



ANNUAL MUNICIPAL SEPARATE STORM SEWER SYSTEM (MS4) STATUS REPORT

FOR THE PERIOD 2019 TO JUNE 30, 2020

GENERAL INFORMATION					
Permittee Name:	West Earl Township		NPDES Permit No.:	PAG133535	
Mailing Address:	157 W. Metzler Rd, PO Box 787		Effective Date:	March 16, 2018	
City, State, Zip:	Brownstown, PA 17508		Expiration Date:	March 15, 2023	
MS4 Contact Person:	Sara Service		Renewal Due Date:	September 30, 2022	
Title:	Stormwater Coordinator		Municipality:	West Earl Township	
Phone:	717-859-3201		County:	Lancaster	
Email:	sservice@westearltwp.org				
Co-Permittees (if applicable):					
Appendix(ces) that permittee is subject to (select all that apply):					
<input type="checkbox"/> Appendix A <input checked="" 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?
Conestoga River	WWF, MF	Yes	Pathogens, Nutrients, Siltation	No	No
Cocalico Creek	WWF, MF	Yes	Nutrients, Siltation	No	No
Groff Creek	WWF, MF	Yes	Nutrients, Siltation	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	West Earl Twp	Sara Service	717-859-3201
#2 Public Involvement/Participation	West Earl Twp	Sara Service	717-859-3201
#3 Illicit Discharge Detection and Elimination (IDD&E)	West Earl Twp	Neil Stoltzfus	717-859-3201
#4 Construction Site Storm Water Runoff Control	West Earl Twp	Brian Brandt	717-859-3201
#5 Post-Construction Storm Water Management in New Development and Redevelopment	West Earl Twp	Sara Service	717-859-3201
#6 Pollution Prevention / Good Housekeeping	West Earl Twp	Neil Stoltzfus	717-859-3201

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

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

- For new permittees only, has the written PEOP been developed and implemented within the first year of permit coverage?
☐ Yes ☐ No
- Date of latest annual review of PEOP: 6/24/2020 Were updates made? ☒ Yes ☐ No
- What were the plans and goals for public education and outreach for the reporting period?

Public Education goals for this year included updating the target audience list to include the agricultural community. Prepare special fliers or newsletters to send to this community regarding erosion and sedimentation controls, the benefits of riparian buffers and other pertinent MS4 subjects that would be beneficial to the AG community. Partner with the Cocalico Creek Watershed Association and TeamAG to set up winter farmers' meetings, discuss agricultural strategy for improving water quality and assist as needed with improving the overall water quality of our Township. As part of the Township's PRP requirements, the Township plans to distribute educational materials to select landowners of properties that have been identified as potential stormwater BMP project sites. Another goal was to educate the BMP landowners on the proper maintenance of their BMPs through sending letters or fliers and setting up meetings with the landowners. Visitor counters were added to the various MS4 pages on the Township's website to determine how many people are being reached by this information to help evaluate the most effective types of education outreach.

- Did the MS4 achieve its goal(s) for the PEOP during the reporting period? ☒ Yes ☐ No
- Identify specific plans and goals for public education and outreach for the upcoming year:

Develop/generate O&M verification forms based on facility/BMP type and send to owners of PCSM facilities and BMPs. Provide general PCSM requirements handout/pamphlet for all existing and new PCSM facility/BMP owners as an attachment to the O&M verification forms. Implement/maintain signage that can be viewed by the general public at select Township-owned facilities/BMPs that describes O&M requirements and the specific O&M being conducted at the facility/BMP. Provide BMP education information to HOAs and meet individually (or small groups) with them at least once to communicate requirements and reinforce education information provided to them. Continue education / outreach related to the Township's PRP requirements. Develop educational outreach materials to support the Pathogens Pollutant Control Measures (PCMs) requirements.

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: 6/24/2020

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: 6/24/2020

Were updates made? ☒ Yes ☐ No

3. Do you have a municipal website? ☒ Yes ☐ No (URL: westearltp.org)

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

An IDDE specific page and forms to report illicit discharges. Information about the state-wide MS4 program and MCM1 - MCM6. Various articles and brochures on general and specific stormwater management/MS4 topics. Link to the Township's PRP Plan. Links to past MS4 Annual Reports including all documentation. Link to the Township's web page about the Adopt-a-Drain program started in 2018. Links to various websites such as the Lancaster Clean Water Consortium, Pennsylvania Waters, Lancaster County Watersheds, and Chesapeake Stormwater Network and several others. New items added to the Township website for the 2019/2020 permit year include a section specific to the agriculture/farming community with information on nutrient management. Also added is a section for kids which includes links to videos and games to teach kids about stormwater management and green infrastructure.

4. Describe any other method(s) used during the reporting period to provide information on stormwater to the public:
Township newsletters, pamphlets in the Municipal building lobby and Facebook posts.
5. Identify specific plans for the publication of stormwater materials for the upcoming year:
Our plans for the upcoming year include continuing posting new links on the website to stormwater websites and brochures, continue to publish MS4 relevant articles in the Township newsletter and on Facebook. Further educate BMP landowners on the proper maintenance of their BMPs. Develop and publish O&M verification forms for BMP landowners.

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).

West Earl was one of the sponsors of the ELANCO Source Water Protection AG Forum held at Shady Maple on December 9, 2019. Handouts at public Township meeting on January 27, 2020 for the Cocalico Creek Watershed Farmer Engagement project, new brochure in lobby, BMP maintenance fact sheets (specific to the type of BMP) distributed with O&M agreements.

MCM #1 Comments:

As part of the Township's development of a comprehensive Stormwater Management Program (SWMP) in 2020, the MCM 1 Plan was expanded. See the SWMP Development attachment for details.

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: 6/24/2020 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:

The Township's SWMP development was discussed at a series of MS4 Committee meetings in 2020 and there was opportunity for input from various target audience groups. See the SWMP Development attachment for details.

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

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: June 17, 2020

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.

The Township formed an MS4 Committee in May 2019. These meetings are held on the last Wednesday of each month and have been advertised in the local newspaper and are open to the public. These meetings are held to discuss action items relating to the MS4 program and progress made on MS4 projects. The meetings also offer the public an opportunity to voice any concerns they may have related to stormwater management, erosion or other relevant MS4 topics and provides the Township with opportunities to provide MS4 education to landowners.

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.

Members of the public attended several of our MS4 Committee meetings to discuss MS4 related issues and projects. Township, Land Studies and Lancaster Conservation District staff along with a few members of the public did a walk-through of the property at 210 Cocalico Creek Road, Ephrata, to observe erosion of the landowners field. Township staff and Land Studies staff met with two landowners to discuss the possibility of extending a streambank restoration project that was done by the Township in 2019 at 156 W. Metzler Road, Ephrata, owned by John Hoover.

MCM #2 Comments:

Public education activities were limited this year due to Covid-19. Earth Day Clean-ups were canceled as well as Lancaster Water Week activities.

As part of the Township's SWMP development, the MCM 2 Plan was expanded. The final SWMP and expanded MCM Plans were reviewed by the MS4 Committee on June 17, 2020. See the SWMP Development attachment for details.

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: 6/24/2020 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: N/A

2. Date of last update or revision to map(s): June 4, 2020

3. Total No. of Outfalls in MS4: 51 Total No. of Outfalls Mapped: 51

4. Total No. of Observation Points: 6 Total No. of Observation Points Mapped: 6
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): October 28, 2019

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? 22
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: 9%
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: September 9, 2014
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
5/19/2020	Possible illicit discharge	Property owner - B&E Properties	None required. See MCM #3 Comments below.

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? Article titled "What is Sediment and Why is it a Stormwater Pollutant" distributed to all Township residents. Article titled "Did you know? MS4 News" which focuses on illicit discharges and what people can do to mitigate and prevent them. This article was also sent to all residents and business owners in the Township. Township staff training on baseline sampling at MS4 outfalls lead by Emily West from Land Studies.

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:

Stormwater violation reported in BMP#5 - A dry weather flow was discovered at 1380 Diamond Station Road, Ephrata. Sara Service & Brian Brandt investigated and took samples of the flow 16 feet south of the discharge point. There were no significant findings in the sample taken. The flow was determined to be a result of an underground, natural spring.

Based on in-field testing and investigations, the dry weather flows observed from two of the outfalls were from groundwater sources and not caused by illicit discharges.

As part of the Township's SWMP development, the MCM 3 Plan was expanded. See the SWMP Development attachment for details.

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: September 9, 2014

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: Participating in statewide program.

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: Participating in statewide program

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: Participating in statewide program

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:

Participating in statewide program

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: Participating in statewide program

MCM #4 Comments:

As part of the Township's SWMP development, the MCM 4 Plan was expanded. See the SWMP Development attachment for details.

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: September 9, 2014
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: September 9, 2014
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.

The Township's goal for the proper operation and maintenance of all structural BMPs is to become compliant with proper O&M by 2022. 1/3 of all structural BMPs were inspected during the 2018/2019 permit cycle. Three structural BMPs were inspected during the 2019/2020 permit cycle. The Township also plans to distribute O&M verification forms to select private facility/BMP owners in an effort to facilitate proper O&M of all BMPs.

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):
Participating in statewide program.
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				0 1 33	0 1 33			
2				0 1 33	0 1 33			
3				0 1 33	0 1 33			
4				0 1 33	0 1 33			
5				0 1 33	0 1 33			
6				0 1 33	0 1 33			
7				0 1 33	0 1 33			
8				0 1 33	0 1 33			
9				0 1 33	0 1 33			
10				0 1 33	0 1 33			
11				0 1 33	0 1 33			
12				0 1 33	0 1 33			
13				0 1 33	0 1 33			
14				0 1 33	0 1 33			
15				0 1 33	0 1 33			
16				0 1 33	0 1 33			

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:

See attachment for PCSM BMP Inventory.

As part of the Township's SWMP development, the MCM 5 Plan was expanded. See the SWMP Development attachment for details.

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? 6/24/2020
3. When was it last updated? 6/24/2020

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: 9/8/2018

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: 6/24/2020 Date of latest training: 6/17/2020

3. Training topics covered:

1. Stormwater Action Team Meeting - August 7, 2019. Discussion included the new O&M Manual developed by the Clean Water Consortium, PRP projects, Municipal Storm Sewersheds, Water quality monitoring & BMP Maintenance.
2. BMP Inspections - October 8, 2019
3. Outfall Screenings - October 30, 2019
4. MS4 Committee Meeting - August 28, 2019. Topics covered include Hoover streambank restoration project, MS4 public education, MS3 delineation map, East Main Street erosion.
5. MS4 Committee Meeting - October 30, 2019. Topics covered include determining MS4 priorities, developing an overarching stormwater management program document, developing robust MS4 goals, addressing pathogens in the Conestoga River Watershed and developing Pollutant Control Measures.
6. MS4 Committee Meeting - November 18, 2019. Topics covered include the drains in the shop, MS4 budget, stormpipe repair at 144 Rose Hill Road, aging stormwater infrastructure, Hoover project extension.
7. MS4 Committee Meeting - December 18, 2019. Topics covered include erosion of the farmer's field at 210 Cocalico Creek Road, Anglesea stormwater easement encroachments.
8. Defining Protocols for Performing Outfall Inspections - January 28, 2020.
9. MS4 Committee Meeting - January 29, 2020. Topics covered include Hoover project extension, Stormwater Management Program document draf, BMP inspections, dry and wet weather outfall screenings schedule.
10. MS4 Committee Meeting - February 26, 2020. Topics covered include Hoover project extension and the property owners in the area where project could be extended, field erosion at 210 Cocalico Creek Road.
11. MS4 Prioritization, Sampling & Discharge Monitoring Training - June 6, 2020.
12. MS4 Committee Meeting - June 17, 2020. Topics covered include partnering with the Cocalico Creek Watershed Association, baseline water quality sampling, MS4 program responsibilities, implementing MS4 goals, wet & dry weather sampling & partnering with PennDot and the Army Corps of Engineers for PRP projects.
13. Stormwater Action Team - February 5, 2020. Riparian Buffers.
14. CSDatum Software Training - May 29, 2020 (via Zoom)

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

1. Kristin Kyler, Stormwater Action Team Co-Chair
2. Emily West, Environmental Scientist III, LandStudies
3. Emily West, Environmental Scientist III, LandStudies
4. Cory Rathman, Senior Project Engineer, LandStudies
5. Cory Rathman, Senior Project Engineer, LandStudies
6. Cory Rathman, Senior Project Engineer, LandStudies
7. Cory Rathman, Senior Project Engineer, LandStudies
8. Mark Harman, P.G., ARRO
9. Cory Rathman, Senior Project Engineer, LandStudies
10. Cory Rathman, Senior Project Engineer, LandStudies
11. Emily West, Environmental Scientist III, LandStudies
12. Emily West & Cory Rathman, LandStudies
13. Kristin Kyler, Stormwater Action Team Co-Chair
14. Jordan Good, Engineer, CS Davidson

5. Names of training attendees:

1. Sara Service, Stormwater Coordinator & Brian Brandt, Stormwater Inspector
2. Sara Service, Stormwater Coordinator, Brian Brandt, Stormwater Inspector, Jerry Howe, Road Crew
3. Brian Brandt, Stormwater Inspector & Sara Service Stormwater Coordinator
4. Candie Johnson, Township Manager, Cory Rathman, LandStudies, Sara Service, Stormwater Coordinator, Benjamin Craddock, Township Engineer, Lancaster Civil Engineering & Keith Kauffman, Township Supervisor.

5. Cory Rathman, LandStudies, Emily West, LandStudies, Sara Service, Stormwater Coordinator, Brian Brandt, Stormwater Inspector, Benjamin Craddock, Township Engineer, Jerry Howe, Acting Roadmaster & Keith Kauffman, Township Supervisor.
6. Cory Rathman, LandStudies, Sara Service, Stormwater Coordinator, Brian Brandt, Stormwater Inspector, Ben Craddock, Township Engineer, Jerry Howe, Road Crew, Neil Stoltzfus, Roadmaster.
7. Cory Rathman, LandStudies, Jenna Seesholtz, Township Manager, Brian Brandt, Stormwater Inspector, Benjamin Craddock, Township Engineer, Keith Kauffman, Township Supervisor, Jerry Howe, Road Crew, Neil Stoltzfus, Roadmaster, Gary Burkholder, property owner of 210 Cocalico Creek Road.
8. Brian Brandt, Stormwater Inspector & Sara Service, Stormwater Coordinator.
9. Jay Burkholder, property owner of 187 Turtle Hill Road (possible Hoover project extension property), Cory Rathman, LandStudies, Brian Brandt, Stormwater Inspector, Sara Service Stormwater Coordinator, Neil Stoltzfus, Roadmaster, Benjamin Craddock, Township Engineer, Keith Kauffman, Township Supervisor.
10. Daniel King, property owner of 143 Turtle Hill Road (possible Hoover project extension property), Emily West, LandStudies, Cory Rathman, Land Studies, Jenna Seesholtz, Township Manager, Brian Brandt, Stormwater Inspector, Sara Service, Stormwater Coordinator, Neil Stoltzfus, Roadmaster.
11. Emily West, LandStudies, Sara Service, Stormwater Coordinator, Jerry Howe, Road Crew, John Enck, Road Crew, Neil Stoltzfus, Roadmaster, Brian Brandt, Stormwater Inspector.
12. Emily West, LandStudies, Cory Rathman, LandStudies, Ben Craddock, Township Engineer, Keith Kauffman, Township Supervisor, Brian Brandt, Stormwater Inspector, Jenna Seesholtz, Township Manager, Neil Stoltzfus, Roadmaster, Sara Service, Stormwater Coordinator
13. Neil Stoltzfus, Roadmaster & Jerry Howe, Road Crew.
14. Brian Brandt, Stormwater Inspector, Sara Service, Stormwater Coordinator, Jenna Seesholtz, Township Manager, Neil Stoltzfus, Roadmaster, Benjamin Craddock, Township Engineer, Jordan Good, CS Davidson, Emily West, LandStudies, Cory Rathman, LandStudies.

MCM #6 Comments:

As part of the Township's SWMP development, the MCM 6 Plan was expanded. See the SWMP Development attachment for details.

West Earl Township plans to continue implementing the SOPs and training-related documentation under the MCM 6 program period during the 2020-2021 reporting period.

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)	6/24/2019	<input type="checkbox"/>	
Source Inventory	6/17/20	<input checked="" type="checkbox"/>	
Investigation of Suspected Sources		<input type="checkbox"/>	9/1/2022
Ordinance/SOP for Controlling Animal Wastes		<input type="checkbox"/>	9/1/2022

PCM Comments:

A Pathogens PCM Pollutant Reduction Plan was developed in 2020 that included a source inventory of suspected sources of pathogens within the Conestoga River watershed. See the Pathogens PCM Attachment for details.

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)	9/14/2017	6/22/2018	Chesapeake Bay
<input checked="" type="checkbox"/> Impaired Waters PRP (Appendix E)	9/14/2017	6/22/2018	Conestoga River, Cocalico Creek, Groff Creek
<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			
<input type="checkbox"/> 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:			
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)	92,353		
<input checked="" type="checkbox"/> Impaired Waters PRP (Appendix E)	92,353		
<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: 9/30/2023 4. Have any modifications to the plan(s) occurred since DEP approval? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If Yes to #4, was the updated plan(s) submitted to DEP? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If Yes to #4, did you comply with the public participation requirements of the applicable appendix? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If Yes to #4, describe the plan modifications. Public participation was not required as part of the plan revisions made in 2019. PRP revisions were approved by DEP on July 30, 2019. See the PRP Attachment for details. 5. Summary of progress achieved during reporting period. The Hoover property streambank restoration project, as outlined in the PRP, was completed in October 2019. The post-construction monitoring and maintenance checklist was completed on June 16, 2020 by Emily West from Land Studies. The sign for the streambank restoration project was installed in March 2020. The sign was installed to educate the public on how the streambank restoration works and what its benefits and impacts are. See the PRP Attachment for details. 6. Anticipated activities for next reporting period.			

See the PRP Attachment for details.

PRP/TMDL Plan Comments:

West Earl Township is required to achieve a 10% sediment reduction, 5% total phosphorus (TP) reduction, and 3% total Nitrogen (TN) reduction. Per DEP's PRP instructions, the PRP used the presumptive approach to assume that a 10% sediment reduction would also satisfy the TP and TN reduction requirements. Per the May 2019 planning area and loading calculations, the 10% sediment requirement for West Earl Township is 92,353 pounds per year.

See the PRP Attachment for details.

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)
	Hoover Property Streambank Restoration	-	-	1,250	LF	40°08'08"	76°12'03"	October 30, 2019	<input checked="" type="checkbox"/>	<input type="checkbox"/>	56,100
						° ' "	° ' "		<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"/>
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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.

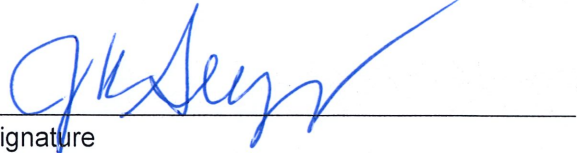
For All Permittees: I certify under penalty of law that this report was prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage 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).

Jenna Seesholtz, Township Manager

Name of Responsible Official

717-859-3201

Telephone No.



Signature

9/22/2020

Date

ATTACHMENT: Pathogens Pollutant Control Measures (PCM)-related Information

As part of West Earl Township's Stormwater Management Program (SWMP) development in Spring 2020, the Township targeted the development of a Pathogens Pollutant Control Measures (PCMs) Pollutant Reduction Plan (PRP) as an overarching SWMP goal. The target of the Pathogens PCM PRP is to address pathogens impairments in accordance with MS4 permit requirements. A Pathogens PCM PRP was finalized as a working document in June 2020.

The Cocalico Creek, Groff Creek, and Conestoga River and tributaries in the Township all have impairments caused by pathogens; however, the Township has started with Conestoga River and tributaries since this was the only watershed identified for Appendix B pathogens impairment per the Integrated Water Quality Monitoring and Assessment Report (including the 303(d) list) at the time that the 2018 MS4 Permit was published. The subsequent 2016 Integrated Water Quality Monitoring and Assessment Report added pathogens impairments for Cocalico Creek and Groff Creek. Therefore, these watersheds are included in the Township's Pathogens PCM/PRP and pollutant control measures for these watersheds will be initiated after the requirements for the Conestoga River have been addressed.

The approach for PCMs development is based on the requirements of Appendix B of PAG-13 Authorization to Discharge Under the National Pollutant Discharge Elimination System (NPDES) General Permit for Stormwater Discharges from Small Municipal Separate Storm Sewer Systems (MS4s) Approval of Coverage (Form 3800-PM-BCW0100d 5/2016) that applies to both general and individual MS4 Permits. The requirements are as follows:

The permittee shall implement the following Pollutant Control Measures (PCMs) within the storm sewershed of any outfall that discharges to waters impaired due to Pathogens or other pollutants (e.g., Fecal Coliform, Nutrients, etc.), regardless of whether there is an approved TMDL:

A. Map and Inventory.

- 1. The permittee shall develop map(s) of the storm sewershed(s) associated with all outfalls that discharge to surface waters subject to Appendix B. The purpose is to identify the area the permittee is responsible for within its legal boundaries in developing a source inventory.*

For West Earl Township, the storm sewershed map for the Conestoga River watershed (identified as impaired due to pathogens per the 303(d) list for the 2018 MS4 Permit) was submitted as part of the 2019 Annual Report. West Earl Township updates their MS4 maps on a quarterly basis and all updates shall be submitted with each annual report. MS3 delineations for the Cocalico Creek and Groff Creek watersheds will be developed and submitted as part of a subsequent annual report during the current MS4 permit cycle.

- 2. The permittee shall develop an inventory of all suspected and known sources of bacteria in stormwater within the storm sewershed, at a minimum, that discharge to impaired waters. The inventory must identify whether the source is suspected or known, the basis for this determination, the responsible party (if known), and any corrective action the permittee has taken or plans to take for any of these sources. For existing permittees, the inventory shall be submitted to DEP with an Annual MS4 Status Report due no later than September 30, 2020.*

As indicated above, the inventory of suspected sources was completed for the Conestoga River watershed first, and subsequently will be completed for the Cocalico Creek and Groff Creek watersheds.

West Earl Township completed preliminary MS3 delineations for all outfalls in 2019, although some MS3s have been revised in 2020 based on findings from subsequent field investigations (see attached map). This includes the addition of some MS3s that do not discharge to outfalls. As part of the development of the Pathogens PCM PRP, an inventory of all outfalls and suspected sources of pathogens (as well as other pollutants) within the Conestoga River watershed was developed in June 2020 (see attached inventory). Suspected sources were identified through a desktop analysis of the area land use types.

Preliminary investigations of suspected sources were completed through baseflow water quality sampling in June 2020. Samples were collected not only to evaluate pathogens concentrations, but to evaluate other water quality parameters for the Conestoga River.

Samples were collected at three locations during the June 16, 2020 baseflow sampling event:

- #1 – Upstream Conestoga River – Where the Conestoga River enters West Earl Township
 - #2 – UNT to Conestoga River – Confluence of the unnamed tributary with the Conestoga River
 - #8 – Downstream Conestoga River – Where the Conestoga River leaves West Earl Township
- NOTE: The above sample location numbers were part of a larger group of eight sample locations, numbers #1 through #8 from upstream to downstream. Sample locations #1, 2, and 8 were the three in-stream sample locations where baseflow sampling could be collected. See information on the additional five outfall sample locations below.

These baseflow sampling locations were selected to understand baseline conditions of the Conestoga River where it enters and exits the Township; and also, to understand baseline conditions along the one unnamed tributary that runs through the Township and discharges to the main stem of the Conestoga River.

In addition to the above in-stream locations, five MS4 outfall locations were targeted for preliminary wet weather screening investigations as part of the pathogens source investigations and development of the Township's Discharge Monitoring Program; however, wet weather source investigations were put on hold due to COVID19 related-budget restrictions.

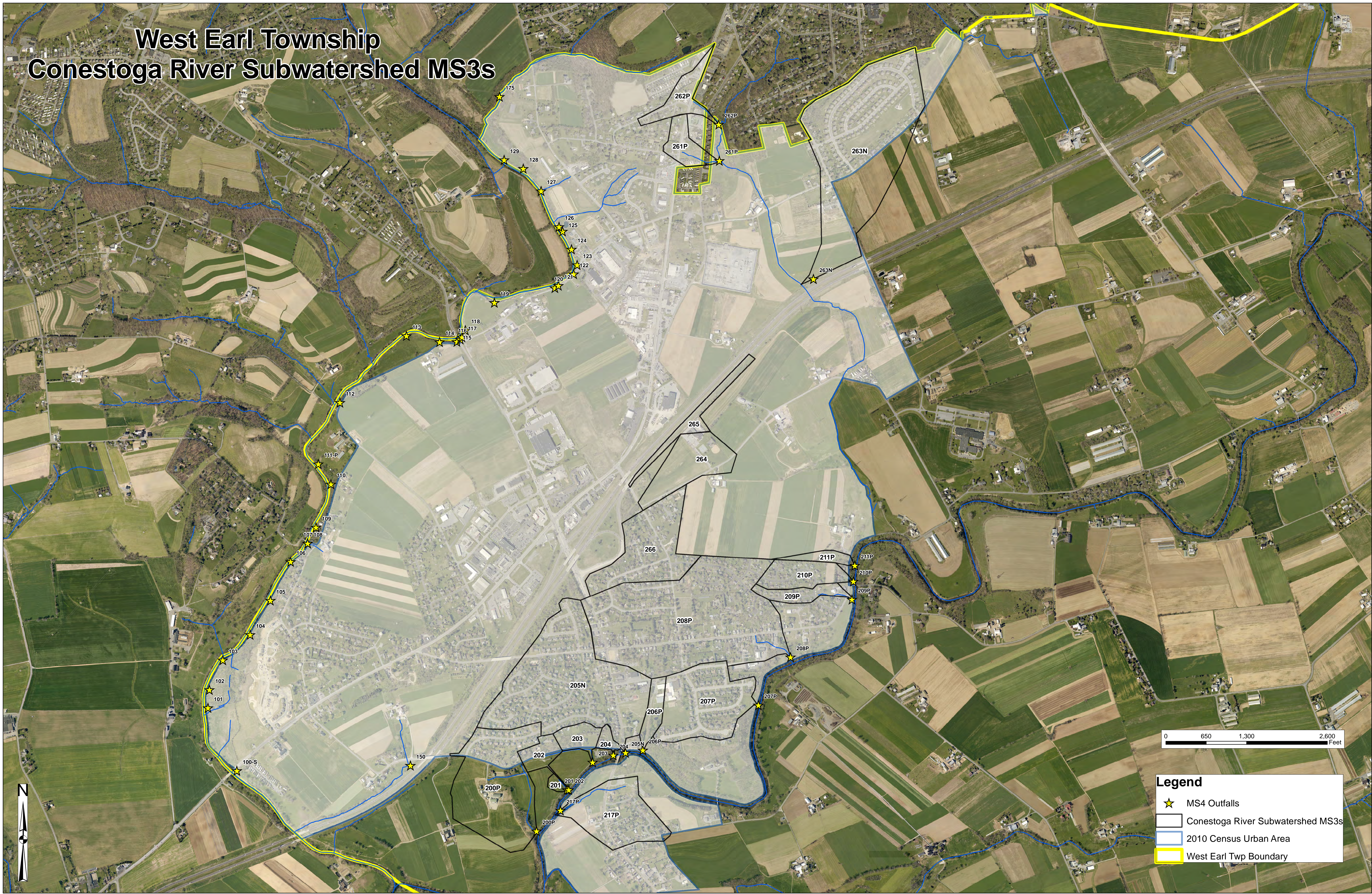
Sampling during both baseflow (dry weather) and wet weather (storm) events is important to understanding local water quality and how a municipality's MS4 infrastructure and streams respond to stormwater. Therefore, results from the June 16, 2020 sampling provide only background information and further investigations are needed to evaluate suspected sources of pathogens and also to understand water quality conditions in West Earl Township as part of the Discharge Monitoring Program. Nonetheless, one key from the June 16, 2020 sample is:

- Fecal coliform along the mainstem of the Conestoga River was higher entering the Township than leaving the Township at the downstream end, thus suggesting that Township's Urban Area is not contributing to the impairments from pathogens in the Conestoga River.

Targets for 2020-2021:

- Continue water quality sampling and field investigations of suspected sources of pathogens within the Conestoga River watershed. The results of these investigations shall be submitted to DEP with an Annual Report by September 30, 2022, in accordance with Appendix B requirements from the MS4 Permit.
- As identified in West Earl Township's SWMP Goal, pathogens investigations along the Cocalico Creek and Groff Creek are targeted after the investigations for the Conestoga River have been addressed in accordance with the MS4 Permit requirements.

West Earl Township Conestoga River Subwatershed MS3s



Legend

- ★ MS4 Outfalls
- Conestoga River Subwatershed MS3s
- 2010 Census Urban Area
- West Earl Twp Boundary

OUTFALL/MS3 INVENTORY

	MS3 ID	MS3 Name	Sub-MS3		Sub-MS3	OUTFALL #	OUTFALL DESCRIPTION							PRIORITY AREA CLASSIFICATION	GEOGRAPHIC REFERENCE	Potential Pollutant Source Inventory	Source Inventory	SWMP GOAL		OTHER NOTES
			Yes	No			Location	Material	Shape	Dims	Other	Lat	Long					YES	NO	
Conestoga River	200P	200P				200P	Stone Quarry Road Park	Swale	Earthen			40.1173	-76.2184			Agricultural pollutants, Lawn fertilizers, Sediment, Road Salt				Private Outfall
	201	201				201	Stone Quarry Road Park	Swale	Earthen			40.1191	-76.2166			Agricultural pollutants				Municipal Outfall
	202	202				202	Sylvan B Fisher Park	Pipe				40.1191	-76.2165	Yes		Agricultural pollutants, Lawn fertilizers, Sediment, Road Salt, pipe re-growth				Municipal Outfall
	203	203				203	Stone Quarry Road Park	Pipe				40.1203	-76.2151			Lawn Fertilizers, sediment, Road Salt, pipe re-growth				Municipal Outfall
	204	204				204	West Side of SR 772 at Stone Quarry Rd	Pipe				40.1206	-76.2139			Lawn Fertilizers, sediment, Road Salt, pipe re-growth				Municipal Outfall
	205N	205N				205N	East Side of SR 772 at Stone Quarry Rd	Pipe				40.1207	-76.2132			Lawn fertilizers, Sediment, Road salt, grease, Pipe Re-growth				PennDOT outfall
	206P	206P				206P	Behind Property at 149 S State Street	Swale	Earthen			40.1208	-76.2122			Grease, Lawn fertilizers, sediment, Road salt				Private Outfall
	207P	207P				207P	Briarhill/Cornerstone-Rear of property at 147 Cornerstone Way	Swale	Earthen			40.1227	-76.2055			Lawn fertilizers, Road Salt, sediment, grease				Private Outfall
	208P	208P				208P	Drainage swale behind School Lane Ave	Swale	Earthen			40.1246	-76.2035			Lawn fertilizers, Road Salt, sediment, grease				Private Outfall
	209P	209P				209P	Located across East Main Street Near intersection of Buchland Rd	Swale	Earthen			40.1273	-76.2			Lawn fertilizers, Road Salt, sediment, pipe re-growth				Private Outfall
	210P	210P				210P	Located North of Farmersville Rd and E Main Street Intersection	Pipe				40.1281	-76.1999			Lawn Fertilizers, Road Salt, Sediment, pipe re-growth, agricultural pollutants				Private Outfall
	211P	211P				211P	Located behind property at 111 Turtle Hill Rd	Swale				40.1288	-76.1998			Lawn fertilizers, road salt, sediment, agricultural pollutants				Private Outfall
	217P	217P				217P	Swale from Farm/pond at 224 S State Street	Swale	channel			40.1182	-76.217			Lawn Fertilizers, Road salt, sediment, agricultural pollutants				Private Outfall
UNT to Conestoga River - 57462059	262P	262P				262P	Located behind property at 463 S 9th Street	Swale	Channel			40.1484	-76.2072			Lawn Fertilizers, Road Salt, Sediment, Oils/Fuels				Private Outfall
	261P	261P				261P	Channel Located on the North side of property at 141 Tobacco Rd	Swale	Channel			40.1468	-76.2072			Lawn Fertilizers, Road Salt, Sediment, Oils/fuels				Private Outfall

	MS3 ID	MS3 Name	Sub-MS3		Sub-MS3	OUTFALL #	OUTFALL DESCRIPTION							PRIORITY AREA CLASSIFICATION	GEOGRAPHIC REFERENCE	Potential Pollutant Source Inventory	Source Inventory	SWMP GOAL		OTHER NOTES
			Yes	No			Location	Material	Shape	Dims	Other	Lat	Long					YES	NO	
UNT to Conestoga River - 57462059	263N	263N				263N	Located at far south west corner of farm at 275 Pool Rd	Swale	Earthen			40.1415	-76.2019			Road Salt, Lawn Fertilizers, Sediment, agricultural pollutants				PennDOT Outfall

ATTACHMENT: PRP-related Information

West Earl Township submitted the West Earl Township Pollutant Reduction Plan for Appendix D and Appendix E pollutants in September 2017. The Township received permit and PRP approval on June 22, 2018. The June 22, 2018 letter from DEP indicated that the PRP was approved, but that there were issues with the planning area that must be evaluated during the permit term. In 2019, the planning areas were revised and load reduction requirements were increased. These revisions were reviewed and approved by DEP in July 2019. With the revised planning areas, West Earl's total sediment reduction requirement is 92,353 pounds per year.

PRP Progress from 2019-2020 Reporting Year

BMP Implementation – Hoover Property Streambank Restoration

BMP #PRP8 (West Metzler Road Channel Stabilization) was designed as the Hoover Property Streambank Restoration in accordance with Chapter 105 requirements. The Hoover Property Streambank Restoration is a 1,250 Linear Foot streambank restoration project. DEP's BMP Effectiveness Values (44.88 lbs/ft/yr) were used to calculate the sediment reduction total of 56,100 pounds for the implementation of the project at the Hoover Property.

Construction of the Hoover Property Streambank Restoration project initiated in July 2019 and was completed in October 2019 in accordance with the permitted design. Post construction monitoring and maintenance is being completed in accordance with the design plans.



June 2020 – Hoover Project - Post construction monitoring inspection

As the Hoover Project has been implemented with 56,100 pounds of sediment reduction per year, the implementation of additional proposed stormwater BMP(s) will be necessary to achieve the remaining 36,253 pounds of required reduction.

Opportunity to Extend the Streambank Restoration

West Earl completed preliminary outreach with landowners (Brubaker and King) along the tributary directly downstream from the Hoover Project to determine their interest in extending the streambank restoration onto their properties. Both landowners are interested in working with West Earl on a restoration project. The extended streambank restoration could be over 1,000 linear feet. If implemented, this restoration project is expected to achieve the Township's remaining sediment reduction requirements for the permit term.

The Township applied for the Chesapeake Bay Stewardship Fund's Small Watershed Grant through the National Fish and Wildlife Foundation (NFWF) to fund the design and construction of this restoration project along the Brubaker and King properties.

PENNDOT PRP Opportunities in West Earl Township

West Earl Township has held preliminary meetings and site visits with PENNDOT and the U.S. Army Corps of Engineers to evaluate other potential stream restoration projects within the Township that could potentially be completed as a collaborative effort.

PRP Goals for 2020-2021

Pending funding from the NFWF grant, or from other sources, West Earl Township aims to move forward with the design and permitting of the extended streambank restoration project along the Brubaker and King properties located downstream from the Hoover Project.

Additional restoration opportunities, including collaborative opportunities with PENNDOT and U.S. Army Corps of Engineers, may also be evaluated to meet the Township's remaining 36,253 pounds of reduction needed to meet the PRP requirements during this permit cycle.

ATTACHMENT - West Earl Township SWMP Development

During the 1st and 2nd Quarters of 2020, West Earl Township worked with LandStudies Inc. to develop a robust Stormwater Management Program (SWMP) to address the United States Environmental Protection Agency (USEPA) requirements for an MS4 permittee to outline rationale, decision processes, measurable goals, performance & assessment criteria, and a facilitation schedule in a combined fashion.

The SWMP provides the purpose and rationale behind West Earl's program while appropriately documenting the necessary processes that are expected to be described to demonstrate compliance to preserve and adhere to the primary requirements of the MS4 Permit:

- *The operator must, at a minimum, develop, implement, and enforce a SWMP designed to reduce the discharge of pollutants from the MS4:*
 - *to the maximum extent practicable (MEP),*
 - *to protect water quality, and*
 - *to satisfy the appropriate water quality requirements of the Clean Water Act (designated uses, water quality criteria, and anti-degradation policy) [40 CFR 122.34(a)].*

The SWMP document ties the entire program together (Minimum Control Measures (MCMs), Impaired Waters Plan, monitoring, goals, etc.). West Earl Township had written Minimum Control Measures (MCMs) plans for all six MCMs prior the 2020 SWMP Development efforts, but these plans were expanded upon and targeted goals were incorporated into each MCM plan to correspond to the Township's overarching SWMP goals.

The overall objective of this SWMP is to protect receiving stream water quality (WQ) by reducing the discharge of pollutants from the township's MS4 to the maximum extent practicable (MEP). This is done through the implementation of SWMP elements (e.g. Minimum Control Measures or MCMs). The Township can meet the MCMs by implementing the best management practices (BMPs) outlined within the SWMP. The SWMP also includes an implementation schedule and roles and responsibilities for implementation, and overarching goals designed to achieve West Earl Township's MS4 permit requirements. These overarching goals, considered to be the guiding objectives to facilitate the SWMP, include both qualitative and quantitative goals.

Below is a summary of the initial goals with supporting rationale that have been established as the basis of West Earl's SWMP. These goals and the targeted timelines for implementation were developed by the Township during the 2nd Quarter 2020. The Township's targeted timelines are internal dates established to assist the Township in overall SWMP progress, and are not specific regulatory deadlines. The Township will track progress towards achieving these goals and update timelines accordingly as part of the annual SWMP review process.

Overarching SWMP Goals:

- **Quantitative Goal: Implement proposed stormwater BMP(s) to achieve the Township's 10% sediment reduction requirement (92,353 lbs.), as identified in the West Earl Township Pollutant Reduction Plan.**
 - **Target goal date:** January 2022
 - **Roles and Responsibilities:** Program Manager (primary), MS4 Committee (support)

- **Rationale:** Pollutant reduction is a critical aspect of the MS4 permit and more specifically, the Impaired Waters Plan and the CBPRP and PRP. The Hoover Streambank Restoration project was completed in Fall 2019 and it achieves 56,100 pounds of sediment reduction per year. The implementation of additional proposed stormwater BMP(s) will be necessary to achieve the remaining 36,253 pounds of required reduction. NOTE: See the Attachment – PRP Related information for more details on the PRP.

- **Qualitative Goal: As part of the Discharge Monitoring Program development, complete the Municipal Separate Storm Sewershed (MS3) delineations initiated under the SWMP development process described in Section 300-4, corresponding initial discharge characterizations of each MS3/Outfall, and system Map updates/re-coding.**
 - **Target goal date:** June 2021
 - **Roles and Responsibilities:** Code Enforcement Officer and MS4 Consultant (primary), MS4 Committee (support)
 - **Rationale:** Delineation of MS3s and initial discharge characterization of MS3 to identify priority MS3s, outfalls, and focus areas to develop a Discharge Monitoring Program to ensure that discharges from regulated MS4 outfalls are not causing and/or contributing to instream exceedances.

- **Qualitative Goal: Expansion of the SWMP element plans for Minimum Control Measures (MCMs) including the PEO (MCM #1), PIPP (MCM #2), IDD&E Plan (MCM #3), Construction Site Runoff Control Plan (MCM #4), PCSM Plan (MCM #5), and O&M Plan (MCM #6).**
 - **Target goal date:** June 2020
 - **Roles and Responsibilities:** Program Manager (primary) and MS4 Consultant
 - **Rationale:** The element plans are necessary components of the SMWP document to facilitate the program based on one of the two programmatic objectives (pollution prevention and/or pollution reduction). The MCM Plans primarily outline the Township's approach for non-structural BMP implementation. Additionally, established plans based on the USEPA "Protocol" not only provides a level of compliant documentation required, but also provides the platform for a coherent and rational program that can be more readily coordinated across elements and township departments.

- **Qualitative Goal: Enforce and improve required operations and maintenance of both privately-owned and publicly-owned Post-Construction Stormwater Management facilities and BMPs with the intent to reduce the long-term use of Township resources to conduct field investigations and inspections.**
 - **Target goal date:** December 2022
 - **Roles and Responsibilities:** Program Manager (primary)
 - **Rationale:** Ensuring functionality and performance of PCSM facilities and BMPs is not only a listed permit requirement, but is also important for helping reduce the potential for polluted discharges due to the facilities and BMPs generally providing a water quality improvement function.

- **Qualitative Goal: Complete the development of the Pathogens PCM (Pollutant Control Measures) PRP required for the Conestoga River, Cocalico Creek, and Groff Creek Watersheds.**
 - **Target goal date:** September 2021
 - **Roles and Responsibilities:** Program Manager (primary) and MS4 Consultant

- **Rationale:** This plan is considered a sub-plan of the overall Impaired Waters Plan. The purpose of the plan is to provide quality control of processes, inventory of investigations, and a summary of resulting actions and Best Management Practices (BMPs) to control sources of pathogens and eliminate or reduce sources of pathogens in accordance with EPA requirements for impaired waters. NOTE: See the Attachment – Pathogens PCM Related Information for more details on the development of the Pathogens PCM PRP for the Township’s waterways.
- **Qualitative Goal: Update West Earl Township’s Stormwater Management Ordinance to be consistent with the requirements of DEP’s 2022 Model Stormwater Management Ordinance.**
 - **Target goal date:** June 2021
 - **Roles and Responsibilities:** Program Manager (primary)
 - **Rationale:** Per MCM 3, BMP #5 of the 2018 MS4 Permit, West Earl Township must update the existing 2013 Stormwater Ordinance to be consistent with DEP’s 2022 Model Stormwater Management Ordinance. The updated model is due by September 30, 2022.

Structural BMP	Site Address	Latitude & Longitude	Drainage Area	Year Installed/ LCCD Prmt Issue Date	Within 2010 Urbanized Area (y/n)	Name of Receiving Water Body	Inspection/ Maintenance Frequency	Responsible Person or Organization	NPDES Permit
REID WISSLER SUBDIVISION	Rosewood Drive, Brownstown, PA 17508	0	0	2003	Y		Owner O&M	Private Property Owner	PAG2003603009
PLEASANT VALLEY MENNONITE SCHOOL	144 Pleasant Valley Road, Ephrata, PA 17522	40° 9' 40.3", -76° 9' 18.2"	5.43	2003	Y	Conestoga River	Owner O&M	Private Property Owner	PAG2003603010
EAGLEVIEW ESTATES (FORMERLY TOBACCO ROAD PHASE 1) REV.	Eagle Drive, Ephrata, PA 17522	40° 8' 50.7", -76° 11' 57"	71.87	2003	Y	Conestoga River	Owner O&M	Private Property Owner	PAR100303?R
JOHN M STOLTZFUS			0	2003			Owner O&M	Private Property Owner	PAG2003603065
LEOLA PRODUCE AUCTION	135 Brethren Church Road, Leola, PA 17540	40° 6' 7.2", -76° 10' 12.6"	0	2004	N	Groff Creek	Owner O&M	Private Property Owner	PAG2003604028
FAIRMOUNT HOMES - EAST CAMPUS	333 Wheat Ridge Drive, Ephrata, PA 17522	40° 8' 0.6", -76° 8' 46"	0	2004	N	Conestoga River	Owner O&M	Private Property Owner	PAG2003604027
CLOVERBROOK	Burkholder Drive, Ephrata, PA 17522	40° 8' 19.3", -76° 13' 16. "	30.91	2004	Y	Cocalico Creek	Owner O&M	Private Property Owner	PAG2003604034
ANGLESEA (WENGER PROPERTY)	281 Orchard View Drive Leola, PA 17540	40° 6' 1.2", -76° 9' 36.2"	54.858	2004	Y	Groff Creek	Owner O&M	Private Property Owner	PAG2003604037
MILLWAY ACRES COMMERCIAL SUBD	Gregory Court, Akron, PA 17501	40° 8' 41.9", -76° 12' 48"	13.27	2004	Y	Cocalico Creek	Owner O&M	Private Property Owner	PAG2003604089
VICTOR S MARTIN			0	2004	Y		Owner O&M	Private Property Owner	PAG2003604115
CLEVELAND BROTHERS - Basin A	4326 Oregon Pike, Ephrata, PA 17522	40° 8' 3.9", -76° 12' 43.4"	0	2005	Y	Cocalico Creek	Owner O&M	Private Property Owner	PAG2003605036
CLEVELAND BROTHERS - Basin B	4327 Oregon Pike, Ephrata, PA 17522	40° 8' 10", -76° 12' 34.4"	0	2005	Y	Cocalico Creek	Owner O&M	Private Property Owner	
DS WATERS - Basin A1	1761 Newport Road, Ephrata, PA 17522	40° 8' 3.9", -76° 13' 6.7"	1.48	2005	Y	Cocalico Creek	Owner O&M	Private Property Owner	PAG2003605101
DS WATERS - Basin A2	1761 Newport Road, Ephrata, PA 17522	40° 8' 7.8", -76° 13' 7.9"	1.55	2005	Y	Cocalico Creek	Owner O&M	Private Property Owner	
SONIC DRIVE-IN	4247 Oregon Pike, Ephrata, PA 17522	40° 8' 0.6", -76° 12' 56.6"	0	2005	Y	Cocalico Creek	Owner O&M	Private Property Owner	PAG2003605094
BROWNSTOWN COMMONS	Barrett Boulevard, Ephrata, PA 17522	40°07'43.5"N 76°13'08.9"W	5.97	2006	Y	Cocalico Creek	Owner O&M	Private Property Owner	PAG2003606013
ESTHER HOOVER SUBDIVISION			0	2006			Owner O&M	Private Property Owner	PAG2003606067
FRANK H HOOVER			0	2006			Owner O&M	Private Property Owner	PAG2003606054
JOHN J SHEAFFER II			0	2006			Owner O&M	Private Property Owner	PAG2003606094
LLOYD F WEAVER POULTRY OPERATION	395 S Farmersville Road, Ephrata, PA 17522	40° 7' 6.3", -76° 9' 32.8"	0	2007	N	Groff Creek	Owner O&M	Private Property Owner	PAG2003607060
LLOYD F WEAVER POULTRY OPERATION	395 S Farmersville Road, Ephrata, PA 17522	40° 7' 6.8", -76° 9' 34.9"	0	2017	N	Groff Creek	Owner O&M	Private Property Owner	
WARREN H NOLT			0	2009			Owner O&M	Private Property Owner	PAG2003608088
LCCTC BROWNSTOWN CAMPUS - Infiltration & Extended Detention Basin	231 Snyder Road Ephrata, PA 17522	40° 8' 1.2", -76° 11' 24.9"	5.43	2012	N	Conestoga River	Owner O&M	Private Property Owner	PAG02003612026
CREEK HILL - Extended Detention-Constructed Wetland Basin	Oregon Pike, Leola, PA 17540	40° 7' 21.7", -76° 14' 5.8"	18.5	2017	Y	Cocalico Creek	Owner O&M	Private Property Owner	
MIKE GROSS - DIAMOND STATION RD - Infiltration Basin	1651 Diamond Station Road, Ephrata, PA 17522	40° 9' 12.3", -76° 10' 10"	2.59	2015	N	Conestoga River	Owner O&M	Private Property Owner	
LAMAR WEAVER SUBDIVISION - Infiltration & Extended Detention Basin		40° 6' 41.8", -76° 8' 22.4"	0.775	2015	N	Conestoga River	Owner O&M	Private Property Owner	
ELI LANTZ - Cistern	223 Stone Quarry Road, Leola, PA 17540	40° 7' 11.2", -76° 13' 38"	0.055	2015	Y	Cocalico Creek	Owner O&M	Private Property Owner	
EARL MARTIN - Infiltration & Extended Detention Basin	123 Willis Pierce Road Ephrata, PA 17522	40° 8' 51.9", -76° 9' 4.9"	2.96	2015	N	Conestoga River	Owner O&M	Private Property Owner	
DAVID LAPP - Infiltration & Extended Detention Basin	182 Cider Mill Rd Ephrata, PA 17522	40° 8' 27.1", -76° 9' 11.1"	0	2016	N	Conestoga River	Owner O&M	Private Property Owner	

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FAIRMOUNT HOMES - COUNTRY VIEW DR - Infiltration & Extended Detention Basin	333 Wheat Ridge Drive Ephrata, PA 17522	40° 7' 54.6", -76° 8' 49.9"	0	2016	N	Groff Creek	Owner O&M	Private Property Owner	PAG02003615035
TIM WEIST - Infiltration Bed	7 Stauffer Lane, Ephrata, PA 17522	40° 9' 41.1", -76° 9' 25.7"	0.1148	2016	Y	Conestoga River	Owner O&M	Private Property Owner	
SENSENIQ REPAIR - Infiltration Bed & Cistern	210 E Farmersville Road Ephrata, PA 17522	40° 7' 52.7", -76° 8' 56.6"	0.19	2016	N	Groff Creek	Owner O&M	Private Property Owner	NA
WILMER HOOVER - Cistern	300 N Farmersville Road Ephrata, PA 17522	40° 8' 24", -76° 10' 36.5"	0.23	2016	N	Conestoga River	Owner O&M	Private Property Owner	NA
BUCH POULTRY BARN - Infiltration & Extended Detention Basin	20 Buch Rd Ephrata, PA 17522	40° 8' 47.3", -76° 11' 32.8"	0	2016	N	Conestoga River	Owner O&M	Private Property Owner	PAG02003615137
ELAM HORNING POULTRY BARN - Infiltration & Extended Detention Basin 1	175 S Farmersville Road Leola, PA	40° 6' 0.6", -76° 9' 5.6"	0.94	2016	N	Groff Creek	Owner O&M	Private Property Owner	PAG02003616004
ELAM HORNING POULTRY BARN - Infiltration & Extended Detention Basin 2	175 S Farmersville Road Leola, PA	40° 5' 58.7", -76° 9' 4.1"	1.02	2016	N	Groff Creek	Owner O&M	Private Property Owner	PAG02003616004
JAMES ZIMMERMAN - Infiltration Bed	84 Hickory Lane Ephrata, PA 17522	40° 9' 20.3", -76° 8' 33.8"	0.07	2016	N	Conestoga River	Owner O&M	Private Property Owner	NA
MILLER/GRUBE - Infiltration Bed - Front Yard (Proj name - Grube)	426 Millway Road Ephrata, PA 17522	40° 8' 59", -76° 13' 2.9"	0.07	2016	Y	Cocalico Creek	Owner O&M	Private Property Owner	NA
MILLER/GRUBE - Infiltration Bed - Back Yard (Proj name - Grube)	426 Millway Road Ephrata, PA 17522	40° 8' 58.9", -76° 13' 2.3"	0.05	2016	Y	Cocalico Creek	Owner O&M	Private Property Owner	NA
LANCASTER HOME BLDRS-Mary Ann CAPIZZI - Infiltration Bed	165 Chapel Lane Ephrata, PA 17522	40° 7' 18.7", -76° 12' 26.7"	0.08	2016	Y	Conestoga River	Owner O&M	Private Property Owner	NA
SCHOOL LANE FARMS - Extended Detention Basin	147 Cornerstone Way Ephrata, PA 17522	40° 7' 22.8", -76° 12' 22.1"	0	Pre 2003	Y	Conestoga River	Owner O&M	Private Property Owner	
EMM Sales - Infiltration Bed	141 Zooks Mill Road Brownstown, PA 17508	40°07'54.7"N 76°13'18.0"W	0.07	2016	Y	Cocalico Creek	Owner O&M	Private Property Owner	NA
JOHN STOLTZFUS - Infiltration Bed	55 Brick Church Road Leola, PA	40°06'15.0"N 76°08'44.1"W	0	2016	N	Groff Creek	Owner O&M	Private Property Owner	NA
AARON ZIMMERMAN SUBDIV - Infiltration Bed	335 N Maple Avenue Leola, PA	40°07'01.9"N 76°11'18.0"W	0	2017	N	Groff Creek	Owner O&M	Private Property Owner	NA
JOHN LEID - Infiltration & Extended Detention Basin	356 Turtle Hill Road Ephrata, PA 17522	40°07'57.6"N 76°10'54.0"W	0	2017	N	Conestoga River	Owner O&M	Private Property Owner	PAC360071
MARTIN APPLICANCE - Infiltration Bed	4216 Oregon Pike Ephrata, PA 17522	40°07'53.1"N 76°12'56.3"W	1.35	2017	Y	Cocalico Creek	Owner O&M	Private Property Owner	NA
JERRE MARTIN - Infiltration Bed	391 N Farmersville Road Ephrata, PA 17522	40°08'38.3"N 76°10'58.9"W	0.58	2017	N	Conestoga River	Owner O&M	Private Property Owner	NA
ISAAC NOLT - Infiltration Bed	339 N Maple Ave Leola, PA 17540	40°06'50.9"N 76°11'12.4"W	0.47	2018	N	Groff Creek	Owner O&M	Private Property Owner	NA
EARL SHIRK - Infiltration Bed	1155 Short Road Holland, PA 17557	40°05'39.1"N 76°08'11.5"W	0.1	2018	N	Groff Creek	Owner O&M	Private Property Owner	NA
FAIRMOUNT HOMES - Infiltration & Extended Detention Basin A	333 Wheat Ridge Drive Ephrata, PA 17522	40°07'54.8"N 76°08'56.6"W	8.66	2019	N	Groff Creek	Owner O&M	Private Property Owner	NA
FAIRMOUNT HOMES - Extended Detention Basin B	333 Wheat Ridge Drive Ephrata, PA 17522	40°07'56.0"N 76°09'08.4"W	3.16	Pre 2003	N	Conestoga River	Owner O&M	Private Property Owner	NA
FAIRMOUNT HOMES - Infiltration & Extended Detention Basin C	333 Wheat Ridge Drive Ephrata, PA 17522	40°07'57.5"N 76°09'05.7"W	1.38	2019	N	Conestoga River	Owner O&M	Private Property Owner	NA
NATHAN MARTIN - Infiltration Bed	422 Millway Road Ephrata, PA 17522	40°09'00.2"N 76°13'02.2"W	0.36	2018	N	Cocalico Creek	Owner O&M	Private Property Owner	NA
BROWNSTOWN COMMONS - Lots 4&5 - Extended Detention Basins	4150 Barrett Blvd Ephrata, PA 17522	40.128882, -76.218212	1.33	Under Construction	Y	Cocalico Creek	Owner O&M	Private Property Owner	PAC360332
BROWNSTOWN COMMONS - Lots 2 - Extended Detention Basins	4145 Barrett Blvd Ephrata, PA 17522	40.128808, -76.219364	0.38	2009	Y	Cocalico Creek	Owner O&M	Private Property Owner	

BROWNSTOWN ELEMENTARY SCHOOL - Extended Detention Basins	51 School Lane Brownstown, PA 17508	40.122188, -76.211326		Under Construction	Y	Conestoga River	Owner O&M	Private Property Owner	PAC360387
INDUSTRIAL ROAD - Extended Detention Basin	13 Industrial Road Ephrata, PA	40.131581, -76.220291			Y	Cocalico Creek	Owner O&M	Private Property Owner	
CALUMENT ENTERPRISES - Extended Detention Basin	171 Butter Road Leola, PA	40.097068, -76.147864	0.41	Pre 2003	N	Conestoga River	Owner O&M	Private Property Owner	
TODD & SHANNON CESSNA	540 Millway Road Ephrata, PA 17522	40.144977, -76.213548		2006	Y	Cocalico Creek	Owner O&M	Private Property Owner	
CALEB STRAUSSER - Infiltration basin	160 Wissler Road, New Holland, PA 17517	40°06'51"N, 76°12'51"W	1.13	Under Construction	N	Groff Creek	Owner O&M	Private Property Owner	
TEAM RAHAL OF MECHANICSBURG - Bioretention Basins 1, 2 & 3	4251 Oregon Pike, Ephrata, PA 17522	40°08'00.54"N, 76°12'52"W		Under Construction	Y	Cocalico Creek	Owner O&M	Private Property Owner	
MARLEE PROPERTIES - Detention Basins A1 & B1	400 Burkholder Drive, Ephrata, PA 17522	40°08'6.5"N, 76°12'51"W		Under Construction	Y	Cocalico Creek	Owner O&M	Private Property Owner	
MARLEE PROPERTIES - Infiltration Basins A & B	400 Burkholder Drive, Ephrata, PA 17522	40°08'6.5"N, 76°12'51"W		Under Construction	Y	Cocalico Creek	Owner O&M	Private Property Owner	
LAVERNE HOOVER - Infiltration Basin	670 E Metzler Road, Ephrata, PA 17522	40°08'32.01"N, 76°10'29.98"W	0.2	2018	N	Conestoga River	Owner O&M	Private Property Owner	
ELI S. BEILER - Infiltration basin	314 Brethren Church Road, Leola, PA 17540	40°06'37"N, 76°10'54"W		2020	N	Groff Creek	Owner O&M	Private Property Owner	NA
SMALL PROJECTS									
BEILERE PROPERTIES - Small Project	37 Meadow View Drive Leola, PA 17540	40°05'42"N,76°09'33"W	0.05	2017	Y	Groff Creek	Owner O&M	Private Property Owner	NA
JONATHAN MARTIN -Small Project	70 N Farmersville Rd Ephrata, PA 17522	40°07'47"N,76°10'13.4"W	0.09	2018	N	Conestoga River	Owner O&M	Private Property Owner	NA
MELVIN MARTIN - Small Project	230 South Fairmount Rd Ephrata, PA 17522	40°07'50.4"N,76°08'50"W	0.06	2017	N	Groff Creek	Owner O&M	Private Property Owner	NA
SOL KING - Small Project	91 Center Square Rd Leola,PA 17540	40°06'32.5"N,76°11'34"W	0.07	2017	N	Groff Creek	Owner O&M	Private Property Owner	NA
JOHN REIFF - Small Project	371 N Hershey Ave Leola, PA 17540	40°07'23.5"N,76°10'19"W	0.11	2017	N	Conestoga River	Owner O&M	Private Property Owner	NA
TODD NAVE - Small Project	11 N State Street Brownstown, PA 17508	40°07'33"N,76°12'50.94"W	0.03	2017	Y	Conestoga River	Owner O&M	Private Property Owner	NA
DARYL STOLTZFUS - Small Project (canceled)	240 South State St Talmage PA 17580	NA	0	Project canceled	Y	Groff Creek	Owner O&M	Private Property Owner	NA
MERVIN HORST - Small Project	431 Linden Grove Rd Ephrata, PA 17522	40°07'26.5"N,76°08'21.85"W	0.07	2018	N	Groff Creek	Owner O&M	Private Property Owner	NA
BILL SHUMATE - Small Project	241 E Main Street Brownstown, PA 17508	40°07'34"N,76°12'12"W	0.08	2018	Y	Conestoga River	Owner O&M	Private Property Owner	NA
AMOS ZIMMERMAN - Small Project	51 W Farmersville Rd Ephrata, PA 17522	40°07'35"N,76°10'11.73"W	0.03	2017	N	Conestoga River	Owner O&M	Private Property Owner	NA
J BURKHOLDER - Small Project	145 N Farmersville Rd Ephrata, PA 17522	40°07'58"N,76°10'21"W	0.03	2018	N	Conestoga River	Owner O&M	Private Property Owner	NA
EARL & MIRIAM HOOVER - Small Project	301 Saw Mill Road Ephrata, PA 17522	40°06'58.45"N,76°08'39.56"W	0.006	2018	N	Conestoga River	Owner O&M	Private Property Owner	NA
STEVIE ZOOK - Small Project	259 Conestoga Creek Rd Ephrata, PA 17522	40.144988, -76.148876	0.03	2018	N	Conestoga River	Owner O&M	Private Property Owner	NA
ALVIN KING - Small Project	157 Locust Street Leola, PA 17540	40.122187, -76.203536	0.06	2018	N	Conestoga River	Owner O&M	Private Property Owner	NA
MELVIN KING - Small Project	224 S. State Street Leola, PA 17540	40°07'04.95"N,76°12'57.24"W	0.02	2018	Y	Conestoga River	Owner O&M	Private Property Owner	NA
TYLER GARMAN - Small Project	48 N Church Street SW Ephrata, PA 17522	40°07'43.59"N,76°12'38.46"W	0.04	2018	Y	Conestoga River	Owner O&M	Private Property Owner	NA

ROY MARTIN - Small Project	92 Center Square Road Leola, PA 17540	40°06'14.73"N,76°11'07.18"W	0.007	2018	N	Groff Creek	Owner O&M	Private Property Owner	NA
CUSTOM HOME GROUP - Small Project	99 Rosewood Drive Brownstown, PA 17508	40°07'17.26"N,76°13'20.11"W	0.06	2018	Y	Conestoga River	Owner O&M	Private Property Owner	NA
FARMERSVILLE FIRE COMPANY - Small Project	74 E Farmersville Road Ephrata, PA	40°07'45.54"N,76°09'39.79"W	0.06	2019	Y	Groff Creek	Owner O&M	Private Property Owner	NA
VICTOR LEININGER - Small Project	122 W Metzler Road, Ephrata, PA 17522	40°07'55.64"N,76°12'35.52"W	0.11	2019	Y	Conestoga River	Owner O&M	Private Property Owner	NA
ALSON HORNING - Small Project (under construction)	334 S Farmersville Road Ephrata, PA 17522	40°06'54.44"N,76°09'27.14"W	0.2	under construction	N	Groff Creek	Owner O&M	Private Property Owner	NA
PAUL ZOOK - Small Project (under construction)	440 Peach Road, Ephrata, PA 17522	40°09'03.87"N,76°09'43.58"W	0.09	under construction	N	Conestoga River	Owner O&M	Private Property Owner	NA
DELMAS FOX - Small Project (under construction)	771 E. Metzler Road, Ephrata, PA 17522	40°08'45.04"N,76°10'10.59"W	0.05	under construction	N	Conestoga River	Owner O&M	Private Property Owner	NA
HARVEY OBERHOLTZER - Small Project (under construction)	394 N. Maple Avenue, Leola, PA 17540	40°07'14.11"N,76°11'40.24"W	0.03	under construction	N	Conestoga River	Owner O&M	Private Property Owner	NA
MICHAEL ZOOK - Small Project (canceled)	262 Cat's Back Road, Ephrata, PA 17522	NA	0	Project canceled	NA	NA	NA	NA	NA
SAM'S AUTO/SAM OVALLE - Small Project	344 S. 7th Street, Akron, PA 17501	40°08'59.66"N,76°12'31.93"W	0.12	under construction	Y	Cocalico Creek	Owner O&M	Private Property Owner	NA