

NEW BRITAIN TOWNSHIP
STORMWATER MANAGEMENT PROGRAM

JULY 2023-JUNE 2024

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EXECUTIVE SUMMARY

A. Applicability

- 1) The following SWMP is intended only to regulate the MS4 of New Britain Township. All Land Regulation and Earth Disturbance Activities are sanctioned to be regulated by this program.
- 2) Regulated Activities may include, but are not limited to:
 - a) Land development.
 - b) Subdivisions.
 - c) Prohibited or polluted discharges.
 - d) Alteration of the natural hydrologic regime.
 - e) Construction or reconstruction of, or addition of new impervious or semi-pervious surfaces (i.e. driveways, parking lots, roads, etc.), except for reconstruction of roads where there is no increase in impervious surface.
 - f) Construction of new buildings or additions to existing buildings.
 - g) Redevelopment.
 - h) Diversion piping or encroachments in any natural or man-made channel, and Nonstructural and structural stormwater management Best Management Practices (BMPs) or appurtenances thereto.
 - i) Any of the above Regulated Activities which were approved more than five years prior to the effective date of this Ordinance are resubmitted for Municipal approval.

B. Limitations on Coverage

- 1) This program does not apply to Regulated Activities that create impervious surfaces smaller than or equal to 1,000 square feet. Any new impervious under 1,000 sf requiring a zoning or building permit, is required to plant trees onsite based on the square footage of added impervious.
- 2) This program does not apply to regulated, ongoing BMP maintenance to an existing SWM system made in accordance with plans and specifications previously approved by the Township.
- 3) The program does not apply to the use of land for gardening for home consumption.

C. Discharges to Water Quality Impaired Waters

- 1) The ultimate goal of this program is to ensure the health, safety, and property of this Township, including the waterways.

- 2) This program in conjunction with the Township's Zoning and Stormwater Ordinances, aims to limit and eventually eradicate all discharges to water quality impaired waters by implementing the following measures:
 - a) Minimize disturbance to natural resources including, water sources, floodplains, wetlands, and wooded areas.
 - b) Create, maintain, repair, or extend riparian buffers.
 - c) Pilot program to naturalize Detention Basins by planting Native Plants to increase filtration of stormwater.
 - d) Avoid erosive flow conditions in natural flow pathways.
 - e) Minimize thermal impacts to waters of this Commonwealth.
 - f) Disconnect impervious surfaces by directing runoff to pervious areas, wherever possible.

D. Stormwater Management Program Review

- 1) This SWMP covers all six MCMs and their corresponding BMPs in regards to both the former PAG-13 General Permit as well as the updated 2018 NPDES Individual permit. The following MCMs and their purposes are as follows:
 - a) MCM #1: The Township has written and is maintaining a written PEOP. This program is used to achieve measurable improvements in the target audience's understanding of the totality of stormwater pollution and its prevention. In the case of the Township, the target audience is its populace. For this MCM, educational materials have been created and provided in multiple modes to all Township residents.
 - b) MCM #2: The Township has written and is maintaining a written PIPP. This program is used to provide the public with opportunities to participate in the decision-making process relevant to the stormwater permit and SWMP. In order to ensure the success of this program, the Township solicits public involvement from its populace and also provides enough time for the public to be aware of discussion opportunities related to the local stormwater program.
 - c) MCM #3: The Township has written and is maintaining a written IDD&E program. This is designed to aid Township officials in mapping the storm sewer and relevant outfalls, identifying and removing the source of any illicit discharges, preventing the discharge of non-stormwater discharges, and providing educational outreach to the public.
 - d) MCM #4: The Township is relying on PA's statewide program for stormwater associated with construction activities, and does not have to fill out this part of the SWMP.
 - e) MCM #5: Due to transitioning permit changes, the Township has only filled out the last three BMPs for this MCM, which discuss the ordinances in place that address post-construction runoff; go over the extent of the Township's use of LIDs; and ensure the proper operation and maintenance of post-construction facilities installed at all qualifying development and redevelopment projects.

- f) MCM #6: The Township maintains Good Housekeeping and Pollution Prevention by maintaining its O&M program for all of its facilities; identifying and documenting all said facilities; and by developing and implementing an employee training program.

MCM #1: PUBLIC EDUCATION AND OUTREACH

A. BMP #1: Maintain written Public Education and Outreach Program (PEOP).

Measurable Goal: For renewal permittees, the existing PEOP shall be reviewed and revised as necessary. The permittee's PEOP shall be designed to achieve measurable improvements in the target audience's understanding of the causes and impacts of stormwater pollution and the steps they can take to prevent it.

1. New Britain Township's continuous goal is to "achieve measurable improvements in the target audience's understanding and participation," as stated in the permit. The methods taken to successfully achieve this goal are measured by the performance criteria of each method's ability to at least potentially reach the majority of the Township's populace. Effective considerations have been taken to follow these criteria through the creation and implementation of a variety of means, as described below.
2. New Britain Township plans to measure the success of the outlets by tracking the amount of public involvement, through attendance at public meetings, target audience participation, and by tracking when MS4 topics are incorporated into discussions. This will be tracked at the townships Board of Supervisors, Planning Commission and newly formed MS4 committee (MCM#2, BMP#1) meetings. Additionally, every quarter a Board of Supervisors meeting will have a dedicated portion for the target audience to discuss MS4 issues in the township. New Britain Township will track the topics and the number of times they are talked about at these meetings to ensure the SWM materials are reaching the target audience. This will be achieved by a review of the meeting minutes at the end of the NPDES permit year.
 - a. This analysis will be based on the assumption that we are starting at zero and looking to create and increase public awareness and involvement on the subject matter moving forward.
 - b. Stormwater Management Materials will be refined on a yearly or as needed basis.

B. BMP #2: Maintain lists of target audience groups present within the areas served by your MS4.

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

1. Target Audiences:
 - a. Municipal Employees – Township Administrative Staff, Public Works, NBT Police
 - b. Residents: Board of Supervisors, Planning Commission, Park and Recreation Board, Zoning Hearing Board, Veteran's Committee, Homeowner's Associations, Property Owners, Chalfont Area Online Community/Facebook Page, Lenape Valley Recreation Commission (LVRC),
 - c. Area Schools and Religious Facilities (Central Bucks Elementary Schools – Simon Butler, St. Jude's Catholic School and Youth Organization, Plumstead Christian School, Chesterbrook Academy, LaPetite Academy, The Goddard School, Kids Care, Windmill Day Camp, Line Lexington Mennonite, The Shrine)

- d. Businesses: Chalfont New Britain Business Alliance, Miscellaneous commercial and industrial businesses
- e. Developers

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

Measurable Goal: *For new permittees, stormwater educational and informational items shall be produced and published in print and/or on the Internet within the first year of permit coverage. In subsequent years (and for renewal permittees), the list of items published and the content in these items shall be reviewed, updated, and maintained annually. Your publications shall contain stormwater educational information that addresses one or more of the 6 MCMs.*

1. The Township's Stormwater Link on their website shall annually undergo verification for errors. This website shall be kept up-to-date with stormwater information relative to the community. The ultimate goal of this site, including its stormwater page, is to provide Township residents with the same information that could be obtained from a federal website, but with greater proximity and relevance to them. This follows the criteria due to the fact that a great percentage of the Township's population own or have access to technology that can access this website and do so when they need to contact the Township directly.
2. New residents of the Township shall be provided with a "Welcome Packet" folder that includes pamphlets of applicable information for new residency, which includes stormwater management materials. This information is distributed at the same time as the Use & Occupancy Certificates, which allows residents to have access to stormwater management information from the very beginning of their residency. Since every incoming new resident receives this folder, this method meets the criteria by appealing to new residents.
3. The Township shall utilize multiple forms of media, including the local newspaper and social media accounts. Each February, the Township and neighboring communities shall run a stormwater advertisement in the Intelligencer, to allow for a greater range of citizens to have access to relevant stormwater information. The Township shall post stormwater information on Facebook, Twitter, and Google Groups in order to appeal to the more technologically-inclined residents. This method is effective due to the high percentage of the population that owns or has access to technology (and social media, consequently).
4. The Township shall issue quarterly newsletter mailings to provide a good summation of relevant events and information corresponding to the Township, including stormwater. Each issue shall cover different aspects of stormwater management, including the prevention of illicit discharges, the reduction of excess water usage, and stormwater issues on a watershed basis. Newsletters shall be sent to all Township residents, and bring relevant information to their doorstep. The goal of the newsletter is to address specific priority area concerns; the appropriate parameters associated with common pollutants and chemicals, and identifiable storm water impairments.
 - i) The material in the newsletter shall target seasonal specific stormwater issues.
 - (1) Spring – Fertilizers and other lawn chemicals
 - (2) Summer – Grass Cutting, Mulch Pile Storage
 - (3) Fall – Proper Yard Waste clean-up
 - (4) Winter – Snow Removal
5. The Township shall incorporate signage into their community parks where stormwater facilities are installed.

6. The Township shall broadcast stormwater information on their two cable access channels if active. These have the potential to give the convenience of providing necessary Township information, including stormwater, with the same amount of ease as watching a news channel. While the cable channels are still under construction, they meet the criteria within their potential to reach a large amount of the Township's populace.
7. The Township shall provide stormwater updates quarterly at their public meetings. The twice-monthly board meetings are open for public attendance.
8. The most recent review and update of the storm water educational items was 6/30/20.
9. In the future, the Township plans to maintain its information distribution methods, including its newsletter, website, social media accounts, "Welcome Packets" for new residents, and newspaper advertisements. The Township will continue to address new topics based on ongoing identified problems and seasonal issues associated with storm water management through the above-mentioned mediums.

D. BMP #4: Distribute storm water educational materials to the target audiences.

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

- a. Besides its newsletter and website provisions, the Township "Welcome Packets" for new residents, social media, and periodic newspaper advertisements to distribute relevant storm water prevention information to its residents.

MCM #2: PUBLIC INVOLVEMENT & PARTICIPATION

A. BMP #1: Maintain a written Public Involvement and Participation Program (PIPP).

Measurable goal: *All permittees shall re-evaluate the PIPP each permit year and revise as needed. Your PIPP shall include, but not be limited to: a) opportunities for the public to participate in the decision-making process associated with the development, implementation, and update of programs and activities related to this Permit; b) methods of routine communication to groups such as watershed associations, environmental advisory committees, and other environmental organizations that operate within proximity to the permittee's regulated small MS4s or their receiving waters; and c) making your periodic reports available to the public on your website, at your municipal offices, or by US Mail upon request.*

1. The Township's PIPP addresses Part A of the measurable goal by holding two Public Meetings per month. The agenda of said meetings is available online several days before the meeting date, and there are at least two designated times for public comment during the meetings (excluding agenda-specific topics). In addition, all new ordinances are discussed at a public hearing, with advertisements being posted about said hearing prior to the hearing date. The public is also encouraged to bring their thoughts and ideas to any Township official or member of the Board of Supervisors, which can potentially lead to further action. Public meetings are also held with the Board of Supervisors for the discussion of subdivision or land development applications. The process is completely transparent and allows the public to know everything about any upcoming subdivision or development project. Relevant landowners near a development area are also given notice about Public Meetings related to said development area. This process is identical for applications for the Zoning Hearing Board. Meeting minutes from public meetings in which stormwater are **attached**.
2. Although the Township currently does not have an environmental advisory council and the local watershed association (North Branch Watershed Association) has been disbanded, it addresses Part B of the measurable goal by maintaining communication with regional groups such as the Doylestown EAC. Through this relationship, information such as training and educational opportunities is shared through normal modes of communication.
 - a. New Britain Township created an MS4 Committee that would meet as needed to tackle Stormwater Management issues. This committee will address Part C and responsibilities are as follows:
 - i. Prioritizing stormwater management projects by identifying the projects that will have the highest impact for the lowest price.
 - ii. Advise the Board of Supervisors on stormwater management projects and issues.
 - iii. Brainstorm different methods to reach our target audiences.
 - iv. Identifying new and relevant training programs for municipal staff.
 - v. Maintain and Make Improvements to the SWMP.
 - vi. Communicating and Working with neighboring local and state environmental advisory committees.
 - vii. Form and monitor a volunteer force from the community responsible for observing and documenting potential points of entry of pollutants and sediment into the MS4.
 - viii. Monitor and grow the Township's pilot program for naturalizing basins.

- b. Committee Makeup:
 - i. At least one Elected Official
 - ii. At least two employees from the Administrative Staff
 - iii. The Public Works Director
 - iv. The Township Engineer
 - v. Two Volunteer Residents
 - vi. Two Volunteers from other Target Audiences

3. The Township addresses Part C of the measurable goal by providing public announcements, updates and reports at Board of Supervisors meetings. The Township's website has a page solely for providing information on upcoming development projects and Zoning Hearing Board applications, including the status of said projects and applications. The Township Administration remains open and available to the public to discuss any concerns, and is very forthcoming with requested materials.

- a. New Britain Township shall dedicate one Board of Supervisors meeting each quarter to provide stormwater updates and to acquire public feedback for stormwater management issues or concerns.

B. BMP #2: Before adopting any ordinance required by the permit, provide adequate public notice and opportunities for public review, input, and feedback.

Measurable Goal: *Advertise any proposed MS4 Stormwater Management Ordinance, provide opportunities for public comment, evaluate any public input and feedback, and document the comments received and the municipality's response.*

- 1. The current ordinance is Chapter 26 of the Township's Code adopted April 1, 2011. "Neshaminy Creek Watershed Stormwater Management Ordinance" (a.k.a., Neshaminy/Little Neshaminy Stormwater Management Ordinance) <https://www.ecode360.com/31568489>
- 2. Ordinances #2015-01-01 and #2015-02-03 were subsequently implemented in 2015. These two ordinances do not directly discuss stormwater management or MS4 requirements; however, they instate new floodplain regulations that prohibit any development in the new FEMA floodplain areas. This ordinance goes beyond blatant construction and also bans the hazardous material storage and all types of vehicle storage within floodplains. The use of specific fill materials is also closely monitored. Both ordinances were advertised and talked about in at least two Public Meetings before being adopted.

C. BMP #3: Regularly solicit public involvement and participation from the target audience groups. This should include an effort to solicit public reporting of suspected illicit discharges. Assist the public in their efforts to help implement your SWMP. Conduct public meetings to discuss the on-going implementation of your SWMP.

Measurable Goal: *Conduct at least one meeting per year to solicit public involvement and participation from target audience groups. The public should be given reasonable public notice through the usual outlets a reasonable period in advance of each meeting. During the meetings, you should present a summary of your progress, activities, and accomplishments with*

implementation of your SWMP, and you should provide opportunities for the public to provide feedback and input. Your presentation can be made at specific MS4 meetings or during any other public meeting. Under this MCM, you should document and report instances of cooperation and participation in your activities; presentations you made to local watershed organizations and conservative organizations; and similar instances of participation or coordination with organizations in your community. You also should document and report activities in which members of the public assisted or participated in your meetings and in implementation of your SWMP, including education activities or organized implementation efforts.

1. The Township aims to solicit public involvement for MS4-related activities to get feedback on the stormwater management, Township's TMDL and PRP Plan, hazard mitigation, operations and maintenance agreements and permanent escrow and fees for maintenance of stormwater BMPs, floodplain management and new floodplain FIRMs, stormwater management in Township parks, and when reviewing development projects and the stormwater-related issues that went along with them.
2. The Township issues biannual stormwater updates at public meetings.
3. The Board of Supervisors meets the first and third Monday of every month. The New Britain Township Planning Commission meets the second and fourth Tuesday of every month. The Planning Commission typically discusses similar topics ahead of the Board of Supervisors. These meetings allow further opportunity for public input on a variety of issues, including stormwater. Meetings are posted in the local newspaper once a year in January. This list is additionally posted at the Municipal Building, in addition to the meeting's agenda and upcoming/relevant legislation. The agenda can also be found on the Township website. The meetings are held at the Municipal Building, located at 207 Park Avenue, Chalfont, PA. Most meetings only have a few residents in attendance, unless a development or debated topic is up for discussion. When development projects are on the agenda, about 20 to 25 residents attend depending on various factors, including existing drainage concerns. The Township tends to get feedback on ongoing stormwater issues when residents attend public meetings discussing land development projects. Their concerns are typically that flooding will get worse. When told that stormwater rates and volumes are required to be managed, the residents usually respond well.

MCM #3: ILLICIT DISCHARGE DETECTION AND ELIMINATION

- A. BMP #1: Develop and implement a written program for the detection, elimination, and prevention of illicit discharges into your regulated MS4s. Your program shall include dry weather field screening of outfalls for non-stormwater flows, and sampling of dry weather discharges for selected chemical and biological parameters. Test results shall be used as indicators of possible discharge sources.

Measurable Goal: *The existing IDD&E program shall continue to be implemented and evaluated annually. Records shall be kept of all outfall inspections, flows observed, results of field screening and testing, and other follow-up investigation and corrective action work performed under this program.*

1. The procedures for detecting illicit discharges entering the system, pollutants in the system, and pollutants discharging from the system are identical and all follow the protocol for dry-weather outfall screening in the Township's outfalls regarding non-stormwater flows. However, the procedure for addressing these components differs depending on the results of the outfall tests.
 - a. Outfall inspectors use DEP's "MS4 Outfall Screening Report" when commencing an outfall screening. These sheets require thorough note-taking of the site itself; underlying environmental conditions; land use in drainage area; the location, material, shape, and dimension of the outfall; description of any present flow; the volume, time to fill, depth, width, length, time of travel, temperature, and pH and ammonia levels of any flow; physical indicators of flowing outfalls such as odor, color, turbidity, and floatables; any outfall damage, deposits/stains, abnormal vegetation, poor pool quality, and pipe benthic growth; overall outfall characterization in regards to previously listed indicators; and the amount and description of any samples collected for data analysis.
 - b. When going to conduct an outfall confirmation exercise/inspection, the site is defined as a "point where the regulated conveyance or system of conveyances that dispose stormwater are owned or operated by the township; and is designed or used for collecting or conveying stormwater to a defined and discernible owned and operated by the Township from which pollutants are or may be discharged--and that discharges to Waters of the United States/Surface Waters of the Commonwealth is an MS4 Outfall."
 - c. Before testing, a confirmation is made that no rainfall precipitation has occurred in the past 48 hours (potentially more time if snow melt runoff is a factor), and the outfall location map is reviewed thoroughly to ensure accessibility. Once the inspector arrives at the outfall, he or she fills out the corresponding data relevant to the outfall report. A GPS unit is used to find the specific latitude and longitude, pictures are taken of the outfall and its surroundings, and its number is recorded on the informational field sheet. The outfall is examined for its material, with care to look at the pipe itself instead of the endwall. A tape measure is then used to find the diameter of the examined pipe. The overall condition of the outfall is noted, and the site is then analyzed for flow. If no flow is seen, then the inspector proceeds to the next section of the field sheet. If flow is detected, sterile gloves are put on and a 1-liter bottle is used to collect the flow to find an estimate of the discharge volume. A sterile sample container is filled with flow from the outfall,

which is then used to find the pH, temperature, and ammonia levels of the flow. The site and its surrounding areas are then examined for physical indicators of impairments, and any such indicators are recorded. The examination continues to encompass any possible outfall damage, abnormal vegetation, poor pool quality, rip-rap condition, and the pipe benthic growth. The site is then analyzed to determine if the flow cause is something other than groundwater infiltration. If other causes are suspected, a sample is taken and sent to a laboratory further testing. This process allows for pollutants as well as illicit discharges entering and exiting the system to be detected.

- d. The illicit discharges entering and exiting the system are addressed through posttest reviews of the collected dry outfall data. Further analysis of flow data allows the Township to trace all flows to their source. For example, when ammonia/potassium ratios in a measured amount of flow are greater than 1.0, it indicates possible sanitary wastewater contamination, while respective detergent or boron ratios of greater than 0.25 mg/L or 0.35 mg/L indicate a possible wash-water contamination. Fluoride ratios of greater than 0.25 mg/L indicate a tap and/or irrigation water source, while not excess ratios whatsoever indicate a natural water source. These results from the traces from these outfalls allow the Township to get a clear view of what sources are producing these illicit discharges, so necessary corrective sanctions may be put in place for violators in question. Specific parameters have been noted during the process to help indicate whether common pollutants and illicit discharges show up in different flow types. The dry weather flow summary can be seen below in Figure 1.1.
- e. The date of the IDD&E's program's latest review/update was **6/30/18**.

- B. **BMP #2:** Develop and maintain a map of your regulated small MS4. The map must also show the location of all outfalls and the locations and names of all surface waters of the Commonwealth that receive discharges from those outfalls.

Measurable Goals: *For renewal permittees, the existing map of your regulated MS4 shall be updated and maintained as necessary during each year of coverage under the permit.*

1. The date of the last revision/update to the storm sewer map was in **09/30/22**.
2. The total number of discharge points that discharge directly to surface waters (outfalls) is **52**.

- C. **BMP #3:** In conjunction with the maps created under BMP #2 (either on the same map or on a different map), renewal permittees shall update the entire storm sewer collection system, including roads, inlets, piping, swales, catch basins, channels, basins, and any other features of the permittee's storm sewer system including municipal boundaries and/or watershed boundaries.

Measurable Goals: *For renewal permittees, update and maintain the map as necessary during each year of permit coverage.*

1. A map that includes roads, inlets, piping, swales, catch basins, channels, basins, municipal boundaries, and watershed boundaries has been completed. It is **on the same map** as for outfalls and receiving waters.
2. The date of the last revision/update to the storm sewer map was in **09/30/22**.

- D. BMP #4: Following the IDD&E program created pursuant to BMP #1, the permittee shall conduct outfall screening, identify the source of any illicit discharges, and remove or correct any illicit discharges using procedures developed under BMP #1.

Measurable Goals: *For all permittees, outfall inspections need to be prioritized according to the perceived chance of illicit discharges within the outfall's contributing drainage area. Observations of each outfall shall be recorded each time an outfall is screened, regardless of the presence of dry weather flow. Proper quality assurance and quality control procedures shall be followed when collecting, transporting, or analyzing water samples. All outfall inspection information shall be recorded on the MS4 Outfall Screening Report. Adequate written documentation shall be maintained to justify a determination that an outfall flow isn't illicit. If an outfall flow is illicit, the actions taken to identify and eliminate the illicit flow also shall be documented.*

1. The Township shall screen all outfalls once during the 5-year permit term.
2. Any dry weather flow shall be analyzed for ammonia, pH, fecal coliform, etc. per the Outfall Screening Report and investigated for its source. Follow-up is required if an illicit discharge is suspected. This information shall be documented with the Township's property files.

- E. BMP #5: Enact a stormwater management ordinance (municipal entities) to implement and enforce a stormwater management program that includes prohibition of non-stormwater discharges to the regulated small MS4.

Measurable Goal: *Renewal permittees must continue to maintain, update, implement, and enforce a Stormwater Management Ordinance that satisfies all applicable requirements.*

Measurable Goal: *Renewal permittees shall update their existing ordinance, if necessary, and submit documentation of completion to Department.*

1. The Township **does** have an ordinance prohibiting non-stormwater discharge. It was enacted on **04/11/2011**.
2. The township did complete and submit its ordinance and letter for an official, engineer, or solicitor that prohibits non-stormwater discharges to the DEP.

- F. 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.

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

1. IDD&E information shall be distributed to public employees, businesses, and the general public during the reporting period. In particular, the BMP shall be satisfied through consistent communication via the Township newsletter and website (and soon cable

channels). Resources such as building permit applications (both residential and commercial) are full of information regarding stormwater for the pre and post construction process. Fliers entitled "Don't Let Stormwater Runoff with Your Time and Money" shall be distributed to all Township contractors and developers. The flier contains information about what stormwater is, permitting requirements and prevention measures to help stop stormwater runoff pollution during the construction process.

2. The Township's contact page allows anyone to quickly notify the Township of any question or concern. The email is sent to the Township's general mailbox and checked on a daily basis during office hours.

MCM #4: CONSTRUCTION SITE STORM WATER RUNOFF CONTROL

Measurable Goals: Prepare and regularly update a document outlining the processes and procedures that occur for issuing NPDES Construction Permits and list of responsibilities by entity (e.g. review plans, directs applicants to CCD, inspections, tracks complaints, and follow-up, etc.)

- A. The Township is relying on PA’s statewide program for stormwater associated with construction activities to satisfy this MCM. For any Township-regulated activities, the preliminary or final approval of subdivision and/or land development plans, the issuance of any building or occupancy permit, the commencement of any earth disturbance, or activity may not proceed until the property owner or applicant or his/her agent has received written approval of a SWM site plan from the municipality and an approval of an adequate erosion and sediment (E&S) control plan review from the municipality or County Conservation District.

Area of Disturbance	Permits/Approvals Required
1 Acres and greater	NPDES Permit/BCCD Adequacy Letter/Township Plan Approval
0 to 0.99 Acres	BCCD Adequacy Letter/Township Approval

1. New Britain Township Responsibilities

- a. Ensure all construction projects within the township’s boundaries are operating with an NPDES construction permit for disturbance 1 acre or larger, and/or have received a County Conservation District Adequacy Letter for earth disturbance between 5,000 SF and 0.99 acres.
- b. Ensure that erosion and sedimentation measures are designed and approved for new development and redevelopment projects that will prevent pollution to the Township’s MS4. Developers or Applicant’s will be required to install, repair, and protect erosion and sedimentation controls and stormwater management features during construction. Maintenance plans must be in place to ensure that these measures continue to work in the manner that they were designed during construction.
- c. Ensure all construction projects are following permit guidelines when regular site checks are conducted throughout the project. For Township regulated activities that require a stormwater review, the Applicant is required to post escrow for the review of the design controls, and for observations during construction, post-construction and prior to closing out any project. All inspections regarding compliance with the stormwater management (SWM) site plan are the responsibility of the municipality.
- d. Projects that propose between 0 and 500 square feet of new impervious are required to plant trees that would reduce runoff volume by 10 cubic feet. Projects that propose between 501 sq. ft. and 1,000 sq. ft. of new impervious are required to plant trees that would reduce runoff volume by 20 cubic feet. Newly planted deciduous trees can reduce runoff volume by six cubic feet. Newly planted evergreen trees can reduce runoff volume by 10 cubic feet. No occupancy permits are issued until these trees are planted.
- e. Once a project is underway, it is the municipality’s responsibility to regularly inspect the construction site and ask for immediate voluntary compliance for any deficiencies with regard to the erosion and sedimentation plan and its implementation. It is also the

Township's responsibility to notify the County Conservation District if a site is found to be out of compliance with state law.

- f. Notification shall set forth the nature of any violation(s) and establish a time limit for correction of these violations(s) and the County Conservation District shall be copied on such correspondence. Said notice may further advise that, if applicable, should the violator fail to take the required action within the established deadline, the work will be done by the municipality and the expense may be charged to the violator. Failure to comply within the time specified may subject a violator to the penalty provisions as specified in the adopted Stormwater Ordinance. All such penalties shall be deemed cumulative and shall not prevent the municipality from pursuing any and all other remedies available in law or equity.
- g. Observations by in-house staff, residents, and site observations by the Township Engineer, are the most common ways violations are found. The staff, Engineer, and/or Bucks County Conservation District shall immediately investigate any potential pollution violations, and follow-up performed until the issue is addressed

2. Bucks County Conservation District Responsibilities

- a. Bucks County Conservation District is delegated by the PA Department of Environmental Protection to enforce Chapter 102 (Erosion and Sediment Control) of PA Title 25 (Environmental Protection). (PA Code Title 25 Chapter 102)
- b. Pennsylvania law requires that any proposed earth disturbance activity that will result in a total of five thousand (5,000) square feet or more of earth disturbance has developed and implemented a written Erosion and Sedimentation Control Plan. These engineered plans depict various erosion controls which must be designed and installed to prevent soil particles from leaving the disturbed areas. (§102.4)
- c. An NPDES permit application (NOI) should be submitted to the Bucks County Conservation District when earth disturbance is one (1) acre or greater.
- d. The District enforces environmental regulation by reviewing submitted plans, and ensuring their adequacy. Once a project is underway, it is the District's responsibility to regularly inspect the construction site, provide written inspection reports if a site is found to be out of compliance with state law, and to impose monetary penalties for ongoing violations.
- e. All complaints issued by the District are carbon copied to the Township. The District regularly follows up with any violations until satisfactorily addressed.

MCM #5: POST-CONSTRUCTION STORMWATER MANAGEMENT IN NEW DEVELOPMENT AND REDEVELOPMENT

- A. BMP's #1-3: The Township is relying on PA's statewide program from MCM #5 BMPs #1-3, so this document shall skip to BMP #4.
- B. BMP #4: The permittee shall enact, implement, and enforce an ordinance (municipal) to address post-construction runoff from new development and redevelopment projects, as well as sanctions and penalties associated with non-compliance, to the extent allowable under State or local law.

Measurable Goal: *All permittees shall submit a letter signed by a municipal official, municipal engineer, or the municipal solicitor as an attachment to their first periodic report certifying the enactment of a stormwater management ordinance that meets the requirements of this Permit.*

- 1. The Township has an ordinance to address post-construction stormwater runoff from new and redevelopment projects, and includes sanctions. The date the ordinance was enacted was **04/11/2011**.
 - 2. The ordinance has been submitted to the DEP with a letter from an official, engineer, or solicitor that certifies the enactment of an ordinance for PCSM activities.
 - 3. The Township has the authority to take enforcement action for failure to properly operate and maintain stormwater practices/facilities.
- C. BMP #5: Develop and implement measures to encourage and expand the use of Low Impact Development in new and redevelopment. Measures also should be included to encourage retrofitting LID into existing development. DEP's Pennsylvania Stormwater Best Management Practices Manual provides guidance on implementing LID practices.

Measurable Goal: *In your inventory of development and redevelopment projects authorized for construction since March 10, 2003, that discharge stormwater to your regulated MS4s, indicate which projects incorporated LID practices.*

Measurable Goal: *Enact ordinances consistent with LID practices and repeal sections of ordinances that conflict with LID practices. Progress with enacting and updating your ordinances to enable the use of LID practices shall be summarized in the periodic reports.*

- 1. The Township encourages Low Impact Development via the Stormwater Ordinance adopted on 04/11/2011, as it applies to regulated activities. The ordinance section states "To the maximum extent practicable, incorporate the techniques for low impact development practices (e.g., protecting existing trees, reducing area of impervious surface, cluster development, and protecting open space) described in the Pennsylvania Stormwater Best Management Practices Manual, Pennsylvania Department of Environmental Protection (PADEP) No. 363- 0300-002 (2006)."
- D. BMP #6: Ensure adequate operation and maintenance of all post-construction stormwater management BMPs installed at all qualifying development or redevelopment projects (including those owned or operated by the permittee).

Measurable Goal: All permittees shall review and update the inspection program annually and shall continue to implement this BMP

Measurable Goal: An inventory of PCSM BMPs shall be developed by permittees and shall be continually updated during the term of coverage under the permit as development projects are reviewed approved and constructed. This inventory shall include all PCSM BMPs installed since March 10, 2003 that discharge directly or indirectly to your regulated small MS4s. The inventory also should include PCSM BMPs discharging to the regulated small MS4 system that may cause or contribute to violation of water quality standard. The inventory shall include: all PCSM BMPs that were installed to meet requirements in NPDES Permits for Stormwater Discharges Associated with Construction Activities approved since March 10, 2003; the exact location of the PCSM BMP; information for BMP owner and entity responsible for BMP Operation and Maintenance (O&M), if different from BMP owner; the type of BMP and the year it was installed; maintenance required for the BMP type according to the Pennsylvania Stormwater BMP Manual or other manuals and resources; the actual inspection/maintenance activities for each BMP; and an assessment by the permittee if proper operation and maintenance occurred during the year and if not, what actions the permittee has taken, or shall take, to address compliance with O&M requirements.

1. The Township shall have a written inspection program to ensure that stormwater BMPs are properly operated and maintained. The current program is attached. The inspection program was last reviewed/updated on **06/30/18**.
2. The Township monitors the operation of stormwater BMPs through site inspections by the Township Engineer and Township Code Enforcement Department prior to starting the 18-month maintenance period for land developments and again prior to closing out the project. In addition, the Bucks County Conservation District observes any new facilities to ensure that they are functioning properly prior to issuing a Notice of Termination of the site NPDES Permit. For smaller projects and other regulated activities, the Township Engineer and Township Code Enforcement review the site for any issues prior to issuing a Final Use and Occupancy Permit for the site. Upon finding a violation, the property owner/developer is notified and forced to come into compliance. Since sites are closely monitored by the Township and Conservation District, there generally no violations in this area (and the ones that occur are caught before they become a problem). Before any permits or activities commence, all projects need to have a Stormwater Maintenance and Operations Agreement and Escrow, regardless of the size of the project. A sample Agreement is attached for reference.
3. The total number of sites with PCSM BMPs installed as of the date of this report was **32**.
4. The total number of sites inspected during this reporting period was **32**.
5. No sites were found to have PCSM BMP deficiencies, and no enforcement actions have been taken during this reporting period.

MCM #6: POLLUTION PREVENTION/GOOD HOUSEKEEPING

- A. BMP #1: Identify and document all facilities and activities that are owned or operated by the permittee and have the potential for generating stormwater runoff to the regulated small MS4.

Measurable Goal: *By the end of the first year of permit coverage, new permittees shall identify and document all types of municipal operations, facilities and activities and land uses that may contribute to stormwater runoff within areas of municipal operations that discharge to the regulated MS4. Renewal permittees should have completed this list during the previous permit term. For all permittees, this information shall be reviewed and updated each year of permit coverage, as needed. Part of this effort shall include maintaining a basic inventory of various municipal operations and facilities.*

1. The Township has identified all facilities and activities owned and operated by the permittee that have the potential to generate stormwater runoff into the MS4.
2. The inventory was last reviewed and updated in **06/30/18**.
3. **Two (2)** new facilities have been added to the inventory during this reporting period.

- B. BMP #2: Develop, implement and maintain a written O&M program for all municipal operations and facilities that could contribute to the discharge of pollutants from the regulated MS4s, as identified under BMP #1.

Measurable Goal: *Renewal permittees shall continue to implement their existing program. All permittees shall review the O&M program annually, edit as necessary, and continue to implement during every year of permit coverage.*

1. The Township did complete and submit its written O&M program to the DEP and is attached.
2. The latest review/update to the O&M program was in **06/30/18**.

- C. 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 municipal operations to your regulated small MS4s.

Measurable Goal: *Renewal permittees shall continue to operate under their existing program. All permittees shall review the training program annually, edit it as necessary, and continue to implement it during every year of permit coverage.*

Measurable Goal: *Your employee training should occur at least annually (i.e. during each permit coverage year) and shall be fully documented in writing and reported in your periodic reports. Documentation shall include the dates of the training, the name of the attendees, the topics covered, and the training presenters.*

1. All employees responsible for maintaining or monitoring the stormwater system or the SWMP shall at minimum undertake at least one relevant training course each year. Additional training courses will be added if a particular issue persists and relevant course material is available.

2. All new employees shall be trained on general MS4 MCM's within one year of employment.
3. Every year employees shall review the township's Operations and Maintenance Manual for both Stormwater Management and Vehicles. This will ensure they are aware of the township's BMPs.
4. The date(s) of employee training, the names of attendees, the topics covered, and the training presenter is attached.
5. The last review/update to the training program was in **06/30/18**.

CONCLUSION

A. Sharing Responsibility

- a. While this SWMP was generated for the officials of New Britain Township, it is likely that bodies of water applicable to this particular SWMP may coincide with the boundaries of Chalfont Borough, New Britain Borough, Hilltown Township, and Doylestown Township. Because of this, it is likely that some procedures, policies, and responsibilities may be shared with these municipalities in certain circumstances.
- b. Responsibility is also shared and maintained between Township officials and residents in determining illicit discharges in public bodies of water. This responsibility allows total transparency between the Township and its residents, and enables an efficient solution to be reached.

B. Reviewing and Updating SWMPs

- a. This SWMP will be checked, edited, and updated on a biannual basis, or every year as needed.

C. Monitoring

- a. Illicit stormwater discharges are closely monitored by the Township, as detailed in the IDD&E section of this program. As stated in section A of this conclusion, the Township requests its residents help monitor, prevent, and eliminate all detected illicit discharges within the Township.

D. Recordkeeping

- a. The Township maintains several tables of data that demonstrate which discharges are encountered, and how and when said discharges are eliminated. The aforementioned tables can be found attached to the end of this document, and are mentioned when relevant throughout the program.

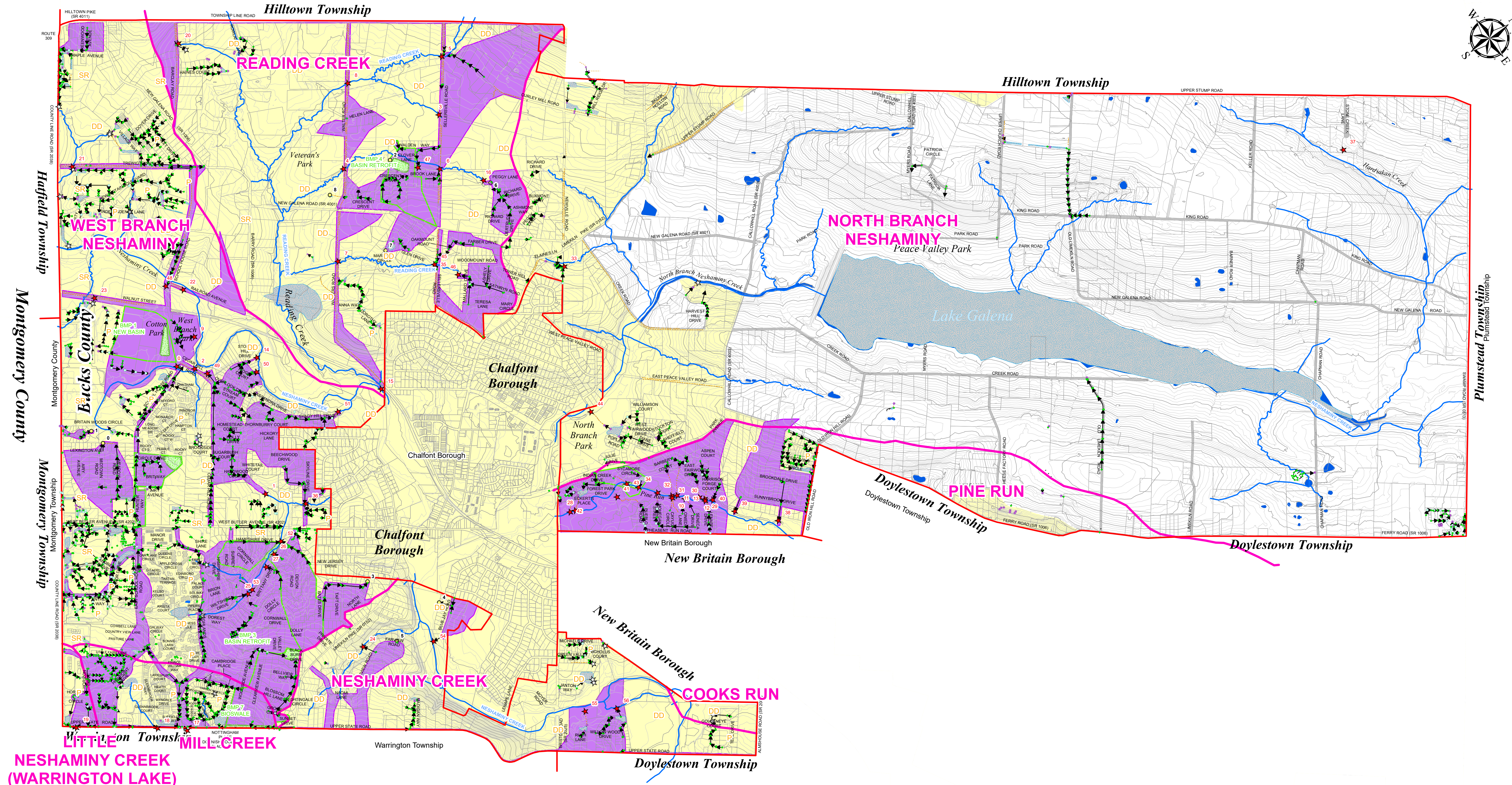
E. Reporting

- a. The Township uses this program, as well as an annual MS4 Progress Report to detail the impairment, pollutants, and control measures being implemented to maintain a healthy storm sewer system.

Appendix A
Outfall and Basin Inspections

[INSERT ANNUAL INSPECTION REPORTS HERE]

Appendix B
Storm Sewer Map



Legend

★ Outfall	□ BMP DA
☆ Private Outfall	□ Parcels
● Inlet	■ BMP
● Endwall	■ Stormwater Management
● Manhole	■ Planning Area
● Observation Point	■ Urbanized Area
— Municipal Boundary	— Municipal Boundary
— Watershed Boundary	■ Hydrology
— Swale	■ Right of Way
— Pipe	— Private Roads
— Surface Waters (DEP)	

Contours

— INDEX
— INTER

PARSING CLASSIFICATION LEGEND

DD = DIRECT DISCHARGE; AREA FLOWS DIRECTLY TO STREAM AND DOES NOT ENTER OR MIX WITH THE MUNICIPALITY'S MS4

P = PRIVATELY OWNED/MAINTAINED; AREA IS NOT MAINTAINED BY MUNICIPALITY AND IS A SEPARTE PRIVATE ENTITY. NO DRAINAGE ENTERS OR MIXES WITH THE MUNICIPALITY'S MS4

SR = STATE ROAD; AREA IS MAINTAINED BY PENNDOT & ALL DRAINAGE TO ROAD IS MAINTAINED BY PENNDOT

**MS4 PRP/TMDL
PLANNING AREA MAP**

NEW BRITAIN TOWNSHIP, BUCKS COUNTY, PA

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JOB NO: 06-03161 DATE: JUNE 2023

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