rd # 101 Mechanicsburg, PA 17050 Phone: (717) 961-6721 Cell: (717) 961-6721 E-mail: <a href="mailto:nate.merkel@thearrogroup.com">nate.merkel@thearrogroup.com</a>
9.	Missimer, Skip	2017-2019	Director	Facilitation*	245 Bellvue Rd. Red Lion, PA 17356 Phone: (717) 246-3030 (home) Cell: (717) 701-7057 E-mail: <a href="mailto:skipmissimer@gmail.com">skipmissimer@gmail.com</a>
10.	Oleson, Diane*	2017-2019	Director	Education & Outreach*	Penn State Extension - York (Retired) Phone: (717) Cell: E-mail: <a href="mailto:dianejoleson@comcast.net">dianejoleson@comcast.net</a>
11.	Peacock, Gary	2017-2019	Director	Education & Outreach	York County Conservation District 118 Pleasant Acres Road York, PA 17402 Phone: (717) 840-7687 Cell: (717) 873-9327 E-mail: <a href="mailto:gpeacock@yorkccd.org">gpeacock@yorkccd.org</a>
12.	Rinaldo, Derek	2015-2017	Director	Education & Outreach	C.S. Davidson, Inc. 38 North Duke Street York, PA 17401 Phone: (717) 846-4805 Cell: E-mail: <a href="mailto:djr@cspdavidson.com">djrcspdavidson.com</a>
13.	Runkle, Brita	2016-2018	Director	Education & Outreach	Muddy Creek TU 770 Blouse Rd. Red Lion, PA 17356 Phone: (717) Cell: (717) 586-4271 E-mail: <a href="mailto:brunkle@hotmail.com">brunkle@hotmail.com</a>
14.	Snyder, Mark	2015-2017	Director	Technical Assistance	The York Water Company 130 East Market Street York, PA 17401 Phone: (717) 845-3601 Cell: E-mail: <a href="mailto:marks@yorkwater.com">marks@yorkwater.com</a>
15.	Weihbrecht, Bill	2015-2017	Director	Technical Assistance	Waterbody Builders 2065 Valley Road Etters, PA 17319 Phone: (717) 645-1526 Cell: E-mail: <a href="mailto:waterbody2@epix.net">waterbody2@epix.net</a>
	Miller, Andrew	Annually	Attorney	Counsel (Pro Bono)	Miller, Poole & Lord LLP 137 East Philadelphia Street York, PA 17401 Phone: (717) 845-1524 Cell: E-mail: <a href="mailto:amiller@mpl-law.com">amiller@mpl-law.com</a>

Notes: \* Committee chairperson



WATERSHED ALLIANCE OF YORK

Board of Directors Meeting of October 11, 2017; 7:00 p.m.

York County ANNEX, Rm. 3, York, PA

Minutes

Attendees: D Hyson; B Runkle; J Helwig; M Leisses; J Longstreet; M Snyder; L Brown; S Missimer; D Oleson; G Peacock; B Weihbrecht; F Dell; D Rinaldo [Quorum]

Acting President called the meeting to Order at 7:00 P.M.

1. Approval of the minutes of the July 12, 2017 meeting – Gary asked for a motion for approval of the minutes of the July 12, 2017 meeting. Skip motioned to approve the minutes as written. J seconded his motion. Board members present approved the minutes as written unanimously.
2. Treasurer's report & approval of bills – Gary presented the Treasurer's report consisting of a Balance and Cash Flow and Transaction Listing Sheets. He noted the Balance Sheet was in error, \$575 is an asset (deposit), making the correct General Fund account (check) balance of \$10,488.25. Checking account transactions from July 1 to October 6, 2017. Learning and used new GnuCash accounting system. He will review and make necessary corrections, and input all transactions from January 1 through December 31, 2017. Several board members asked what our cash status is minus the grants in General Fund? Gary replied to the best of his knowledge we have about \$2000 available.
  - a. Secretary's report & communications – Gary provided a summary of correspondence received and sent for the quarter last. This report does not include all e-mail correspondence with the Board, Committees, and externally.
3. Committee reports on current and future activities
  - a. Executive (President)
    - i. M&T Bank account General Fund theft/recovery – Gary followed up on his Incident Update e-mail to the Board of August 31<sup>st</sup>. The timeline of significant events follows:
      - 7/6, 11 and 12/17 Secretary e-mailed Treasurer asking about a donation check deposit and requesting the Treasury Report for the upcoming board meeting.
      - 7/12/17 Treasurer failed to produce a report stating he needed to rectify expenses. Secretary attempted to contact Treasurer about unpaid bills and online bank account access on July 27 and August 4.
      - 8/8/17 Secretary went to M&T Bank and requested assistance access WAY's online account. Additionally, all passwords, security questions were changes, Treasurer was removed from account as signatory, and debit card issued in his name cancelled and new card issued to me. Notified Executive Committee of this action.
      - 8/17/17 Gained access to WAY's online M&T Bank checking account , reviewed all transactions for June – August, and discovered an unauthorized check for \$2000 was cashed by the Treasurer 6/29. Additionally, \$36,310 was deposited then withdrawn from the account the same date. I reported



these findings to Executive Committee immediately. Legal Counsel advised me to follow up with M&T Bank to get details, report to insurance company, and report to the police. These actions were initiated immediately. M&T Bank confirmed it was J Romig's signature on check. Additionally, coordinated getting updated signatories (i.e., Brita, Skip and myself) on account with M&T Bank.

- 8/21/17 received e-mail from Treasurer stating he was out of town for personal reasons and gave a new g-mail address.
- 8/23/17 Met Brita and Skip at M&T Bank and updated signatures. Also discovered \$100 cash donation (i.e., spring cleanup) never deposited into account.
- 8/31/17 Notified WAY Board of Incident.
- 9/26/16 Followed up with phone call to Det. Craul to inform him J Romig had a new Range Rover with Utah plates. He said he was waiting for M&T Bank to provide video of the transaction, as part of his investigation.

A lengthy discussion was had, and many questions asked. Skip as if we had sent a letter to the Treasurer demanding full restitution? Gary replied no, stating he has legal counsel's advice and that of Detective Craul, Springettsbury PD. He added that Andy offered to work with M&T Bank on recovery of the \$2,000.

- ii. Removal of Board Officer/Member from the board – Gary asked for a motion to remove J Romig from the board, as both Treasurer and Director, pursuant to WAY's By-laws, Article 5, section 5.4, Removal of Officers. Any officer or agent may be removed by the Board whenever in its judgment the best interests of the Corporation may be served thereby, but such removal shall be without prejudice to the contract rights of any person so removed. Diane motion to remove J Romig as Treasurer and from the board. Skip seconded her motion. The Board members presented voted unanimously to remove J Romig as Treasurer and Director from the board.
  - iii. New accounting system GnuCash – Gary reported he reviewed several accounting software systems SmartSheet, WAVE, M&T Banking Online, Quickin, QuickBooks, and GnuCash. All must be purchased, except GnuCash and M&T Banking tool (i.e., not an accounting system). He input WAY's banking transactions in GnuCash, from July 1<sup>st</sup> through September 30<sup>th</sup>, to try it out.
  - iv. New website: [www.watershedallianceofyork.org](http://www.watershedallianceofyork.org). Gary reported that today he successfully regained ownership of WAY's old web URL [www.watershedyork.org](http://www.watershedyork.org), and was able to publish a webpage directing visitors to our new website.
- b. Nominating Committee – Brita reported that three current board members will not be renewing their terms, and they are Nate, Mark and Bill. She thanked them for their service and asked all board members present for suggestions of potential board member/directors. Skip commented this is an opportunity to reach out to WAY's partnering organizations (i.e., TU, IWL, etc.) and ask. Gary suggested asking local municipal folks as well. Jack made a motion to approve Lettice Brown's directorship on the board. Derek seconded his motion adding it was



filling a vacancy. All of the board members present voted unanimously approve Lettice's appoint to the board and fill an existing vacancy. Brita asked for all nominations are submitted to her by December 13, 2017.

c. Education and Outreach (Diane)

- i. Master Watershed Stewards Program update – Diane reported on Class of 2017 projects, Jodi's Class of 2018 recruiting, and Duane highlighted several activities and events completed by the Stewards. Skip commented the MWS's present an opportunity for WAY to tap into volunteers with diverse backgrounds and skills, such as accounting, GIS, etc.
- ii. 39<sup>th</sup> Shank's Mare River Arts Fest Aug. 5<sup>th</sup>; 10 am – 4 pm – Gary and Skip reported attending this event with macro's exhibit display and activity, educating approximately 25 public individuals. Fest attendance number were low in spite of good weather.
- iii. YAPSA refrigerator magnets – Gary reported no new orders and he's working to address website URL change issue on existing magnets.

d. Facilitation (Skip)

- i. Women's Giving Circle "Codorus Creek Water Trail" Grant – Skip reported the CWT is built, pamphlet written and in design stage, and signs forward to City for approval, with planned installing in upcoming 6-8 weeks. He stated the Kids on the Codorus Venue was a huge success—approximately 150 city youth ages 4-14—were given free canoe rides at the Boat Basin, by York College students. Additionally, he suggested the board plan Water Trail expansion projects, initially downstream to Rte. 30 Rail Trail parking area, and upstream on West Branch to Spring Grove. All agreed this was a good idea.
- ii. 15<sup>th</sup> Watershed Weekend Sept. 23-24, 2017 – Gary reported WAY's 15<sup>th</sup> WSWE 2017 was a Success! About two-thirds of venues have reported outcomes. An estimated 1,249 people attended/educated one or more venues and 22 local municipal partners were engaged. Gary commented local newspaper coverage was sparse compared to past years, may be because some do not accept press releases and direct you to their online events page.

e. Technical Assistance (Vacant) – No report.

4. Other Business – Gary reported on the following business items:

a. Insurances

- i. D&O insurance – Current policy does not include "employee theft". He requested/received a quote to add this from Kling Bros. for \$500 or more. Gary did not recommend adding this coverage to existing policy and will shop around for a better price on D&O insurance with this coverage.
- ii. POWR general liability insurance – Learned this policy does not cover on-water activities and events. POWR directs policy holders to the American Canoe Association



to get additional on-water activity/event coverage. Gary had to join ACA, apply for WAY affiliate membership, and obtained the general liability insurance rider, all total costing about \$190. He hopes to recoup this cost from grant, if possible.

- b. WAY-PSCE MOU– Nina Redding, PSCE-York Manager, forwarded Penn States revised MOU with WAY for administering the YCCF Grant for Master Watershed Stewards Program. He and Executive Committee reviewed and accepted the changes to WAY's draft MOU. Waiting on PSU to execute and return final MOU for signing.
  - c. Conflict of Interest Declarations (outstanding – Lettice read, signed and submitted.
5. Networking – Gary asked board members present if there were any concerns, issues or announcements for the good of the order?
- a. Concerns and issues of the board – Brita said she plans to continue coordinating the York Rev's playground fundraiser in 2018. She shared some thoughts on potential fundraising opportunities, including selling signs, Yankee Candles, fruit and sandwiches, etc. Skip suggested an activity like a fun run or polar plunge. Bill suggested t-shirt and hats. Gary added road rally. Board members encouraged to share their ideas for fundraising in 2018.
  - b. Announcements – Gary reported that Ted is planning to make a \$135 donation to WAY
  - c. Other York County activities – Skipped due to time.
6. Meeting Calendar 2018 – Jan. 10, Apr. 11, Jul. 11, and Oct. 10
7. Next Meeting –January 10, 2018, 7:00 P.M., York County ANNEX; Room #3
8. Adjourned at 8:50 P.M.



# American Public Works Association (APWA)

- APWA Meeting and CBPRP Presentation.pdf

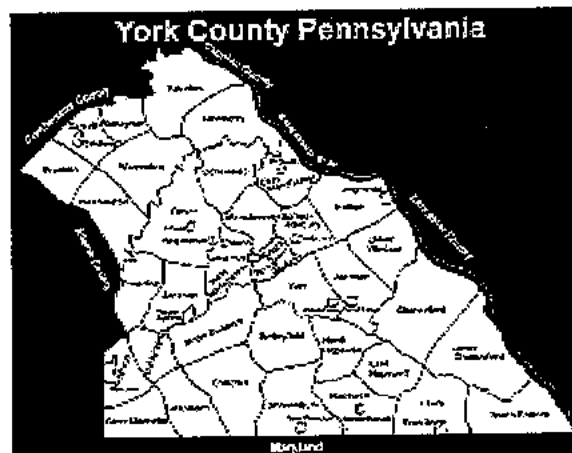




**YORK COUNTY BRANCH, est. January, 1992**  
**of**  
**CENTRAL PENNSYLVANIA CHAPTER**

Thursday, October 12, 2017 – 11:30AM

**MEETING AGENDA**



1. **Opening Remarks (11:30)**
  - a. Pledge of Allegiance
  - b. Introductions, new members
2. **Secretary's Report – Rick Fink**
  - a. August minutes – motion for approval
3. **Treasurer's Report – Barry Myers**
  - a. Treasurer's report - motion for approval.
  - b. 50/50 Drawing
4. **Central Chapter News and Updates - Annual Chapter Dinner & Awards Nov. 4, see flyer for info!**
  - a. Hollywood Casino Ballroom, upper level Penn National Race Course.
  - b. Branch members are reimbursed the fee to attend
  - c. Thanks to all who volunteered and/or attended Annual Symposium. Great Attendance!
5. **Old Business**
  - a. Gift Card program to recruit new members still in place
6. **New Business**
  - a. Branch President for 2018 one year, nominations open in November. This will bring all our Branch Officer terms into alignment for the future
  - b. 2017 Chapter Symposium, Past Presidents in attendance. Thanks Jim Phipps, coordinator
  - c. Topics for meetings, 2018
  - d. Other?
7. **Legislative News**
  - a. Contact your Representative to Join Public Works & Infrastructure Caucus  
House Public Works and Infrastructure Caucus: Rep. Ryan Costello (PA) Co-Chair, Rep. Dina Titus (NV) Co-Chair. The Caucus was formed to raise awareness about the critical importance of investing in the country's public works and infrastructure. The Caucus is a valuable tool for educating Congressional members and staff about the important services and projects that public works professionals provide to communities across the country and depend on daily—including roads and bridges, drinking water, emergency preparedness and response, flood control and stormwater, recycling, solid waste removal, parks and recreation, and public fleets and buildings.  
**NOTE: Rep. Costello will be attending the Annual Dinner on Nov. 4 and be presented our Chapter "Elected Officials Award" for contributions to Public Works. He will also address those in attendance.**

Continued..



The Caucus has sponsored APWA in hosting multiple issue briefs on Capitol Hill in recent months. Additionally, APWA most recently worked with Caucus to host a National Public Works Week event on Capitol Hill. Future opportunities for APWA to work with the Caucus are currently being planned. If your Representative has not yet joined the Caucus, please let them know how important it is to continue raising awareness about the crucial public works services and the need for infrastructure investment. Please have your Representative contact Ms. Katherine Loughhead (Representative Costello) at Katherine.Loughhead@mail.house.gov or Mr. Ben Rosenbaum (Representative Titus) at Ben.Rosenbaum@mail.house.gov for more information, or to join the Caucus. Please contact APWA's Director of Government Affairs at acales@apwa.net regarding any questions you may have about APWA's work with the Caucus.

b. The American Public Works Association (APWA) submitted comments to the Environmental Protection Agency (EPA) and the U.S. Army Corps of Engineers (USACE) regarding the recodification of the "Waters of the United States" rule. In 2015, the agencies published the "Clean Water Rule: Definition of 'Waters of the United States'" (80 FR 37054, June 29, 2015), and on October 9, 2015, the U.S. Court of Appeals for the Sixth Circuit stayed the 2015 Rule nationwide pending further action of the court. The agencies propose to replace the stayed 2015 definition of "Waters of the United States", and re-codify the exact same regulatory text that existed prior to the 2015 rule.

APWA's comments support this decision, as the lack of clarity in the 2015 rule has led to uneven implementation across the country, making the jobs of public works departments more difficult. The comments also make clear APWA's position that simply recodifying the previous rule is not a solution, as the previous rule does not have reasonable scope limitations. APWA urges the agencies to review and revise the 2015 rule, as a clear and concise rule is a necessary second step in this process.


## 8 Upcoming Meetings & Events

- a. **Thursday October 26, Branch Board Meeting, Vito's Pizzeria, 5:15**  
Topics: '18 Branch President; '18 Meetings & Events Planning; Nov. & Dec. Board Dates
- b. **Saturday November 4, Annual Awards Dinner and Membership Meeting**  
See Flyer!! NOVEMBER 1 deadline to attend.
- c. **Thursday November 9, York Branch Monthly Meeting**  
11:30 am. Location and Topic to be determined, Mike Fleming possibility?  
Also: Nominations for Branch President, 2018
- d. **Thursday December 14, Old Country Buffet, 11:30am**  
ERIC HORST; Winter Weather Outlook for 2017-18  
Also: Election of Branch President, 2018


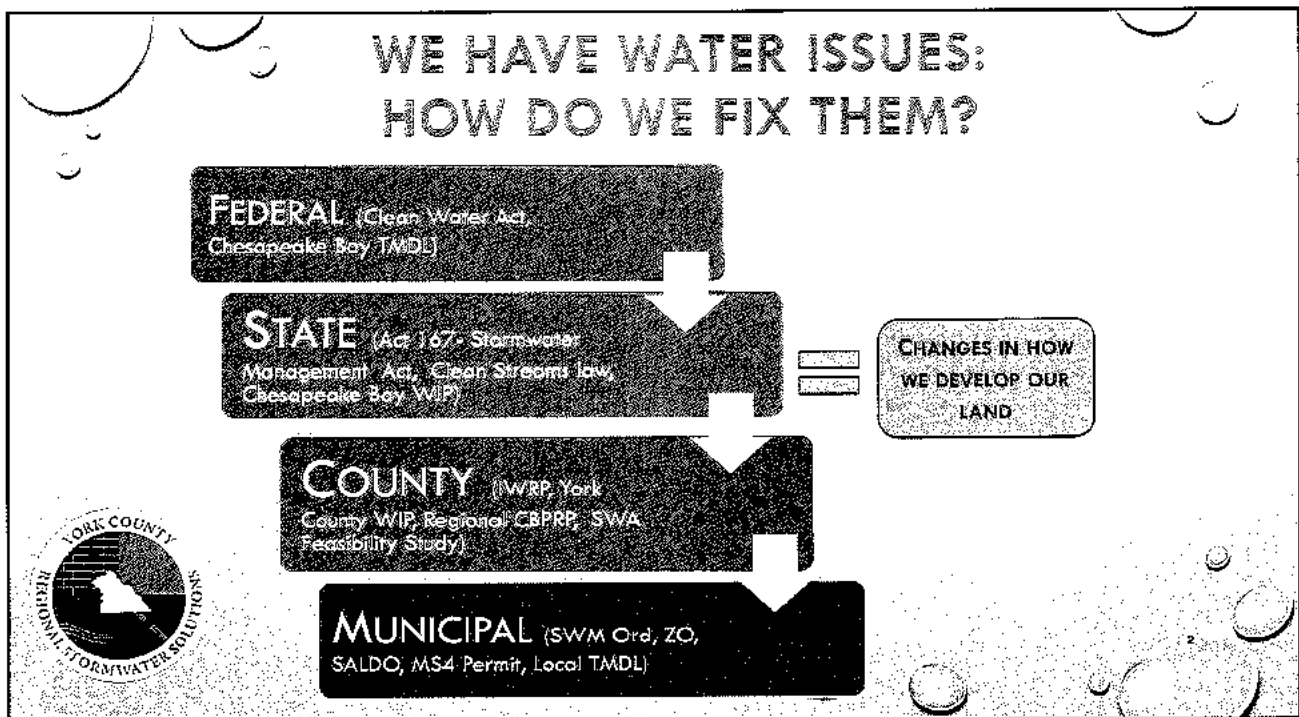
## 9 ADJOURNMENT ~12:00

**TODAY'S SPEAKER:** York County Representatives, topic: Chesapeake Bay.  
Would you like to read the latest news from the Central PA Chapter?  
Newsletter Link: <http://centralpen.apwa.net/PageDetails/12673>

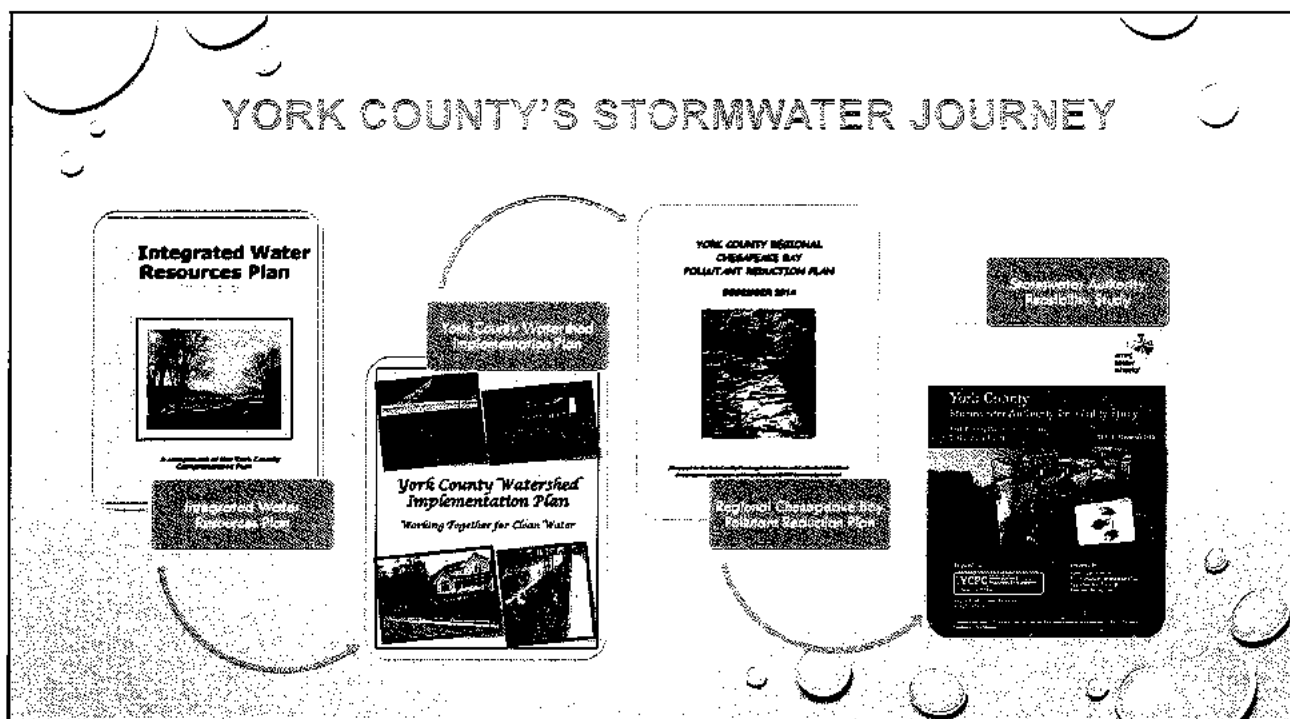
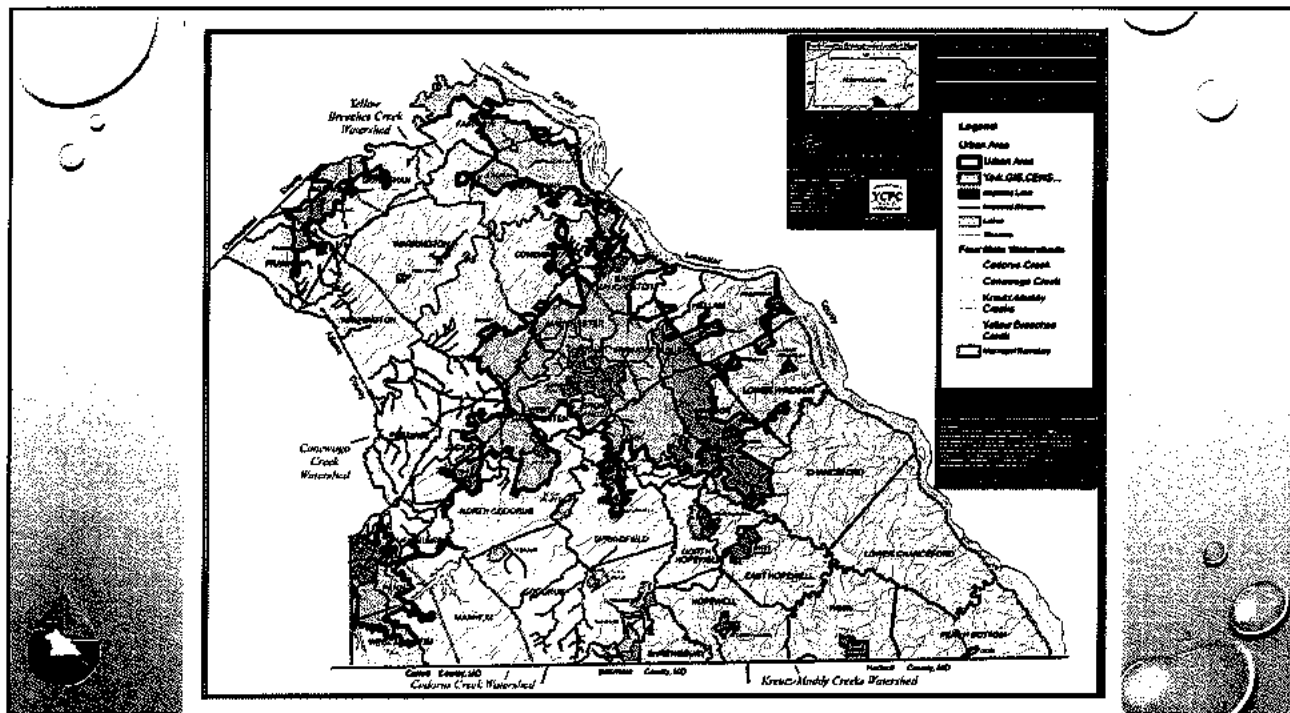




**PRESENTED BY THE  
YORK COUNTY PLANNING COMMISSION  
TO  
AMERICAN PUBLIC WORKS ASSOCIATION CENTRAL  
PA CHAPTER – YORK BRANCH  
OCTOBER 12, 2017**







## REGIONAL CBPRP PROGRESS (YEARS 1 - 3)

(3) BIORETENTION  
(3) STREAM RESTORATION  
(1) BIOSWALE  
(1) POROUS PAVEMENT  
(2) RIPARIAN BUFFER

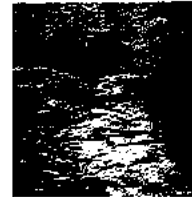
2 PROJECTS  
UNDER  
CONSTRUCTION  
+ OTHERS IN  
THE PIPELINE!

**POLLUTANT REDUCTION OF**  
**161,338 LBS/YR**

1,624,153 LBS OF TSS  
1,222,153 LBS OF P  
1,071,422 LBS OF N

YORK COUNTY REGIONAL  
CHESAPEAKE BAY  
POLLUTANT REDUCTION PLAN

DECEMBER 2014



Prepared by the York County Planning Commission and Center for Watershed Protection in cooperation with the Regional CBPRP Steering Committee

## REGIONAL CBPRP COMPARISON

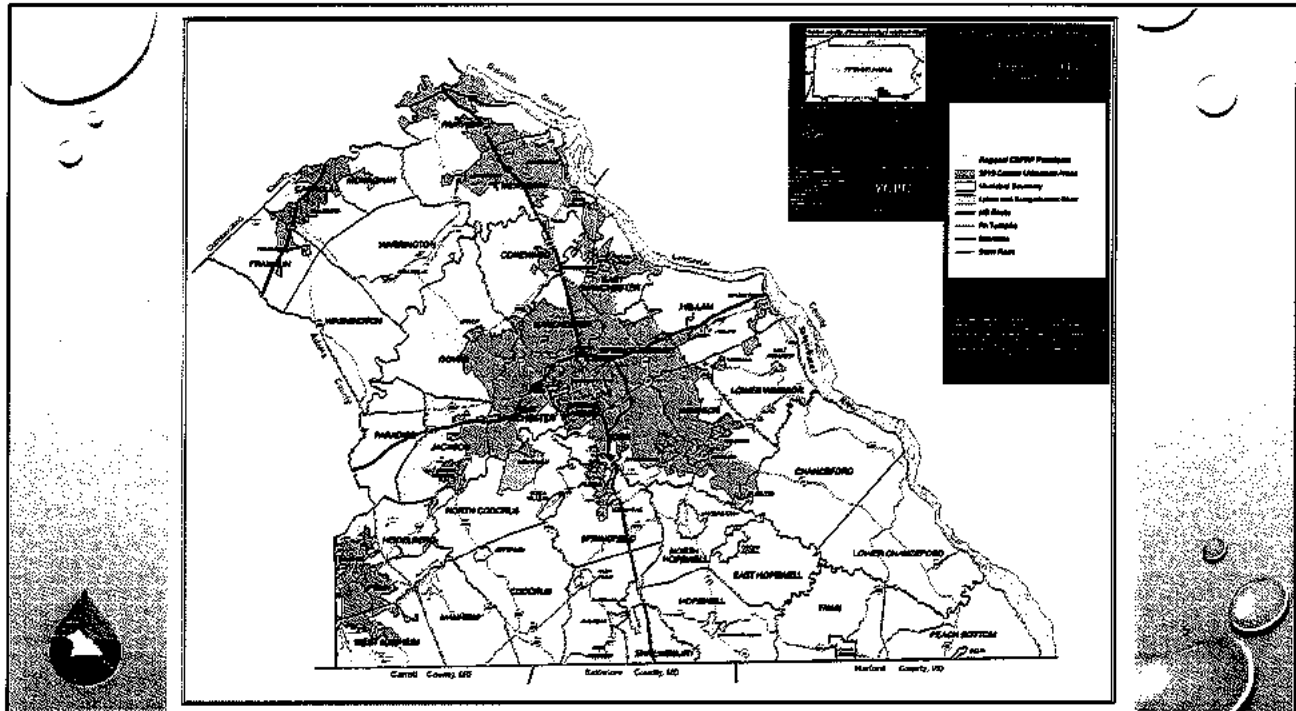
### CURRENT PLAN

- 44 PARTICIPANTS
- COUNTYWIDE TARGET
- INCREMENTAL PROGRESS TO REDUCE TSS, P, & N REQUIRED
- COLLECT \$1M OVER 5 YEARS
- ALL SHARE THE COST FOR PROJECTS & ADMIN BASED ON POPULATION, IMPERVIOUS COVER & IMPAIRED STREAMS
- ANNUAL CONTRIBUTIONS RANGE FROM \$69 TO \$14,662
- NO PARTNERSHIPS
- IMPLEMENTATION SCHEDULE OVER SEVERAL PERMIT CYCLES
- O&M RESPONSIBILITY IDENTIFIED
- MUST EVALUATE INFRASTRUCTURE UPGRADES FOR GI POTENTIAL
- INTERGOVERNMENTAL AGREEMENT

### NEW PLAN

- 52 PARTICIPANTS
- DETERMINE SEDIMENT BASELOAD
- REQUIRED POLLUTANT REDUCTIONS (10% TSS, 5% P, 3% N)
- COLLECT \$13M OVER 5 YEARS
- PERMIT HOLDERS SHARE PROJECT COSTS BASED ON POPULATION, IMPERVIOUS SURFACE & IMPAIRED STREAMS
- ANNUAL FEES FOR PERMIT HOLDERS RANGE FROM \$4,296 TO \$224,138
- WAIVER & NON-MS4 MUNICIPALITIES SHARE ADMINISTRATIVE COSTS EQUALLY (\$1,691/YR)
- PARTNERSHIPS IMPORTANT
- MUST COMPLETE PROJECTS W/IN 5 YEARS
- FUNDING MECHANISMS IDENTIFIED
- O&M RESPONSIBILITY IDENTIFIED
- INTERGOVERNMENTAL AGREEMENT





## COUNTY SEDIMENT BASELOAD

**25,573,905**  
MILLION LBS/YR

• COUNTY BASELOAD

**1,057,366**  
MILLION LBS/YR

• EXISTING BMP REDUCTIONS

**24,516,539**  
MILLION LBS/YR

• MODIFIED BASELOAD

**2,451,654**  
MILLION LBS/YR

• COUNTY SEDIMENT REDUCTION  
GOAL (10% OVER 5 YR PERMIT)





## PROJECT COST ESTIMATE CHANGES

**\$37 Million**

- Projects-Cost model generated estimates
- No Grants

**\$23 Million**

- Projects \$25.8 mill
- Admin 175k
- 20% Grant assumption

**\$13 Million**

- Projects \$15.9 mill
- Admin 175k
- 20% Grant assumption

## P3 OPPORTUNITIES

**DEPARTMENT OF  
DEFENSE**

- THEY ARE REQUIRED TO DO PROJECTS AND THOSE WILL COUNT TOWARDS OUR REDUCTIONS

**PENNDOT**

- I-83 UPGRADES
- PILOT PROGRAM WITH YORK COUNTY

**KINSLEY  
PROPERTIES**

- HAVE BASINS ON THEIR PROPERTIES WHICH COULD BE UPGRADED FOR ENHANCED WATER QUALITY



## 2018-2023 REGIONAL CBPRP

- PLAN SUBMITTED TO DEP SEPTEMBER 15
- 45 PARTICIPANTS, INCLUDES 2 NON-MS4
- 49 BMP PROJECTS
- PROJECTS MUST BE CONSTRUCTED BY 2023
- ANNUAL PROGRESS REPORTS REQUIRED
- PLAN TO BE IMPLEMENTED BY YORK COUNTY STORMWATER CONSORTIUM



## INTERGOVERNMENTAL COOPERATION AGREEMENT

Required for DEP Approval of Plan

Advertised & Adopted by Ordinance

Established Governance Structure

York County Stormwater Consortium

Collect Fees Totalling \$2,469,866/year

Implement BMP Projects

Submit Annual Report to DEP



## YORK COUNTY STORMWATER CONSORTIUM

### REGIONAL COMMITTEE

- ALL PARTICIPATING MUNIS HAVE A PRIMARY AND ALTERNATE
- QUARTERLY MEETINGS
- VOTE ON PROJECTS AND PARTICIPATION OF MEMBERS
- DISCUSS ENFORCEMENT ACTION

### MANAGEMENT COMMITTEE

- 1 YEAR TERM
- 7 VOTING MEMBERS
- MAY CREATE SUBCOMMITTEES
- AUTHORIZE PAYMENTS
- ENSURE BMP PROJECTS ARE CONSTRUCTED AS APPROVED

### YCPC-ADMINISTRATOR

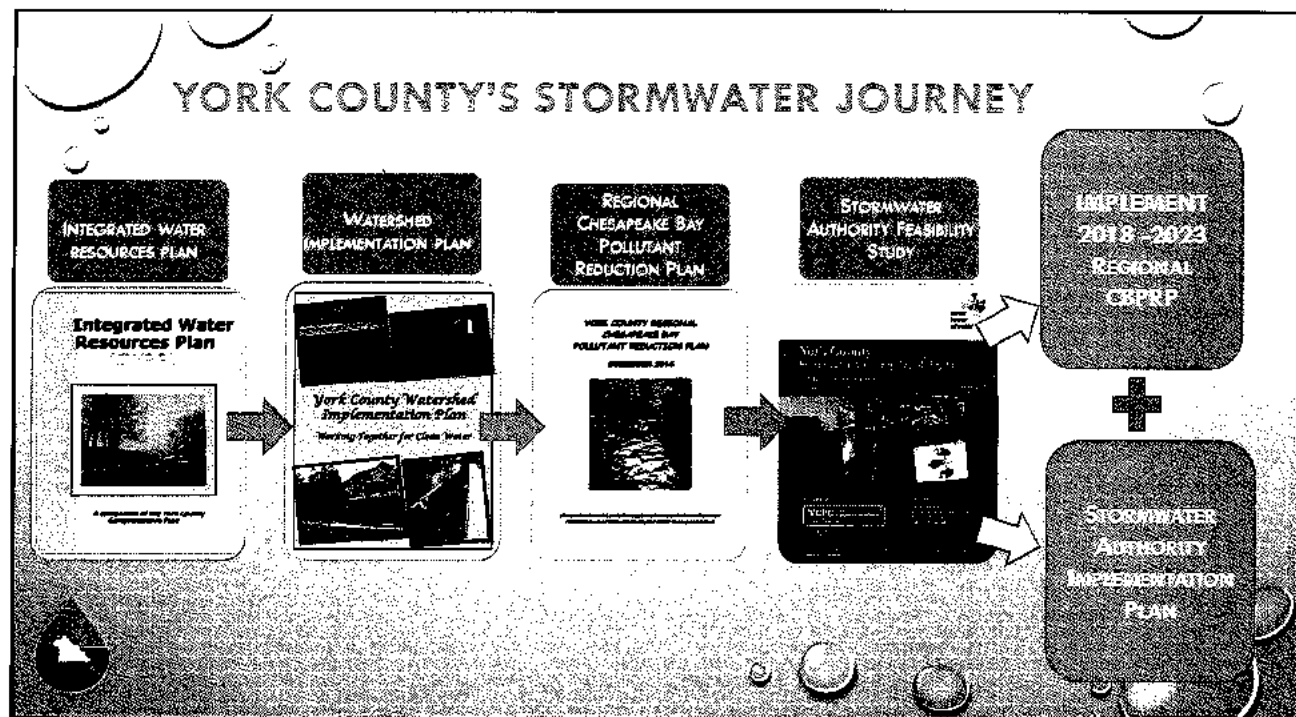
- MINUTES
- COORDINATE MEETINGS
- NOTICE REQUIREMENTS
- INVOICES
- DRAFT REVISIONS
- PREPARE ANNUAL REPORTS


## INGREDIENTS FOR SUCCESS

- LEAD AGENCY W/DEDICATED STAFF
- ENGAGE EPA & DEP
- COST SAVINGS
- REGULATORY CONSIDERATION
- P3- PUBLIC PRIVATE PARTNERSHIP AND PATIENCE, PERSISTENCE, PROFESSIONAL HELP









# YORK COUNTY

Regional Stormwater Solutions

**YORK COUNTY PLANNING COMMISSION**

717-771-9870

[WWW.YCPC.ORG](http://WWW.YCPC.ORG)



# **Pollutant Reduction Plans (PRPs) and TMDL Plans**