



ANNUAL MUNICIPAL SEPARATE STORM SEWER SYSTEM (MS4) STATUS REPORT

FOR THE PERIOD JULY 1, 2021 TO JUNE 30, 2022

GENERAL INFORMATION					
Permittee Name:	WEST EARL TOWNSHIP	NPDES Permit No.:	PA133535		
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): N/A					
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 & Brian Brandt	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.

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: 8/8/2022 Were updates made? ☐ Yes ☒ No

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

Continue PRP BMP implementation; Provide information to the public on upcoming Notice of Intent and the Pollutant Reduction Plan revisions associated with the 2023 permit cycle. Provide outreach related to pathogen PCM requirements. Continue including MS4 related articles in newsletters, on the Township website and special mailings to the Target Audience Group. Develop/generate O&M verification forms based on facility/BMP types to send to owners of PCSM facilities and BMPs. Develop educational outreach materials to support the Pathogens Pollutant Control Measures (PCMs) requirements.

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:

Provide general PCSM requirements handout/pamphlet for all existing and new PCSM facility/BMP owners as an attachment to the O&M verification forms. Provide BMP education information to HOAs and meet individually (or in small groups) with them at least once to communicate requirements and reinforce education information provided to them. Continue education and outreach related to the Township's PRP requirements. Target at least one specific audience group from the TAG list for a special mailing on Pathogens Pollutant Control Measures.

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: 8/8/2022 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: 9/1/2021

Were updates made?

☒ Yes ☐ No

3. Do you have a municipal website? ☒ Yes ☐ No (URL:
www.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. 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 websites such as the Lancaster County Conservation District, Lancaster Clean Water Consortium, Chesapeake Stormwater Network and the Chesapeake Bay Program-Take Action! site. Fact Sheets such as "Pathogens and our Waterways", "Maintaining your BMPs", and "Landscaping Maintenance" provided by LandStudies. Link to the Conestoga River Club.

4. Describe any other method(s) used during the reporting period to provide information on stormwater to the public:
Township newsletters, pamphlets, fact sheets and brochures in the Municipal building lobby and Facebook posts. Developed O&M verification forms and introductory letters for BMP landowners. MS4 Fact Sheet fliers provided at National Night Out in August 2022 and same fliers added to Municipal building lobby.
5. Identify specific plans for the publication of stormwater materials for the upcoming year:
Plans for the upcoming year include continuing to post new links on the website to relevant stormwater websites, brochures and fliers. Include MS4 articles in the Township newsletters and on Facebook. Include MS4 related fact sheets with all building and zoning permits that are issued. Develop a news article for the Township's website (and/or newsletter) related to the completion of the Turtle Hill Stream Restoration Project.

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).

The Township received a PA Clean Water Grant for a streambank restoration project. The grant announcement was published on the Township website and on Facebook. The grant and the streambank restoration project was also discussed at several public meetings during the reporting period. BMP maintenance fact sheets were distributed with the small stormwater project plans.

MCM #1 Comments:

O&M verification forms and introductory letters for BMP landowners were developed during the 2021/2022 reporting period and Township staff did initial inspections of privately owned BMPs. BMP landowner participation is targeted for 2nd QTR 2023.

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: 8/8/2022 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:

West Earl Township's Stormwater Ordinance was amended to be compliant with DEP's 2022 model stormwater ordinance. The changes were advertised in the Ephrata Review on August 10, 2022 to be reviewed and adopted at the August 22, 2022 Board of Supervisors meeting or within 60 days of that date. There were no comments on the proposed amendments from the public. The Ordinance was approved and adopted at the September 12, 2022 Board of Supervisors meeting. Proof of publication and the Ordinance will be attached to this report.

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
Chapter 149 Stormwater Ordinance (amended via Ordinance #263 to comply with 2022 DEP model stormwater ordinance)	8/10/2022	8/22/2022	9/12/2022

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: 5/9/2022 & 5/23/2022

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.

Met with the Lancaster Farmland Trust and a local farmer to discuss ongoing stormwater drainage issues on his property, along with potential opportunities to implement agricultural BMPs and potential stream restoration opportunities along his property in an effort to address water quality issues along Groff Creek.

"Farmer Chat-n-Chew" meeting sponsored by the Cocalico Creek Watershed Association and TeamAg in association with Elizabeth, Penn, West Earl, and Ephrata Townships. Township staff gave a brief presentation on West Earl's PRP stream bank restoration projects at the beginning of the meeting to those in attendance.

The Township continues to hold MS4 Committee meetings which are open to the public. These meetings are quarterly and held to discuss action items relating to the MS4 program and updates on PRP projects.

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.

Township staff and LandStudies staff met with the 4 landowners in the area of the Turtle Hill Streambank Restoration project on multiple occasions to finalize details for the project.

Township staff worked with 8 small stormwater project applicants to discuss stormwater management and which BMPs would be the best fit for their construction projects.

MCM #2 Comments:

West Earl plans to partner with the Conestoga River Club for cleanups and water quality sampling along the Conestoga River.

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: 8/8/2022

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): 8/8/2022

3. Total No. of Outfalls in MS4: 53

Total No. of Outfalls Mapped: 53

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): 7/12/2022

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? 4
2. Indicate the percentage of all outfalls screened in the past five years. 64%
3. Indicate the percent of outfalls screened during the reporting period that revealed dry weather flows: 0%
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 12, 2022
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

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.

N/A

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? Illicit Discharge Detection & Elimination Refresher Training (video). Reviewed illicit discharge reporting form.

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:

Remaining outfalls targeted for inspection for 4th QTR 2022 or early 2023.

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: 2014 SWMO and subsequent 9/12/2022 Amendments

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:

BMP #3 - The Township's 2014 Stormwater Management Ordinance and the newly adopted 2022 Stormwater Management Ordinance amendments both require implementation and maintenance of E&S control BMPs.

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: 2014 SWMO and subsequent 9/12/2022 Amendments
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: 2014 SWMO
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 completed preliminary landowner outreach and baseline inspections on 8 PCSM BMPs during the 2nd QTR 2021. All but 1 PCSM BMP has been inspected during the permit cycle. The Township will initiate the landowner outreach during 1st and 2nd QTR 2023. Additionally, some PCSM BMPs inspected in 2019 noted issues and a follow-up inspection by the Township will be targeted for completion by the end of the 1st QTR 2023 along with the remaining BMP that has yet to be inspected. See attached SWMP Goal Summary for more details on the Township's PCSM BMP inspections and outreach.

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	See attached inventory			o 1 33	o 1 33			
2				o 1 33	o 1 33			
3				o 1 33	o 1 33			
4				o 1 33	o 1 33			
5				o 1 33	o 1 33			
6				o 1 33	o 1 33			
7				o 1 33	o 1 33			
8				o 1 33	o 1 33			
9				o 1 33	o 1 33			
10				o 1 33	o 1 33			
11				o 1 33	o 1 33			
12				o 1 33	o 1 33			
13				o 1 33	o 1 33			
14				o 1 33	o 1 33			
15				o 1 33	o 1 33			
16				o 1 33	o 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

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? 8/8/2022
3. When was it last updated? 8/8/2022

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: 8/8/2022

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: 8/8/2021 Date of latest training: 8/5/2022

3. Training topics covered:

1. September 1, 2021 - PA Clean Water Academy MCM1 (video series)
2. October 1, 2021 - PA Clean Water Academy MCM2 (video series)
3. November 5, 2021 - BMP Inspections training video by Land Studies
4. February 4, 2022 - Illicit Discharge Detection & Elimination Refresher Training (video)
5. March 4, 2022 - Stormwater Pollution Prevention: A Drop in the Bucket (video)
6. February 17, 2022 - Community Soil Conservation Planning & BMPs (Farmer Chat-n-Chew)
7. February 17, 2022 - Managing Crop Input Costs & Planning Ahead (Farmer Chat-n-Chew)
8. February 17, 2022 - Opportunities for Improvement - developing farm plans, adaptive nutrient management, Regenerative farming & grass systems (Farmer Chat-n-Chew).
9. February 17, 2022 - Smart Pesticide Use & Difficult to Control Weeds (Farmer Chat-n-Chew).
10. February 17, 2022 - Funding Opportunities for planning & BMP implementation (Farmer Chat-n-Chew).
11. July 19, 2022 - Zoning Ordinance...the First Stormwater Regulations & How Things Have Changed!
12. April 26, 2022 - Managing the Unmanageable: Cloudbursts & Catastrophic Floods
13. February 22, 2022 - Certified Stormwater Inspector - Re-Certification Training
14. July 21, 2021 - Retention Pond Maintenance and Inspections
15. September 22, 2021 - Proposed Federal CGP: How Does This Affect You?
16. October 20, 2021 - Pollutants of Concern and Best Management Practices
17. January 19, 2022 - Recreation Criteria
18. February 16, 2022 - Dealing with Bacteria Violations
19. March 16, 2022 - Proper SWPPP Content
20. April 20, 2022 - New Federal Construction Permit and its Impact on State Programs
21. May 12, 2022 - Townships, HOAs, and Stormwater BMPs

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

1. PA Clean Water Academy
2. PA Clean Water Academy
3. Land Studies
4. Water Atlas - Orange County, Florida
5. Mastery Training Services (<https://www.mastery.com/>)
6. John Williamson, TeamAG Inc.
7. Andrew Frankenfield, Penn State Extension
8. Jedd Moncavage-TeamAg Inc, Eric Rosenbaum-4R Alliance, Sue Ellen-TeamAg Inc.
9. Jeff Graybill, Penn State Extension
10. Jeremy Weaver, TeamAg Inc.
11. Benton G. Webber, PE - Lancaster Township Engineer
12. PSATS
13. National Stormwater Center CSI Network
14. National Stormwater Center CSI Network
15. National Stormwater Center CSI Network
16. National Stormwater Center CSI Network
17. National Stormwater Center CSI Network
18. National Stormwater Center CSI Network
19. National Stormwater Center CSI Network
20. National Stormwater Center CSI Network
21. PSATS webinar - Bob Flinchbaugh, PE, Senior Municipal Engineer

5. Names of training attendees:

1. Teresa Beever-Police Dept Admin. Assistant, Amy Carter-Financial Assistant, Jerry Howe-Roadcrew, Carl Jones-Parks Dept., John Enck-Water Dept., Sara Service-Zoning/Stormwater, Sherry Ditzler-Admin. Assistant, Jenna Seesholtz-Twp. Manager, Josh Mertz-Police Department, Ryan Blessing-Police Department.
2. Robert Buckwalter-Water Dept., Joe Kepple-Roadcrew, Amy Carter-Financial Assistant, Sherry Ditzler-Administrative Assistant, Jenna Seesholtz-Twp. Manager, John Enck-Water Dept., Neil Stoltzfus-Roadmaster, Teresa Beever-Police Dept. Admin. Assistant, Ryan Blessing-Police Department, Sara Service-Zoning/Stormwater
3. Sara Service-Zoning/Stormwater, Robert Buckwalter-Water Dept., John Enck-Water Dept., Amy Carter-Financial Assistant, Sherry Ditzler-Admin. Assistant, Dawn Ray-Police Department, Brian Brandt-Code Enforcement, Joe Kepple-Roadcrew, Kyle Stapleton-Roadcrew, Neil Stoltzfus-Roadmaster, Jenna Seesholtz-Twp. Manager.
4. Brian Brandt-Codes/Stormwater Inspector, Teresa Beever-Police Dept. Admin. Assistant, Jerry Howe-Roadcrew, Joe Kepple-Roadcrew, John Enck-Water Dept., Sherry Ditzler-Admin. Assistant, Amy Carter-Financial Assistant, Kyle Stapleton-Roadcrew, Robert Buckwalter-Water Dept., Neil Stoltzfus-Roadmaster, Jenna Seesholtz-Twp. Manager, Sara Service-Zoning/Stormwater.
5. Sara Service-Zoning/Stormwater, Robert Buckwalter-Water Dept., Joe Kepple-Roadcrew, John Enck-Water Dept., Eric Higgins-Police Chief, Brian Brandt-Codes/Stormwater Inspector, Sherry Ditzler-Admin. Assistant, Jenna Seesholtz-Twp. Manager, Neil Stoltzfus-Roadmaster.
6. Sara Service-Zoning/Stormwater Coordinator
7. Sara Service-Zoning/Stormwater Coordinator
8. Sara Service-Zoning/Stormwater Coordinator
9. Sara Service-Zoning/Stormwater Coordinator
10. Sara Service-Zoning/Stormwater Coordinator
11. Sara Service-Zoning/Stormwater Corrdinator
12. Brian Brandt-Codes/Stormwater Inspector, Sara Service-Zoning/Stormwater Coordinator
13. Sara Service-Zoning/Stormwater Coordinator
14. Brian Brandt-Codes/Stormwater Inspector
15. Brian Brandt-Codes/Stormwater Inspector
16. Brian Brandt-Codes/Stormwater Inspector
17. Brian Brandt-Codes/Stormwater Inspector
18. Brian Brandt-Codes/Stormwater Inspector
19. Brian Brandt-Codes/Stormwater Inspector
20. Brian Brandt-Codes/Stormwater Inspector
21. Sara Service-Zoning/Stormwater Coordinator

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)	6/24/2019	<input type="checkbox"/>	
Source Inventory	6/17/2020	<input type="checkbox"/>	
Investigation of Suspected Sources	4/7/2022	<input type="checkbox"/>	

Ordinance/SOP for Controlling Animal Wastes	9/12/2022	<input checked="" type="checkbox"/>	
---	-----------	-------------------------------------	--

PCM Comments:
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, Coclico 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			

☐ 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? ☒ 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.

Public participation was not required as part of the plan revisions made in 2019. PRP revisions were approved by DEP on July 30, 2019.

5. Summary of progress achieved during reporting period.

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 instruction, the PP 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)
	Turtle Hill Stream Restoration Project		95	1,535	LF	40°07'50"	76°11'53"	ongoing	<input type="checkbox"/>	<input type="checkbox"/>	69,964
						0 1 11	0 1 11		<input type="checkbox"/>	<input type="checkbox"/>	
						0 1 11	0 1 11		<input type="checkbox"/>	<input type="checkbox"/>	
						0 1 11	0 1 11		<input type="checkbox"/>	<input type="checkbox"/>	
						0 1 11	0 1 11		<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?
	Hoover Property Streambank Restoration			1,250	LF	40°08'08"	76°12'03"	10/30/2019	53,100	7/21/22	<input checked="" type="checkbox"/>
						0 1 11	0 1 11				<input type="checkbox"/>
						0 1 11	0 1 11				<input type="checkbox"/>
						0 1 11	0 1 11				<input type="checkbox"/>

						O 1 11	O 1 11				<input type="checkbox"/>
						O 1 11	O 1 11				<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).

Jenna Seesholtz, Township Manager

Name of Responsible Official

717-859-3201

Telephone No.

Signature

Date

9/21/22

WEST EARL TOWNSHIP BMP INVENTORY - UPDATED SEPTEMBER 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	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	

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
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	
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	
SENSENIG 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

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
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	2020	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		2020	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	Groff Creek	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	2021	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		2020	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		2020	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		2020	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
SOUTH FAIRMOUNT CHURCH - Subsurface Infiltration Beds	450 S. Fairmount Road, Ephrata, PA 17522	40° 7' 6.92" N, 76° 8' 32.258" W		2022	N	Groff Creek	Owner O&M	Private Property Owner	
ELVIN WENGER - Subsurface Infiltration Bed	95 Saw Mill Road, Ephrata, PA 17522	40° 6' 59.4036" N, 76° 9' 6.048" W	0.128	2020	N	Groff Creek	Owner O&M	Private Property Owner	NA
DENMAR PROPERTIES - Basin A - Bio-Retention	300 Burkholder Drive, Ephrata, PA 17522	40° 8' 30.233" N, 76° 13' 0.111" W		Under Construction	Y	Cocalico Creek	Owner O&M	Private Property Owner	
DENMAR PROPERTIES - Basin B - Bio-infiltration	300 Burkholder Drive, Ephrata, PA 17522	40° 8' 30.233" N, 76° 13' 0.111" W		Under Construction	Y	Cocalico Creek	Owner O&M	Private Property Owner	
ANSTORAGE LLC - Subsurface Infiltration Bed	32 Cocalico Creek Road, Ephrata, PA 17522	40°08'36.17"N, 76°12'46.78"W		Under Construction	Y	Cocalico Creek	Owner O&M	Private Property Owner	
REGAL FOODS - Detention Basin	171 Butter Road, Leola, PA 17540	40.097068, -76.147864	3.471	2022	N	Groff Creek	Owner O&M	Private Property Owner	
REGAL FOODS - Infiltration Bed	172 Butter Road, Leola, PA 17540	40.097068, -76.147864	0.429	2022	N	Groff Creek	Owner O&M	Private Property Owner	
JOHN M BEILER - Infiltration Bed	216 Locust Street, Leola, PA 17540	40°07'34.96"N, 76°11'44.83"W		Under Construction	N	Conestoga River	Owner O&M	Private Property Owner	
MARK MARTIN MOTORS - Infiltration Bed	4126 Oregon Pike, Ephrata, PA 17522	40° 7' 35.8"N, -76° 13' 10.7"W		2022	Y	Conestoga River	Owner O&M	Private Property Owner	
DAVID BURKHOLDER - Infiltration Basin	540 S Fairmount Road, Ephrata, PA 17522	40° 6' 50.229"N, 76° 8' 30.809"W		Under Construction	N	Groff Creek	Owner O&M	Private Property Owner	
PAUL RIEHL-Runoff Capture & Reuse Facility	406 Glenbrook Road, Leola, PA 17540	40° 6' 47.6"N, -76° 12' 41.1"W		2021	N	Groff Creek	Owner O&M	Private Property Owner	NA

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
SMALL PROJECTS									
BEILER 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
JONATHAN 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
DAVID AIGLER-Small Project	13 Cedar Avenue, Brownstown, PA 17508	40° 7' 39.6"N, -76° 12' 52.9"W		2019	Y	Cocalico Creek	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 17522	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	334 S Farmersville Road Ephrata, PA 17522	40°06'54.44"N,76°09'27.14"W	0.2	2022	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

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
DELMAS FOX - Small Project	771 E. Metzler Road, Ephrata, PA 17522	40°08'45.04"N,76°10'10.59"W	0.05	2022	N	Conestoga River	Owner O&M	Private Property Owner	NA
HARVEY OBERHOLTZER - Small Project	394 N. Maple Avenue, Leola, PA 17540	40°07'14.11"N,76°11'40.24"W	0.03	2022	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	2021	Y	Cocalico Creek	Owner O&M	Private Property Owner	NA
JERRY MARTIN - Small Project	265 Pleasant Valley Road, Ephrata, PA 17522	40° 9' 20.7432"N, 76° 9' 10.2492"W		2022	N	Conestoga River	Owner O&M	Private Property Owner	NA
MAHLON MARTIN-Small Project	307 Goods Rd, Ephrata, PA 17522	40° 8' 35.7"N, -76° 8' 29.6"W		under construction	N	Conestoga River	Owner O&M	Private Property Owner	NA
LEON STOLTZFUS-Small Project	75 Brick Church Road, Leola, PA 17540	40° 6' 14.3"N, -76° 8' 38.3"W		2022	N	Groff Creek	Owner O&M	Private Property Owner	NA
MARK MARTIN MOTORS-Small Project	4126 Oregon Pike, Ephrata, PA 17522	40° 7' 35.8"N, -76° 13' 10.7"W		2020	Y	Conestoga River	Owner O&M	Private Property Owner	NA
DARVIN HOOVER-Small Project	384 Cabin Drive, Ephrata, PA 17522	40° 8' 43.3"N, -76° 8' 42.3"W		2022	N	Conestoga River	Owner O&M	Private Property Owner	NA
JACOB GLICK-Small Project	1077 W Main Street, New Holland, PA 17557	40° 5' 31.3"N, -76° 7' 59.1"W		2022	N	Groff Creek	Owner O&M	Private Property Owner	NA
LLOYD M HOOVER-Small Project	303 W Farmersville Road, Leola, PA 17540	40° 7' 37.5"N, -76° 11' 18.9"W		under construction	N	Conestoga River	Owner O&M	Private Property Owner	NA
STERLING MOTORS-Small Project	4350 Oregon Pike, Ephrata, PA 17522	40° 8' 15.2"N, -76° 12' 37.6"W		2021	Y	Cocalico Creek	Owner O&M	Private Property Owner	NA
DANIEL KING-Small Project	143 Turtle Hill Road, Ephrata, PA 17522	under construction		under construction	Y	Conestoga River	Owner O&M	Private Property Owner	NA
LAWRENCE REIFF-Small Project	359 N Hershey Avenue, Leola, PA 17540	under construction		under construction	N	Groff Creek	Owner O&M	Private Property Owner	NA
MARVIN REIFF-Small Project	490 S Farmersville Road, Ephrata, PA 17522	under construction		under construction	N	Groff Creek	Owner O&M	Private Property Owner	NA

TOWNSHIP OF WEST EARL

Lancaster County, Pennsylvania

ORDINANCE NO. 243

AN ORDINANCE OF THE TOWNSHIP OF WEST EARL, LANCASTER COUNTY, PENNSYLVANIA AMENDING THE WEST EARL TOWNSHIP CODE OF ORDINANCES, CHAPTER 149, STORM WATER MANAGEMENT, TO IMPLEMENT REVISED REGULATIONS

BE AND IT IS HEREBY ORDAINED AND ENACTED by the Board of Supervisors of West Earl Township, Lancaster County, Pennsylvania, as follows:

Section 1. The Code of Ordinances of West Earl Township, Chapter 149, Storm Water Management, Article I, General Provisions, §149-111, Duty of persons engaged in development of land, to add new §149-112, MS4 Protection and §149-113, Reduction of Pollutants in Stormwater, which shall provide as follows:

§149-111. Duty of persons engaged in development of land.

Notwithstanding any provision(s) of this chapter, including exemptions, any landowner or any person engaged in the alteration or development of land which may affect stormwater runoff characteristics shall implement such measures as are reasonably necessary to prevent injury to health, safety, or other property. Such measures also shall include actions as are required to manage the rate, volume, direction, and quality of resulting stormwater runoff in a manner which otherwise adequately protects health, property, and water quality.

- A. Each structural BMP installed pursuant to this chapter shall be maintained and operated by persons engaged in the development or redevelopment of land so as to preserve and continue its function in controlling stormwater quality and quantity at the degree or amount of function for which the structural BMP was designed until transfer of ownership and responsibilities has been successfully completed.

§149-112. MS4 Protection.

Any person or entity owning or occupying a premises through which the MS4 passes, or conducts activities subject to this chapter in which the MS4 passes or receives drainage from the site in which the activities are subject to this chapter, shall:

- A. Keep and maintain that part of the premises reasonably free of trash, debris, sediment, and other obstacles which may pollute, contaminate, or retard the flow of water to or through the MS4.
- B. Maintain existing structures within or adjacent to the MS4 so that those structures will not become a hazard to the use, function, or physical integrity of the MS4.
- C. Protect inlets or other entry points to the MS4, including inlets off-site or downstream, to the maximum extent practicable in which activities, equipment, or materials could result in the discharge of a pollutant or a non-stormwater discharge.
- D. Protect receiving waters, and reduce / prevent discharge of pollutants from the MS4 to receiving waterways in accordance with the requirements of the Township's MS4 permit.

§149-113. Reduction of pollutants in stormwater.

Any person or entity engaged in activities which may result in discharges to the MS4 shall, to the maximum extent practicable, undertake all measures to reduce the risk of non-stormwater discharges and polluted discharges. The following requirements shall apply:

- A. Every person or entity undertaking an activity or use of a premise that may cause contribute to stormwater pollution or contamination, illicit discharges, or non-stormwater discharges to the MS4 shall implement structural and/or non-structural BMPs to reduce or prevent a polluted discharge. BMPs shall be maintained routinely throughout the life of the activity.

Section 2. The Code of Ordinances of West Earl Township, Chapter 149, Storm Water Management, Article II, Definitions of Terms, §149-22 shall be amended by adding or revising the following definitions in alphabetical order:

CODE ENFORCEMENT OFFICER -- The person or persons appointed by the Board of Supervisors to administer and enforce Article VI, Operations and Maintenance (O&M), Article VIII, Prohibitions, and Article IX, Enforcement, of this chapter. The Code Enforcement Officer shall not have the power to review applications or plans or issue approvals.

ILLICIT CONNECTION – Any man-made physical connection or prohibited connection to the MS4 that conveys an illicit discharge.

ILLICIT DISCHARGE – Any discharge to the MS4 that is not composed entirely of stormwater or polluted stormwater, except for discharges allowed under an NPDES Permit, discharges conditionally allowed under the MS4 Permit, and discharges authorized by this chapter as set forth in §149-101.D.

MUNICIPAL SEPARATE STORM SEWER SYSTEM PERMIT (MS4 PERMIT) – The NPDES Permit regulating discharges from the MS4 issued to Township by DEP.

REGULATED ACTIVITIES – Activities, including earth disturbance activities, that involve the alteration or development of land in a manner that may affect stormwater runoff. Regulated activities shall include, but not be limited to:

- A. Land development subject to the requirements of Chapter 155, Subdivision and Land Development;
- B. Removal of ground cover, grading, filling or excavation;
- C. Construction of new or additional impervious or semi-impervious surfaces (driveways, parking lots, etc.), and associated improvements;
- D. Construction of new buildings or additions to existing buildings;
- E. Installation or alteration of stormwater management facilities and appurtenances thereto;
- F. Diversion or piping of any watercourse;
- G. Any other regulated activities where the Township determines that said activities may affect any existing watercourse's stormwater management facilities, or stormwater drainage patterns; and,
- H. Any activities where the Township determines that said activities may affect the water quality of stormwater discharges or generate non-stormwater discharges to the MS4 and/or receiving waterbodies.

Section 3. The Code of Ordinances of West Earl Township, Chapter 149, Storm Water Management, Article III, Stormwater Management Standards, §149-31, General standards, shall be amended as follows:

* * *

- I. All regulated activities shall include such measures as necessary to:
 - (1) Protect health, safety, and property;
 - (2) Meet the water quality goals of this chapter by implementing measures to:

* * *

- (f) Reduce or prevent to the maximum extent practicable the discharge of pollutants, polluted stormwater, or an illicit discharge to the MS4.

* * *

- O. To the maximum extent possible, areas proposed for infiltration BMPs shall be protected from sedimentation and compaction during the construction phase to maintain maximum infiltration capacity. Staging of earthmoving activities and selection of construction equipment should consider this protection.
- P. To the maximum extent possible, infiltration BMPs shall not be constructed nor receive runoff from disturbed areas until the entire contributory drainage area to the infiltration BMP has achieved final stabilization.

* * *

Section 4. The Code of Ordinances of West Earl Township, Chapter 149, Storm Water Management, Article III, Stormwater Management Standards, §149-37, Stormwater management facility design standards, Subsection C, Paragraph (3), Subparagraph (b) shall be amended to provide as follows:

- (b) Inlets or manholes shall be placed at all points of changes in the horizontal or vertical directions of conveyance pipes. Curved pipe sections are prohibited. Roof downspout leaders that are eight (8) inches in diameter or less may use pipe fittings (i.e., elbows, wyes, tees, etc.) at changes in direction.

Section 5. The Code of Ordinances of West Earl Township, Chapter 149, Storm Water Management, Article III, Stormwater Management Standards, §149-37, Stormwater management facility design standards, Subsection C, Paragraph (5), Subparagraph (c)[1], shall be amended to provide as follows:

- [1] Vegetated swales.
 - [a] The first condition shall consider swale stability based upon low degree retardance ("n"=0.03).
 - [b] The second condition shall consider swale capacity based upon a higher degree of retardance ("n"=0.05).
 - [c] All vegetated swales shall have a minimum slope of 1% unless otherwise approved by the Township Engineer.

Section 6. The Code of Ordinances of West Earl Township, Chapter 149, Storm Water Management, Article III, Stormwater Management Standards, §149-37, Stormwater management facility design standards, shall be amended by inserting a new Subsection E which shall provide as follows:

- E. Wetlands. No development or earthmoving activities shall involve uses, activities or improvements which would entail encroachment into, the regrading of, or the placement of fill in wetlands in violation of State or Federal regulations.

Section 7. The Code of Ordinances of West Earl Township, Chapter 149, Storm Water Management, Article IV, Stormwater Management Site Plan Requirements, §149-43, SWM site plan information, Subsection M, Existing features, shall be amended as follows:

* * *

- (2) In areas of disturbance, contours at intervals of one or two feet. In areas of steep slopes (greater than 15%) and areas undisturbed, five-foot contour intervals may be used. The location of the benchmark and the datum used shall also be indicated. Existing contours shall be plotted as located by field survey or by GIS or LIDAR data, when deemed acceptable by the Township Engineer.

* * *

- (7) The names, locations and dimensions of all existing streets, easements, rights-of-ways, railroads, watercourses, drainage facilities, floodplains, inlets, or other entry points to the MS4 both on-site and off-site that could receive drainage from the site and other significant features within 200 feet of any part of the tract proposed to be developed and the location of all buildings and approximate location of all tree masses within the tract.

Section 8. The Code of Ordinances of West Earl Township, Chapter 149, Storm Water Management, Article IV, Stormwater Management Site Plan Requirements, §149-43, SWM site plan information, Subsection N, Proposed features, Subparagraph (3) shall be amended to provide as follows:

- (3) The location of any proposed on-lot disposal systems, public sewer line, public water lines, replacement drainfield easements, and water supply wells.

Section 9. The Code of Ordinances of West Earl Township, Chapter 149, Storm Water Management, Article IV, Stormwater Management Site Plan Requirements, §149-44, Additional information, shall be amended by inserting new Subsection F through M which shall provide as follows:

- F. The plans should clearly indicate the need for a pre-construction meeting to be held prior to earth moving activities and recordation of the plan and include personnel from the following:
 - West Earl Township
 - West Earl Township Engineer
 - The Lancaster County Conservation District
 - The equitable owner
 - The consulting firm that prepared the plan
 - Site operator (entity with day-to-day control of the site)
 - The excavator
 - Anyone else deemed necessary

- G. A note indicating that all items needing inspection shall be coordinated by the owner and/or site operator (contractor). All requests for required inspections by the contractor are to be deemed as approved requests on behalf of the owner.
- H. The actual existing and proposed lot coverage in square feet, in addition to the percentages, should clearly be shown on the data provided on the plan. This should correlate to the design information in the required Post Construction Stormwater Management Report to be used as a benchmark for all future impervious surface changes.
- I. When applicable, notation should be added to the plan stating that “all impervious surfaces to be removed are to be removed full depth, including any stone base” so as to receive credit as a post development condition pervious surface in the stormwater management design. A statement, signed by the owner and any successor, acknowledging that the impervious surfaces to be removed full depth function as the SWM Facilities for this project and cannot be added back or altered or increased unless a revised plan is approved by the Township must be provided.
- J. A note indicating construction site operators are required to control waste at the construction site that may cause adverse impacts to water quality. These wastes can include discarded building materials, concrete washout, chemicals, litter, and sanitary waste.
- K. PCSM Title Blocks outlining each individual post-construction stormwater management BMP and/or facility

INDIVIDUAL BMP INFORMATION			
BMP Name:		BMP #:	
BMP Description/Type:		Acres treated:	
BMP Length (ft) (if applicable):		Imp. acres treated:	
BMP Area (ac):		Lifecycle (yrs):	
BMP Depth (ft):		Other:	
Vol. of stormwater treated (cf):			
Vol. reduction (cf) (if applicable):			

Other Information that should already be somewhere else on the title page, or should be added:

NPDES Permit # (if applicable)
Site Location (Address)
Owner Name
Owner Address
Owner Phone #
Watershed
Receiving Waterbody
West Earl Township Outfall #

- L. Where an NPDES construction permit is required, a general description of the overall approach, techniques, controls, BMPs, and methods for managing non-stormwater generating activities (including, but not limited to, concrete washouts and sew-cutting operations), waste (including, but not limited to, solid waste and sanitary/septic waste), other materials (including, but not limited to, fertilizers and herbicides), and related inspection and maintenance facilities.
- M. Verification of an approved and proven agricultural erosion and sedimentation control plan or conservation plan and a manure management plan or nutrient management plan for agricultural uses to be implemented.

Section 10. The Code of Ordinances of West Earl Township, Chapter 149, Storm Water Management, Article V, Plan Processing Procedures, §149-52, Alternate plan submission and processing for certain regulated activities, Subsection B, Paragraph (3) shall be amended to provide as follows:

- (3) Include less than 10,000 square feet of proposed new or expanded impervious surface or disturbed area.

Section 11. The Code of Ordinances of West Earl Township, Chapter 149, Storm Water Management, Article V, Plan Processing Procedures, §149-53, Preapplication meeting, shall be amended to add a new Subsection F which shall provide as follows:

- F. Potential impacts to the MS4 (including inlets to the MS4 off-site but which may receive drainage from the site) and possible protection measures and BMPs.

Section 12. The Code of Ordinances of West Earl Township, Chapter 149, Storm Water Management, Article VI, Operation and Maintenance (O&M), §149-61, Responsibilities of developers and landowners, shall be amended to add a new Subsection F which shall provide as follows:

- F. The Township may take enforcement action against a landowner for any failure to satisfy the provisions of this article.

Section 13. The Code of Ordinances of West Earl Township, Chapter 149, Storm Water Management, Article VI, Operation and Maintenance (O&M), §149-63, Operation and Maintenance (O&M) Plan Contents, Subsection B, Paragraph (1), Subparagraph (a), shall be amended to provide as follows:

- (a) The landowner or the owner's designee (including the Township for dedicated and owned facilities) shall inspect SWM BMPs, facilities and/or structures installed under this Ordinance according to the following frequencies, at a minimum, to ensure the BMPs, facilities and/or structures continue to function as intended:
 - [1] Annually beginning at the time of final inspection by the Township after installation.
 - [2] During or immediately after the cessation of a 10-year (4.56 inches in a 24 hour period) or greater storm.
 - [3] As specified in the operations and maintenance agreement pursuant to §149-62.

Section 14. The Code of Ordinances of West Earl Township, Chapter 149, Storm Water Management, Article VI, Operation and Maintenance (O&M), shall be amended by inserting a new §149-69, Operation and maintenance (O&M) verification forms, which shall provide as follows:

§149-69. Operation and maintenance (O & M) verification forms.

The Township is subject to the terms and conditions of an issued MS4 Permit. One condition included in the permit requires the Township to ensure stormwater management facilities and BMPs are operating as intended/designed and maintained as required. To meet this condition, the Township requires the completion and return of an O&M verification form for each stormwater management facility and BMP owners annually verifying inspections and maintenance is occurring. O&M verification forms are available at the Township office and on the Township website.

Section 15. The Code of Ordinances of West Earl Township, Chapter 149, Storm Water Management, Article VIII, Prohibitions, §149-81, Prohibited Discharges and Connections, Subsections A through D, shall be amended to provide as follows:

A. The following connections are prohibited:

- (1) Any drain or conveyance, whether on the surface or subsurface, that allows any nonstormwater discharge including sewage, process wastewater, and wash water to enter a municipal separate storm sewer (if applicable), or waters of this commonwealth, and any connections to the storm sewer from indoor drains and sinks.
- (2) Any drain or conveyance connected from a commercial or industrial land use to the municipal separate storm sewer (if applicable) which has not been documented in plans, maps, or equivalent records, and approved by the Township.
- (3) Chlorinated pool or fountain discharge.

- (4) Commercial and industrial air conditioner condensate.
- B. Illicit discharges.
 - (1) Except as provided in §149-81.D, it is unlawful for any person or entity to cause a non-stormwater discharge to the MS4.
 - (2) It is unlawful for any person or entity to cause either individually or jointly any discharge into or from the MS4 that results in or contributes to a violation of the MS4 Permit, including the discharge of a pollutant.
 - (3) Any person or entity that causes a non-stormwater discharge or a discharge into or from the MS4 that results in or contributes to a violation of the MS4 Permit, including the discharge of a pollutant, is subject to the enforcement provisions of Article IX of this chapter.
- C. No person shall place any structure, fill, landscaping or vegetation into a SWM facility or within a drainage easement that will limit or diminish the functioning of the SWM facility in any manner.
- D. The following discharges are authorized unless they are determined to be significant contributors to pollution to the waters of this Commonwealth:
 - (1) Discharges from firefighting activities.
 - (2) Potable water sources including water line flushing and fire hydrant flushing, if such discharges do not contain detectable concentrations of Total Residual Chlorine (TRC).
 - (3) Non-contaminated irrigation drainage.
 - (4) Non-contaminated air conditioning condensate and water from geothermal systems.
 - (5) Diverted stream flows and springs.
 - (6) Water from crawl space pumps. Water from crawl space or sump pumps shall discharge to infiltration or vegetative BMPs wherever feasible.
 - (7) Pavement wash waters where spills or leaks of toxic or hazardous materials have not occurred (unless all spill material has been removed) and where detergents are not used.
 - (8) Flows from riparian habitats and wetlands.
 - (9) Uncontaminated water from foundations or from footing drains.

- (10) Uncontaminated groundwater.
- (11) Water from individual residential car washing where cleaning agents are not utilized.
- (12) Routine external building wash down (which does not use detergents or other compounds). If cleaning agents are used, environmentally friendly cleaning agents shall be used.
- (13) Rising groundwaters.
- (14) Non-contaminated hydrostatic test water discharges if such discharges do not contain detectable concentrations of Total Residual Chlorine (TRC).

Section 16. The Code of Ordinances of West Earl Township, Chapter 149, Storm Water Management, Article VIII, Prohibitions, §149-81, Prohibited Discharges and Connections, shall be amended by adding a new Subsection H which shall provide as follows:

- H. Disposal of animal waste in storm drains or in a manner which shall allow animal waste to enter a storm water management facility is prohibited. Disposal of animal waste in any Township compost facility is prohibited.

Section 17. The Code of Ordinances of West Earl Township, Chapter 149, Storm Water Management, Article VIII, Prohibitions, §149-82, Alteration of SWM BMPs, shall be amended and a new §149-83, Containment and notification of spills, shall be added which shall provide as follows:

§149-82. Alteration of SWM BMPs.

No person shall modify, remove, fill, landscape or alter stormwater management facilities or stormwater BMPs which may have been installed on a property unless a stormwater management plan has been approved which authorizes such modification, removal, filling, landscaping or alteration. No person shall place any structure, fill, landscaping or vegetation into a SWM facility or within a drainage easement which will limit or alter the functioning of the SWM facility or easement in any manner.

§149-83. Containment and notification of spills.

Any person owning or occupying a premises who has knowledge of any significant release of pollutants or non-stormwater discharges from those premises that may enter the MS4 shall immediately take all reasonable action to contain the release and minimize any non-stormwater discharge. The person shall notify the Township within four (4) hours of the non-stormwater discharge.

Section 18. The Code of Ordinances of West Earl Township, Chapter 149, Storm Water Management, Article IX, Enforcement and Penalties, §149-92, Enforcement, shall be amended to provide as follows:

The Board of Supervisors is hereby authorized and directed to enforce all of the provisions of this chapter. The Board of Supervisors hereby designates the Code Enforcement Officer to enforce Articles VI, VIII, and IX of this chapter.

- A. Any permit or approval issued by the Township pursuant to this chapter may be suspended by the Township for:
 - (1) Noncompliance with or failure to implement any provision of the approved SWM site plan or O&M agreement.
 - (2) A violation of any provisions of this chapter 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 construction or development that constitutes or creates a hazard, nuisance, pollution or endangers the life or property of others.
- B. A suspended permit may be reinstated by the Township when:
 - (1) The Township has inspected and approved the corrections to the violation that caused the suspension.
 - (2) The Township is satisfied that the violation has been corrected.
- C. The Code Enforcement Officer may issue notices of violation for violations of provisions of Articles VI , VIII, and IX of this chapter and may, with or without issuing a notice of violation, institute summary criminal proceedings.

Section 19. The Code of Ordinances of West Earl Township, Chapter 149, Storm Water Management, Article IX, Enforcement and Penalties, §149-95, Modification Procedure, shall be retitled “Modification and/or Waiver Procedure” and Subsection B, shall be amended to provide as follows:

- B. The approval of the modification or waiver shall not have the effect of making null and void the intent and purpose of this chapter. Cost or financial burden shall not be considered a hardship. In the approval of a modification or waiver, the Board of Supervisors may impose such conditions, as will, in its judgment, secure substantially the objectives of the standards and requirements of this chapter.

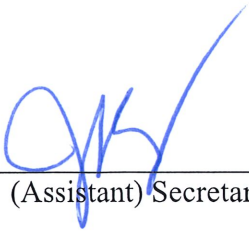
Section 20. All other sections, parts and provisions of the Code of Ordinances of West Earl Township shall remain in full force and effect as previously enacted and amended.

Section 21. In the event any provision, section, sentence, clause or part of this Ordinance shall be held to be invalid, illegal or unconstitutional by a court of competent jurisdiction, such invalidity, illegality or unconstitutionality shall not affect or impair the remaining provisions, sections, sentences, clauses or parts of this Ordinance, it being the intent of the Board of Supervisors that the remainder of the Ordinance shall be and shall remain in full force and effect.

Section 22. This Ordinance shall take effect and be in force five (5) days after its enactment by the Board of Supervisors of the Township of West Earl as provided by law.

DULY ORDAINED AND ENACTED this 12th day of September, 2022, by the Board of Supervisors of the Township of West Earl, Lancaster County, Pennsylvania, in lawful session duly assembled.

Attest: _____


(Assistant) Secretary

TOWNSHIP OF WEST EARL
Lancaster County, Pennsylvania

By: _____


(Vice) Chairman
Board of Supervisors

[TOWNSHIP SEAL]



ATTACHMENT - West Earl Township SWMP Goal Summary

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 were 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. As part of the annual SWMP review process, 2022 status updates have been provided below.

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.
- **2022 Status Update:** West Earl Township has completed the design and permitting process for the Conestoga UNT at Turtle Hill Road Stream Restoration Project. Construction of this project is anticipated to start in August 2022 and be finished in November 2022. This project is located directly downstream from the Hoover Streambank Restoration Project and it is anticipated to add another 1,535 linear feet of restoration which equates to an estimated 68,891 pounds of sediment reduction. Once the Turtle Hill Project is completed, West Earl Township will have 124,991 pounds of annual sediment reduction as part of the Township's PRP requirements. This is an additional 32,638 pounds beyond the Township's 92,353 pounds of sediment reduction required per year per the PRP. The Township plans to utilize this additional reduction amount towards the reductions required as part of the next permit cycle.
- **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.
 - **2022 Status Update:** During 2022, 5 outfalls were monitored for dry weather screening and 7 outfalls were sampled during a wet weather sampling event in April 2022. Based on these screenings, one new outfall was identified (Outfall 600) and two priority outfalls were identified within the Conestoga River (Outfall 200P and Outfall 208P).
 - The prioritization of these two outfalls is based on the large MS3 drainage areas to these locations, in addition to the results of the wet weather and dry weather screenings. Both of these locations had elevated fecal coliform values and there was notable erosion discharging from these locations. Outfalls 200P and 2008P will be monitored annually, at a minimum.
 - The remaining outfalls that need dry weather screening as part of this permit cycle will be inspected during 3rd-4th Quarter 2022.
 - During 1st Quarter 2023, the Township will target additional dry weather and wet weather screening for Outfalls 211P, 208P, 200P, 217N, and 600, along with remaining Conestoga River Outfalls (203, 204, 206P, 207P, 209P, 210P, 261P, 262P, 263N) to prioritize outfalls for discharge monitoring purposes; Cocalico Creek wet weather sampling is targeted in 2024 (Headwaters, 175P, 125P, 123, 117, 107P, 102P, Downstream Cocalico) along with on-going monitoring for priority outfalls; Wet weather sampling for Groff Creek (Headwaters, 360P, 362P, 363P, 364P, and Downstream) are also targeted for 2024.

- Additionally, the Township has continued to make updates, as necessary to existing MS3 drainage area delineations. As dry and wet weather screenings continue, this will help to further update and modify drainage areas, as needed.
- **Qualitative Goal: Expansion of the SWMP element plans for Minimum Control Measures (MCMs) including the PEOP (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.
 - **2022 Status Update:** This goal has been completed. Updates to the existing MCM plans will be on-going, as needed, during the permit cycle.
- **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.
 - **2022 Status Update:**
 - The Township has continued to complete PCSM BMP inspections of select stormwater infrastructure and BMPs during the 1st and 2nd Quarters of 2022. PCSM BMP Facilities within the Township's MS4 have almost all been inspected during the permit cycle. The Township will target inspection of PCSM Facilities within the Cocalico Creek Watershed (CC-001 – CC-014) during 4th Quarter 2022 since these facilities have not been inspected by the Township since 2019. Additionally, CR-001 was inspected in 2019 and there were some issues identified during that inspection for the HOA to address. The Township will complete a follow-up inspection of CR-001 in 4th Quarter 2022 along with the Cocalico Creek PCM BMPs. The Township will distribute documentation regarding the findings of the 4th Quarter 2022 inspections to the landowners.
 - Based on the results of the landowner outreach after the 4th Quarter 2022 BMP inspections, the Township will evaluate the feasibility of having Township staff complete inspections of all PCSM BMP facilities within the MS4 area on their own and then communicating findings from the inspection to the BMP owners. There is concern that relying on landowners and HOAs to properly complete O&M verification forms

may not be effective and that it is possible that major problems could be overlooked. For newly completed PCSM BMP facilities that have clear O&M Agreements that define maintenance and monitoring responsibilities for BMP owners, the O&M Verification Form process may be more successful. This will be evaluated during the 2nd Quarter 2023.

- **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.
 - **2022 Status Update:** The PCM PRP Plan was developed in 2020. Per the MS4 requirements, the Township targeted investigation of the Conestoga River first. Dry weather sampling was collected at the upstream and downstream ends of the Conestoga River in June 2020 along with the tributary that receives drainage from the Hoover PRP project and pending Turtle Hill PRP Project. Wet weather screening of these in-stream locations, along with seven select MS4 outfalls within the Conestoga River watershed was completed in April 2022. Fecal coliform values increased during wet weather sampling as compared to sampling during dry (baseflow conditions). This is normal and is a demonstration of the impact of non-point source discharge on the waterways. The April 2022 sample results did show some elevated fecal coliform values; however, all results were within the range of natural fluctuations from runoff during storm events. Pet waste, agricultural runoff, wildlife waste, and other natural fluctuations may be impacting on pathogens levels in the stream. During both the dry weather sampling and the wet weather sampling, the fecal coliform values at the upstream end of the Conestoga River within West Earl Township were higher than the fecal coliform values at the downstream end of the Conestoga River within the Township. Thus, the data supports that West Earl Township is not contributing the pathogens impairments in the Conestoga River. The Township plans to continue to monitor pathogens within the Conestoga River, and start monitoring within the Cocalico Creek and Groff Creek watersheds as described further in the Pathogens PCM PRP Plan.

- **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.
 - **2022 Status Update:** Amendments to West Earl Township's SWMO were developed during the 1st and 2nd Quarter 2022, with final drafts being approved by Township staff,

Engineer of Record, and Solicitor in July 2022. Amendments are anticipated for adoption by the Board of Supervisors at the end of August 2022 and will be submitted as part of the September 2022 Annual Report.

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.

The 1,250 Linear Foot Hoover Property Streambank Restoration was completed in 2019. 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.

PRP Progress from 2021-2022 Reporting Year

As part of an extension of the Hoover Property Stream Restoration Project, West Earl Township worked with landowners directly downstream from the Hoover site to design an additional 1,535 linear foot stream restoration project that will stabilize the remaining portion of this tributary down to an access lane off of Turtle Hill Road near the confluence with the Conestoga River.

The Township applied for, and received, a large implementation grant from the Lancaster Clean Water Partners for the Conestoga UNT Turtle Hill Road Stream Restoration project. The design and permitting for the Conestoga UNT at Turtle Hill Road Stream Restoration project was completed during the 1st and 2nd QTR 2022, easement agreements finalized in 2nd QTR 2022. Construction began in June 2022 and is targeted for completion in September 2022.

PRP Goals for 2022-2023

West Earl Township hopes to complete work on the Turtle Hill Road Stream Restoration Project in September 2022. It is anticipated that the Turtle Hill project will achieve 68,891 pounds of sediment reduction annually. Therefore, a total of 124,991 pounds of annual sediment reduction will be achieved by the Hoover and Turtle Hill Road projects.

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.

In previous annual reports, West Earl Township provided MS3 delineation maps of the Conestoga River and an inventory of all outfalls and suspected sources of pathogens (as well as other pollutants) within the Conestoga River watershed. 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, including the tributary that receives drainage from the Hoover PRP Project and the pending Turtle Hill PRP Project. Additional wet weather sampling has been targeted for 2021 to further investigate potential sources of pathogens; however, wet weather sampling has yet to be completed due to a lack of qualifying storm events within the first half of 2021. Wet weather screenings of these in-stream locations, along with seven select MS4 outfalls within the Conestoga River watershed, were completed in April 2022. A map of the sampling locations is included below. Fecal coliform values increased during wet weather sampling as compared to sampling during dry (baseflow conditions) as shown in Tables 1 and 2 below. These fluctuations between baseflow and wet weather sampling are normal and are a demonstration of the impact of non-point source discharges (i.e. run-off) on the waterways.

During both the dry weather sampling and the wet weather sampling, the fecal coliform values at the upstream end of the Conestoga River (Sample Location 1 from Tables 1 and 2) within West Earl Township were higher than the fecal coliform values at the downstream end of the Conestoga River (Sample Location 10 from Tables 1 and 2) within the Township. Thus, the data supports that West Earl Township is not contributing the pathogens impairments in the Conestoga River.

No exceedances occurred per the 25 PA Code Chapter 93.7 Specific Water Quality Criteria values. All results were within the range of natural fluctuations from runoff during storm events. However, the April 2022 sample results did show some elevated fecal coliform values that warrant further monitoring. Pet waste, agricultural runoff, wildlife waste, and other natural fluctuations may be impacting on pathogens levels discharging from these outfalls and in the stream during wet weather events. As there are no specific point sources of pathogens that have been identified in West Earl Township, no specific corrective actions are feasible or warranted to combat these suspected sources of pathogens. However, the Township continues to distribute pathogens flyers to the general public, and even distribute flyers to specific neighborhoods that drain to MS4 outfalls (i.e. Outfall 208P) where slightly elevated pathogens values were detected in an effort to educate the public on the pathogens impairment issue. The Township also continues to encourage implementation of agricultural BMPs within the Township's extensive farm areas and support the Lancaster Farmland Trust on potential agricultural improvement projects on local farms. These education and outreach efforts will be on-going.

The Township plans to continue to monitor for pathogens within the Conestoga River Watershed and will implement corrective actions for suspected sources of pathogens, as needed.

Table 1. Dry Weather Screening Results 2020

DRY WEATHER SCREENING 2020									
Location:	Date:	Turbidity:	Total Phosphorus:	NO2/NO3:	NH3-N:	TKN:	Total Nitrogen:	Fecal Coliform:	Total Coliform:
1 - In Stream - Conestoga River	6/16/2020	4.05	0.15	5.3	ND	ND	ND	580	>2419.6
2 - In Stream - UNT at Turtle Hill	6/16/2020	0.82	0.11	12	0.101	ND	ND	3,100	>2419.6
10 - In Stream - Conestoga River	6/16/2020	1.93	0.14	6.2	0.166	5.2	11.4	380	>2419.6

NOTE: No dry weather flows observed from outfalls, therefore, no samples were collected from MS4 outfalls during the 6/16/20 sample event.

Table 2. Wet Weather Screening Results 2020

WET WEATHER SCREENING 2022											
Location:	Date:	TSS:	Total Phosphorus:	NO2/NO3:	NH3-N:	TKN:	Total Nitrogen:	Fecal Coliform:	Total Coliform:	Ph (field):	Temperature C (field):
1 - In Stream - Conestoga River	4/7/2022	ND	0.15	2.7	ND	1.1	3.8	1,620	2,420	8.6	10.2
2 - In Stream - UNT at Turtle Hill	4/7/2022	26	ND	7.3	ND	ND	ND	90	2,420	8.4	11.1
3 (Outfall 211P)	4/7/2022	450	0.75	ND	0.336	3.9	ND	270	2,420	9.3	9.7
4 (Outfall 208P)	4/7/2022	30	0.24	ND	0.512	1.3	ND	5,700	2,420	9.2	11
5 (Outfall 207P)	4/7/2022	35	0.11	ND	0.162	2.3	ND	ND	2,420	8.6	9.5
6 (Outfall 205N)	4/7/2022	18	0.11	5	0.139	ND	ND	90	2,420	8.7	9.3
7 (Outfall 202)	4/7/2022	17	0.1	5.4	0.112	ND	ND	360	2,420	7.9	9.8
8 (Outfall 217N)	4/7/2022	61	0.27	ND	0.286	1.5	ND	7,840	2,420	8.4	11
9 (Outfall 200P)	4/7/2022	61	0.54	ND	0.171	1.4	ND	4,800	2,420	8.5	9.5
10 - In Stream - Conestoga River	4/7/2022	15	0.17	2.9	0.171	1.3	4.2	1,080	1,730	8.3	9.5

Targets for 2022-2023:

During 1st Quarter 2023, the Township will target additional dry weather and wet weather screening for Outfalls 211P, 208P, 200P, 217N, and 600, along with remaining Conestoga River Outfalls (203, 204, 206P, 207P, 209P, 210P, 261P, 262P, 263N) to prioritize outfalls for discharge monitoring purposes; Cocalico Creek wet weather sampling is targeted in 2024 (Headwaters, 175P, 125P, 123, 117, 107P, 102P, Downstream Cocalico) along with on-going monitoring for priority outfalls; Wet weather sampling for Groff Creek (Headwaters, 360P, 362P, 363P, 364P, and Downstream) are also targeted for 2024.

Results will be documented in subsequent Annual Reports and as part of the Township's Pathogens PCM PRP.

West Earl Township 2022 MS4 Water Quality Sampling Locations

