

**NPDES Stormwater Discharges from MS4
Pollutant Reduction Plan – Donny Brook
Collegeville Borough
Montgomery County, Pennsylvania**

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Prepared For:

Collegeville Borough
491 East Main Street
Collegeville, PA 19426
610-489-9208

Prepared By:

Gilmore & Associates, Inc.
Engineers ♦ Land Surveyors ♦ Planners ♦ GIS Consultants
184 West Main Street, Suite 300
Trappe, PA 19426
(610) 489-4949



**MS4 Pollutant Reduction Plan
Collegeville Borough – Donny Brook
Montgomery County, Pennsylvania**

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Appendix A	Applicable portion of the MS4 Requirements Table (Municipal) Anticipated Obligations for Subsequent NPDES Permit Term (Revised 6/26/2017)
Appendix B	Public Participation <ul style="list-style-type: none">• Public Notice & Proof of Advertisement• Public Comments Received• Public Meeting Agenda and Meeting Minutes• Record of Consideration
Appendix C	Maps <ul style="list-style-type: none">• Collegeville Borough MS4 PRP Map• Collegeville Borough MS4 PRP Land Uses (MapShed) Map
Appendix D	3800-PM-BCW0100m 5/2016 BMP Effectiveness Values
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Collegeville Borough, Montgomery County is submitting this Pollutant Reduction Plan (PRP) in accordance with the requirements of General Permit *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 (MS4)*; specifically, in accordance with the *MS4 Requirements Table (Municipal) Anticipated Obligations for Subsequent NPDES Permit Term (Revised 6/26/2017)*. Collegeville Borough must create a PRP due to discharges from their MS4 to Donny Brook, which has been listed as impaired for Siltation (see Appendix A).

The intent of this MS4 PRP is to establish the existing loading of pollutants discharged from the MS4 to Donny Brook, and to present a plan to reduce these pollutants. This MS4 PRP is organized to follow the *National Pollutant Discharge Elimination System (NPDES) Stormwater Discharges from Small Municipal Separate Storm Sewer Systems Pollutant Reduction Plan (PRP) Instructions* included as part of the *PAG-13 MS4 General Permit* package. This PRP may be evaluated and updated by Collegeville Borough on an as-needed basis, based on its effectiveness in reducing pollutant loads in discharges from the regulated small MS4. If this occurs, Collegeville Borough will work with the Department of Environmental Protection (DEP) for review and approval of any revisions or updates.

Each MS4 PRP must include the following Required PRP Elements:

Section A: Public Participation

Section B: Map

Section C: Pollutants of Concern

Section D: Determine Existing Loading for Pollutants of Concern

Section E: Select BMPs to Achieve the Minimum Required Reductions in Pollutant Loading

Section F: Identify Funding Mechanisms

Section G: Identify Responsible Parties for Operation and Maintenance (O&M) of BMPs

This PRP is organized to follow the above outline of required elements as shown on the following pages. Relevant verbiage from the PRP Instructions is reiterated herein for each of the above required PRP Elements.

A. Public Participation

As part of the preparation of this MS4 PRP, public participation is required. Collegeville Borough shall complete the following public participation measures listed below, and report in the PRP that each was completed.

- The Township shall make a complete copy of the PRP available for public review.
- The Township shall publish, in a newspaper of general circulation in the area, a public notice containing a statement describing the plan, where it may be reviewed by the public, and the length of time the Township will provide for the receipt of comments. The public notice must be published at least 45 days prior to the deadline for submission of the PRP to DEP. **Include a copy of the public notice with the PRP.**
- The Township shall accept written comments for a minimum of 30 days from the date of public notice. **Include a copy of all written comments received from the public with the PRP.**
- The Township shall accept comments from any interested member of the public at a public meeting or hearing, which may include a regularly-scheduled meeting of the governing body of the municipality or municipal authority that is the permittee.
- The Township shall consider and make a record of the consideration of each timely comment received from the public during the public comment period concerning the plan, identifying any changes made to the plan in response to the comment. **Include a copy of the Township's record of consideration of all timely comments received in the public comment period with the PRP.**

Collegeville Borough has completed the above-listed Public Participation measures and all required documentation of public participation is included as Appendix B.

- PRP public notice was published in: [REDACTED]
- Date PRP public notice was published in newspaper: [REDACTED]
- Date PRP was made available for public review/comment: [REDACTED]
- End date for receipt of written comments (30 days from the date of public notice):
[REDACTED]
- Date PRP comments were accepted at a public meeting: [REDACTED]

B. Map

Attach maps that identify **land uses** and the **storm sewershed boundaries** associated with the MS4 that discharge to impaired surface waters, and calculate the storm sewershed area that is subject to Appendix E of PAG-13. In addition, the proposed location(s) of structural BMP(s) that will be implemented to achieve the required pollutant load reductions must be identified on a map.

The map may be the same as that used to satisfy MCM #3 of the PAG-13 General or Individual Permit, with the addition of land use, the storm sewershed boundary, and locations of proposed BMPs, or may be a different map.

The map must be sufficiently detailed to identify the PRP Planning Area relevant to satisfying the requirements of Appendix E, and to demonstrate that BMPs will be located in appropriate storm sewersheds to meet the requirements.

NOTE – Delineation of storm sewersheds associated with individual MS4 outfalls is typically necessary in order to determine the PRP Planning Area. The MS4 may display the storm sewershed for each MS4 outfall or just the PRP Planning Area, at its discretion.

The map may show areas that are to be “parsed” from the PRP Planning Area. In other words, at the MS4’s discretion (subject to DEP rules), certain areas may be shown on the map that are within the Planning Area but are not included in the calculation of land area and existing pollutant loading. Guidance on parsing is outlined below. Note that if parsing is done, BMPs implemented within the parsed area will not count toward achieving pollutant reduction objectives.

Parsing Guidelines for MS4s in Pollutant Reduction Plans

DEP has developed these guidelines to assist owners and operators of MS4s that are required to develop Pollutant Reduction Plans (PRPs) in understanding where it is possible to “parse” land area in the course of developing those plans. For the purpose of this document, parsing is

defined as a process in which land area is removed from a Planning Area in order to calculate the actual or target pollutant loads that are applicable to an MS4.

Parsing is not required by NPDES permits and is therefore optional; however, some MS4 permittees may benefit from parsing. When parsing is done, best management practices (BMPs) implemented within the land area that is parsed may not be considered for meeting pollutant loading reductions.

MS4s must identify the target pollutant loadings (i.e., existing pollutant loading minus loading reduced by existing BMPs). In order to estimate existing pollutant loading, MS4s may parse out appropriate land area.

All parsing must be supported by a map and a determination of the area being parsed and/or appropriate calculations demonstrating how the parsing was done.

Parsing for PRPs

Parsing provides an opportunity for an MS4 permittee to eliminate areas within the storm sewershed that do not drain to the MS4 and areas that are already covered by an NPDES permit (i.e., not a waiver or no exposure certification) for the control of stormwater. For example, the land area of an industrial site that is covered by the PAG-03 General Permit for Stormwater Associated with Industrial Activity that discharges stormwater to the MS4 may be parsed out of the assessment of land area within the storm sewershed that is subject to the calculation of existing pollutant loading. If, however, the industrial land area is removed, BMPs implemented on that land may not be used as credit toward meeting the MS4's pollutant loading reduction requirements. Other examples of land area that may be parsed include:

- The land area associated with non-municipal stormwater NPDES permit coverage that exists within the urbanized area of a municipality (in such cases the entities may submit a combined PRP);
- Land area associated with PennDOT roadways and the Pennsylvania Turnpike (roads and right of ways);

- Lands associated with the production area of a Concentrated Animal Feeding Operation that is covered by an NPDES permit;
- Land areas in which stormwater runoff does not enter the MS4. If an accurate storm sewershed map is developed, these lands may be parsed or excluded as part of that process. Potential examples include homeowner's associations and schools which do not contain municipal roads or other municipal infrastructure.

If parsing is initially done for the PRP but the MS4 permittee decides later that it would be in their best interests to include that land in the PRP, the permittee may submit a modified PRP to DEP, following the public participation requirements of Appendix E of the permit.

The MS4 PRP map(s) shall also show the proposed locations of structural BMPs that will be implemented to achieve the required pollutant load reductions.

The Collegeville Borough MS4 PRP Map identifies the PRP Planning Area, which includes all storm sewershed boundaries, as well as the proposed locations of structural BMPs to be implemented to achieve required pollutant load reductions. The PRP Planning Area was calculated to be 304 acres (please see Appendix E, "C:\MapShed\Runfiles\DonnyBrookUA\Output\DonnyBrookU\9190_ua.csv", "Area1").

For clarity, land uses within the PRP Planning Area are shown separately on the Collegeville Borough MS4 PRP Land Uses (MapShed) Map.

The above referenced Maps are included in Appendix C.

C. Pollutants of Concern

Identify the pollutants of concern for each storm sewershed or the overall PRP Planning Area.

The term “nutrients” refers to “Total Nitrogen” (TN) and “Total Phosphorus” (TP) unless specifically stated otherwise in DEP’s latest Integrated Report. The terms “sediment,” “siltation,” and “suspended solids” all refer to inorganic solids and are hereinafter referred to as “sediment.” The term, “storm sewershed” is defined in the PAG-13 General Permit as the land area that drains to the municipal separate storm sewer from within the jurisdiction of the MS4 permittee. This term is used in these instructions as well as the term “PRP Planning Area” (or “Planning Area”), which refers to all of the storm sewersheds that an MS4 must calculate existing loads and plan load reductions for.

For all PRPs, MS4s shall calculate existing loading of the pollutant(s) of concern in lb/year; calculate the minimum reduction in loading in lb/year; select Best Management Practice(s) (BMP(s)) to reduce loading; and demonstrate that the selected BMPs will achieve the minimum reductions.

For PRPs developed for Appendix E, impaired waters, the pollutant(s) are based on the impairment listing, as provided in the MS4 Requirements Table. If the impairment is based on siltation only, a minimum 10% sediment reduction is required. If the impairment is based on nutrients only or other surrogates for nutrients (e.g., “Excessive Algal Growth” and “Organic Enrichment/Low D.O.”), a minimum 5% TP reduction is required. If the impairment is due to both siltation and nutrients, both sediment (10% reduction) and TP (5% reduction) must be addressed. PRPs may use a presumptive approach in which it is assumed that a 10% sediment reduction will also accomplish a 5% TP reduction. However, MS4s may not presume that a reduction in nutrients will accomplish a commensurate reduction in sediment.

The impaired downstream water is Donny Brook, which has an impairment of Siltation. Since the impairment is siltation, a minimum 10% reduction is required. This MS4 PRP presents the minimum reduction in loading for siltation as pounds per year (lb/yr).

D. Determine Existing Loading for Pollutants of Concern

Identify the date associated with the existing loading estimate. Calculate the existing loading, in lbs. per year, for the pollutant(s) of concern in the PRP Planning Area.

There are several possible methods to estimate existing loading, ranging from simplistic to complex. One method to estimate existing loading that is acceptable to DEP is to determine the percent impervious and pervious surface within the urbanized area of the storm sewershed and calculate existing loading by multiplying the developed impervious and developed pervious land areas (acres) by pollutant loading rates (lb/acre/year) (“simplified method”). The MS4 may use loading rates for undeveloped land for areas outside of the urbanized area which flows into the urbanized area. Where structural BMPs are currently in place and are functioning, the existing loading estimate may be reduced to account for pollutant reductions from those BMPs.

Use of DEP’s simplified method is not required. Any methodology that calculates existing pollutant loading in terms of lbs. per year, evaluates BMP-based pollutant reductions utilizing the BMP effectiveness values contained in 3800-PM-BCW0100m or Chesapeake Bay Program expert panel reports, uses average annual precipitation conditions, considers both overland flow and stream erosion, and is based on sound science may be considered acceptable.

Whatever tool or approach that is used to estimate existing loading from the PRP Planning Area must also be used to estimate existing loading to planned BMPs. This avoids errors in percent pollutant removal calculations that would result if different methods were used. Later BMP design efforts will usually apply a more sophisticated method than used in planning to calculate load to a BMP. The design loading may not however be used to alter the assumed pollutant reduction by the BMP unless the PRP is revised to apply the more sophisticated method to the load from the storm sewershed as a whole.

MS4s may claim “credit” for structural BMPs implemented prior to development of the PRP to reduce existing loading estimates. In order to claim credit, identify all such structural BMPs in Section D of the PRP along with the following information:

- A detailed description of the BMP;
- Latitude and longitude coordinates for the BMP;
- Location of the BMP on the storm sewershed map;
- The permit number, if any, that authorized installation of the BMP;
- Calculations demonstrating the pollutant reductions achieved by the BMP;
- The date the BMP was installed and a statement that the BMP continues to serve the function(s) it was designed for; and
- The operation and maintenance (O&M) activities and O&M frequencies associated with the BMP.

The MS4 permittee may optionally submit design drawings of the BMP for previously installed or future BMPs with the PRP.

Existing loading must be calculated and reported for the portion of the Planning Area which drains to impaired waters as of the date of the development of the PRP. MS4s may not claim credit for street sweeping and other non-structural BMPs implemented in the past, and an MS4 may not reduce its obligations for achieving permit term pollutant load reductions through previously installed BMPs. If structural BMPs were implemented prior to development of the PRP and continue to be operated and maintained, the MS4 may claim pollutant reduction credit in the form of reduced existing loading.

An MS4 may use all BMPs installed prior to the date of the load calculation to reduce its estimate of existing pollutant loading. For example, if a rain garden was installed ten years ago and is expected to remove 100 lbs. of sediment annually, and the overall annual loading of sediment in the storm sewershed is estimated to be 1,000 lbs. without specifically addressing the rain garden, an MS4 may not claim that the rain garden satisfies its obligations to reduce sediment loading by 10%. The MS4 may, however, use the rain garden to demonstrate that the existing load is 900 lbs. instead of 1,000 lbs., and that 90 lbs. rather than 100 lbs. needs to be reduced during the term of permit coverage.

Each impairment identified on the MS4 Requirements Table (“Table”) must be addressed in a PRP document. The Table listings for each MS4 are different because they reflect local conditions, which is why an MS4 must carefully interpret the information on the Table.

NOTE - MapShed, or any other watershed model where channel erosion is explicitly modeled, should be run on a minimum of ~10 mi² area to properly account for downstream channel impacts and include impaired waters identified in the MS4 Requirements Table. Aggregation of these waters up to approximately the 12-digit HUC scale for modeling purposes is acceptable. Modeling may not be done at the individual storm sewershed or municipal scale where the extent of downstream impact is not included in load calculation.

For PRPs developed for impaired waters (Appendix E), the pollutant(s) are based on the impairment listing, as provided in the MS4 Requirements Table. If the impairment is based on siltation only, a minimum 10% sediment reduction is required. If the impairment is based on nutrients only or other surrogates for nutrients (e.g., “Excessive Algal Growth” and “Organic Enrichment/Low D.O.”), a minimum 5% TP reduction is required. If the impairment is due to both siltation and nutrients, both sediment (10% reduction) and TP (5% reduction) must be addressed. PRPs may use a presumptive approach in which it is assumed that a 10% sediment reduction will also accomplish a 5% TP reduction. However, MS4s may not presume that a reduction in nutrients will accomplish a commensurate reduction in sediment.

All MS4s must use the BMP effectiveness values contained within DEP’s BMP Effectiveness Values document (3800-PM-BCW0100m) or Chesapeake Bay Program expert panel reports for BMPs listed in those resources when determining pollutant load reductions in PRPs, except as otherwise approved by DEP. An example of other approaches that may be approved by DEP include the use of thoroughly vetted mechanistic models with self-contained BMP modules (e.g., Storm Water Management Model (SWMM), WinSLAMM) to demonstrate achievement of reduction targets. Application of these data intensive models could allow for a streamlining of the planning and design phases of BMPs that may provide future cost savings as municipalities move toward implementation of the plan. Such resources must be documented in the PRP, and must reflect both overland flow and in-stream erosion components.

NOTE - Calculation of sediment load reductions for PRP purposes using the *Expert Panel to Define Removal Rates for Individual Stream Restoration Projects* report should be done as follows:

- Where existing sediment loads were calculated using modeling at a local watershed scale, the default rate to be used is 115 lb/ft/yr. This default rate comes from a convergence of MapShed modeled streambank erosion loads from a group of urbanized watersheds, the 248 lb/ft default edge-of-field (EOF) rate in the Expert Panel Report with the 50% efficiency uncertainty factor specified for the Protocols applied, and field data were collected following the BANCS methodology where projects have been implemented and load reductions calculated using the Protocols.

NOTE – Use of default effectiveness values (115 lb/ft/yr) will be accepted for the subsequent permit term. It is recommended that the data required to complete load calculations using the Protocols be collected during the design phase for use in subsequent load reduction calculations.

NOTE – Desktop MapShed users may not use the streambank restoration or street sweeping components included in the MapShed BMP editor for pollutant reduction calculations. Pollutant reductions associated with streambank restoration projects must use the methods described above; whereas, reductions from street sweeping must be calculated in accordance with the *Recommendations of the Expert Panel to Define Removal Rates for Street and Storm Drain Cleaning Practices* or the BMP Effectiveness Values Table.

NOTE – If BMP effectiveness values are updated in DEP’s BMP Effectiveness Values document or in Chesapeake Bay Program expert panel reports between the time the PRP is approved and the time the final report is developed to document compliance with the permit, those updated effectiveness values may optionally be used.

MapShed was utilized to compute the existing sediment loading of the PRP Planning Area, which drains to Donny Brook. The date the existing loading was calculated / the date of development of this PRP is September 2017.

Collegeville Borough has a total existing sediment loading of 217,204 lbs/year in its Donny Brook storm sewershed (please see Appendix E, "C:\MapShed\Runfiles\DonnyBrookUA\Output\DonnyBrookU\9190_ua.csv", "Area1").

E. Select BMPs to Achieve the Minimum Required Reductions in Pollutant Loading

Identify the minimum required reductions in pollutant loading. Applicants must propose the implementation of BMP(s) or land use changes within the PRP Planning Area that will result in meeting the minimum required reductions in pollutant loading within the Planning Area. These BMP(s) must be implemented within 5 years of DEP's approval of coverage under the PAG-13 General Permit or an individual permit, and may be located on either public or private property. If the applicant is aware of BMPs that will be implemented by others (either in cooperation with the applicant or otherwise) within the Planning Area that will result in net pollutant loading reductions, the applicant may include those BMPs within its PRP.

Historic street sweeping practices should not be considered in calculating credit for future practices. All proposed street sweeping practices may be used for credit if the minimum standard is met for credit (see 3800-PM-BCW0100m). In other words, if sweeping was conducted 1/month and will be increased to 25/year in the future, the MS4 does not need to use the "net reduction" resulting from the increased sweeping; it may take credit for the full amount of reductions from 25/year sweeping.

NOTE – Street sweeping may be proposed as a BMP for pollutant loading reductions if 1) street sweeping is not the only method identified for reducing pollutant loading, and 2) the BMP effectiveness values contained in 3800-PM-BCW0100m or Chesapeake Bay Program expert panel reports are utilized.

The names and descriptions of BMPs and land uses reported in the PRP should be in accordance with the Chesapeake Bay Program Model. The names and descriptions are available through CAST (log into www.casttool.org, select "Documentation," select "Source Data" and see worksheets named "Land Use Definitions" and "BMP Definitions").

Opportunities for BMP installation vary across a municipality, and for that reason MS4s with multiple PRP obligations need not propose BMPs to address each impairment listed in the Table during the permit term. The existing loading must be calculated for the entire PRP

Planning Area which drains to impaired waters, but pollutant controls to be installed during the subsequent permit term may be located such that they reduce the load in one sub-watershed by less than 10% and by more than 10% in another (as long as the overall amount of lbs. reduced constitutes 10% of the existing loading for the entire PRP Planning Area).

MS4s may propose and take credit for only those BMPs that are not required to meet regulatory requirements or otherwise go above and beyond regulatory requirements. For example, a BMP that was installed to meet Chapter 102 NPDES permit requirements for stormwater associated with construction activities may not be used to meet permit term minimum pollutant reductions unless the MS4 can demonstrate that the BMP exceeded regulatory requirements; if this is done, the MS4 may take credit for only those reductions that will occur as a result of exceeding regulatory requirements.

The impairment is siltation, which requires a minimum 10% reduction. The required reduction is 21,720 lbs/year. The reduction is calculated as follows:

The storm sewershed (the PRP Planning Area) that drains to the municipal separate storm sewer system within the jurisdiction of the MS4 to the Donny Brook has been delineated using PAMAP data known as Light Detection and Ranging (LiDAR) contours. For Collegetown Borough, the PRP Planning Area consists of 304 acres. The Donny Brook watershed is contained within the Perkiomen Creek Basin in MapShed, which consists of 7,047 acres.

Drainage areas to proposed BMP locations have also been delineated (BMP DA) using LiDAR contours. There are four (4) BMPs proposed (infiltration facilities). These watersheds were converted into GIS data for use in the MapShed program, which was utilized in the development of this MS4 PRP to determine the loading of siltation from Collegetown Borough in the Donny Brook watershed. Please note that per discussions with Barry Evans, it was determined that the best way to model the storm sewersheds / PRP Planning Area and the BMP watersheds in the MapShed program was as urban areas. This way, the necessary information (loading, land uses, etc.) could be obtained for the watersheds of interest while still correctly using MapShed to model on a watershed basis.

The first MapShed model run used the PRP Planning Area as an “urban area” to determine the total Donny Brook watershed loading as well as the loading exclusively from the MS4 storm sewershed(s) / PRP Planning Area. The loading from the “urban area” (PRP Planning Area) from this model run is used to calculate the required siltation load reduction (i.e., 10% of this load).

Collegeville Borough is proposing to install BMP infiltration facilities with a goal of capturing and infiltrating the runoff generated from 1.5" of rainfall from the BMP drainage areas, as well as approximately one hundred (100) feet of streambank restoration.

Other model runs were performed using the four (4) BMP drainage areas as “urban areas” to ascertain their land use information. These areas total forty-four (46) acres. The land use information from each of these BMP drainage areas is then utilized in the BMP Data function in GWLF-E.

Models were then run applying an Infiltration Basin BMP with 1.5" Rainfall Captured for each of the BMP area, which utilizes an efficiency rate of 0.82 for TSS. Note that per the BMP Effectiveness Values from DEP (3800-PM-BCW0100m 5/2016), Infiltration Practices w/Sand, Veg. has a BMP Efficiency Value of 95%; therefore, the MapShed efficiency rate is acceptable.

The initial model run of the Donny Brook basin yielded the existing loading of the entire basin as 3,990,135 lbs. Subtracting the entire basin loading from this for each of the four individual BMP runs, the reduction from the four BMPs under consideration is 26,829 lbs. Recall the first model run yielded the MS4 loading of 217,204 lbs/year, 10% of which must be removed by BMPs (21,720 lbs/year). (Please see Appendix E, “C:\MapShed\Runfiles\CollegevilleBMPs\Output\CollegeBMPArea*-9190_ua.csv”, where * is 1, 2 and 3, as well as “C:\MapShed\Runfiles\CollegevilleThirdAve\Output\CollegeThirdAveBMP-9190_ua.csv”).

Stream bank restoration and street sweeping are calculated outside of the MapShed program, per the PRP instructions, with streambank restoration as 115 lbs/ft/yr reduction. Therefore, the proposed streambank restoration of one hundred (100) feet results in 11,500 lbs./yr (i.e., 100 ft * 115 lbs/ft/yr) reduction.

The final total proposed sediment reduction is therefore 35,919 lbs. (i.e., 24,419 lbs. + 11,500 lbs.). The actual reductions will be refined at the time of design of each BMP.

TABLE E-1: REQUIRED 10% SILTATION REDUCTION

Existing Load (lb/yr)	217,204
Percent Reduction	10%
Required Reduction (lb/yr)	21,720
Proposed Reduction (lbs./yr)	35,919

Collegeville Borough plans to achieve the sediment reduction by designing, constructing, operating and maintaining Best Management Practices (BMPs), namely by installing four (4) infiltration facilities and installing one hundred (100) feet of streambank restoration. Collegeville Borough is required to implement this plan over the next five (5) years.

The Donny Brook Storm Sewersheds / PRP Planning Area require a 10% percent reduction in siltation (sediment). Table E-2 is a summary of the proposed BMPs under consideration, including BMP ID (as indicated on PRP Map), location, type, area treated, and sediment removed. Note that these proposed load reductions cannot be verified until the time of BMP design.

TABLE E-2: SUMMARY OF PROPOSED BMPS

BMP ID	BMP LOCATION	BMP TYPE	AREA TREATED BY BMP	SEDIMENT REMOVED BY BMP (lbs./yr)
1	Clahor Ave. between Maykut and Lloyd Ave	Infiltration Basin	17 ac.	±9,815
2	Stratford Ave and Shakespeare Dr.	Infiltration Basin	17 ac.	±9,815
3	Carmen Dr.	Infiltration Basin	10 ac.	±5,789
4	Third Avenue	Infiltration Basin	2 ac.	±1,410
N/A	Unnamed Tributary	Streambank Restoration	100 FT	11,500

The following table summarizes the sediment load and required and proposed reductions for Collegeville Borough’s Donny Brook Storm Sewershed / PRP Planning Area.

TABLE E-3: MS4 PRP STRATEGY SUMMARY

Description	Value	Unit
Donny Brook Storm Sewershed / PRP Planning Area	304	acres
Existing Sediment Load	217,204	lb/year
Required Sediment Pollutant Load Reduction Percentage	10%	lb/year
Minimum Required Pollutant Load Reduction	21,720	lb/year
Proposed Potential Sediment Load Reduction from BMPs	38,329	lb/year

F. Identify Funding Mechanism(s)

Prior to approving coverage DEP will evaluate the feasibility of implementation of an applicant's PRP. Part of this analysis includes a review of the applicant's proposed method(s) by which BMPs will be funded. Applicants must identify all project sponsors and partners and probable funding sources for each BMP.

Funding sources for the proposed BMP projects outlined in this PRP include the following:

- MS4 General Fund
- MS4 Dedicated Stormwater Fund
- Bond
- Developer Cooperation
- MS4 Stormwater Fee
- Grant Funding
- PennVest Low-Interest Loan

Collegeville Borough will be working in the following five years (i.e., during the permit term) to determine the best funding source for each proposed BMP project, as each project is undertaken.

G. Identify Responsible Parties for Operation and Maintenance (O&M) of BMPs

Once implemented, the BMPs must be maintained in order to continue producing the expected pollutant reductions. Applicants must identify the following for each selected BMP:

- The party(ies) responsible for ongoing O&M;
- The activities involved with O&M for each BMP; and
- The frequency at which O&M activities will occur.

MS4 permittees will need to identify actual O&M activities in Annual MS4 Status Reports submitted under the General Permit. Table G-1 lists the required information.

TABLE G-1 OPERATION AND MAINTENANCE OF BMPs

NAME OF BMP	RESPONSIBLE PARTY	O&M ACTIVITY & FREQUENCY
1	Collegeville Borough	Per PA BMP Manual (latest revision)
2	Collegeville Borough	Per PA BMP Manual (latest revision)
3	Collegeville Borough	Per PA BMP Manual (latest revision)
4	Collegeville Borough	Per PA BMP Manual (latest revision)
Streambank Restoration	Collegeville Borough	Per PA BMP Manual (latest revision)

H. GENERAL INFORMATION

Submission of PRP: Attach one copy of the PRP with the NOI or individual permit application that is submitted to the regional office of DEP responsible for reviewing the NOI or application. In addition, one copy of the PRP (not the NOI or application) must be submitted to DEP's Bureau of Clean Water (BCW). BCW prefers electronic copies of PRPs, if possible. Email the electronic version of the PRP, including map(s) (if feasible), to RA-EPPAMS4@pa.gov. If the MS4 determines that submission of an electronic copy is not possible, submit a hard copy to: PA Department of Environmental Protection, Bureau of Clean Water, 400 Market Street, PO Box 8774, Harrisburg, PA 17105-8774.

PRP Implementation and Final Report: Under the PAG-13 General Permit, the permittee must achieve the required pollutant load reductions within 5 years following DEP's approval of coverage under the General Permit, and must submit a report demonstrating compliance with the minimum pollutant load reductions as an attachment to the first Annual MS4 Status Report that is due following completion of the 5th year of General Permit coverage.

For example, if DEP issues written approval of coverage to a permittee on June 1, 2018, the required pollutant load reductions must be implemented by June 1, 2023 and the final report documenting the BMPs that were implemented (with appropriate calculations) must be attached to the annual report that is due September 30, 2023.

Collegeville Borough will submit the PRP in accordance with the above requirements.