NPDES and Stormwater Update

Changing Expectations

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Hydraulic Engineer.

March 20 – 21, 2025

WCD Engineers Workshop

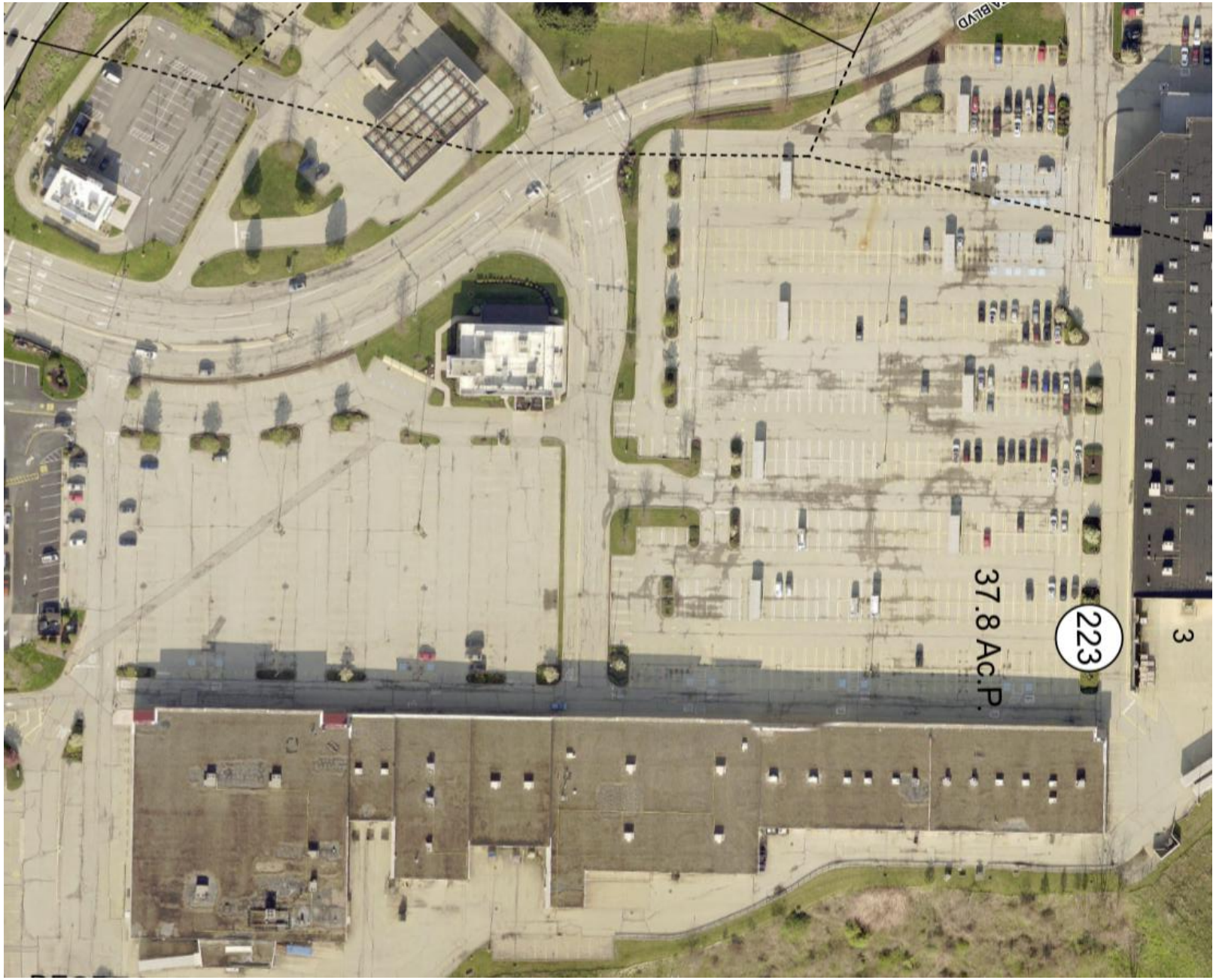
Saint Vincent College

Thinking about stormwater…

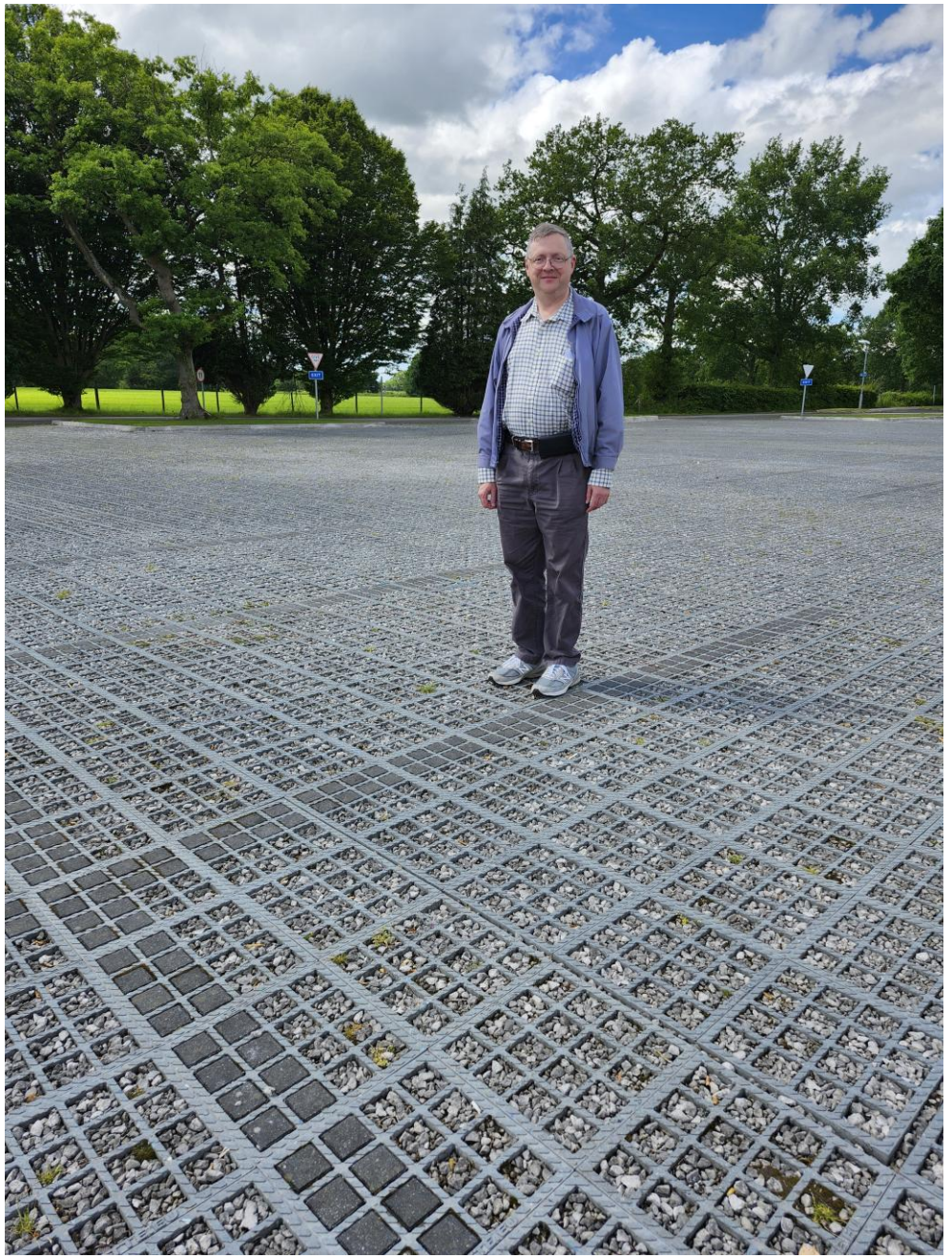
Photo - Pittsburgh Post-Gazette

Saint Patrick's Day Flood of 1936, at the confluence of the Allegheny and Monongahela Rivers, Pittsburgh, PA

Google™ estimates that there are 2,000,000,000 parking spaces in the US



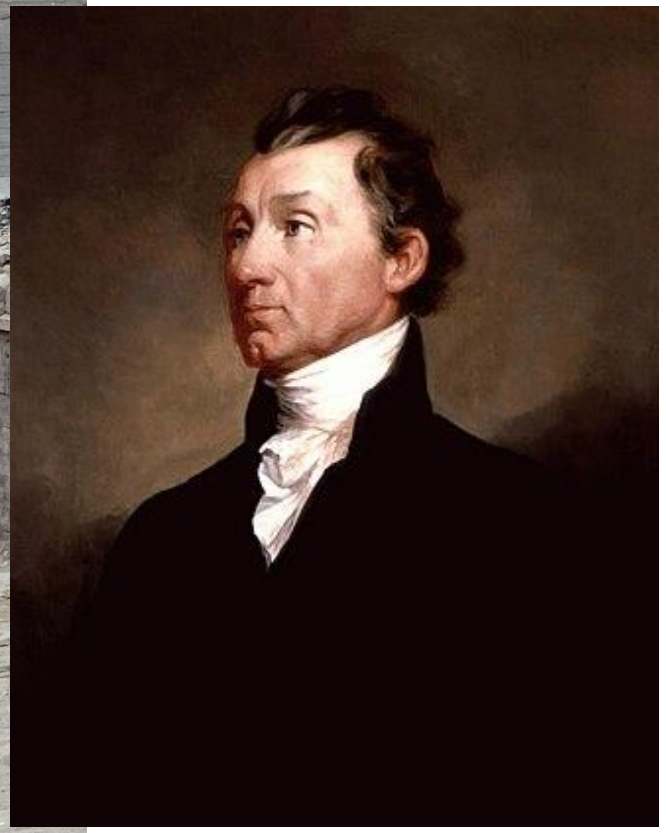
Permeable pavement at Jodrell Bank, England!



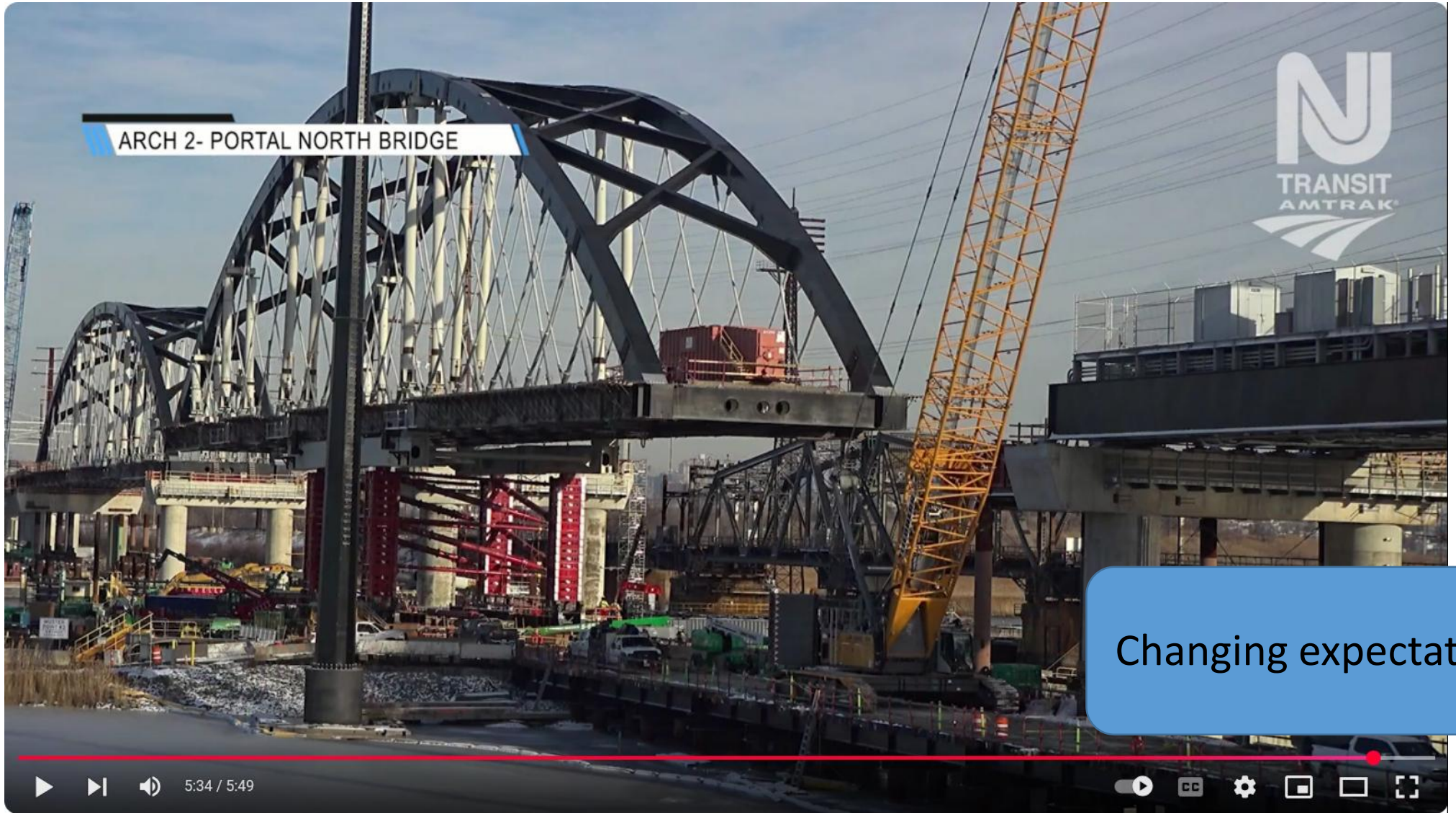
Permeable pavement at the Conservation District's new Solar Observatory

Think about Stormwater Management before you start to design!

President James Monroe dedicated this bridge on July 4, 1818



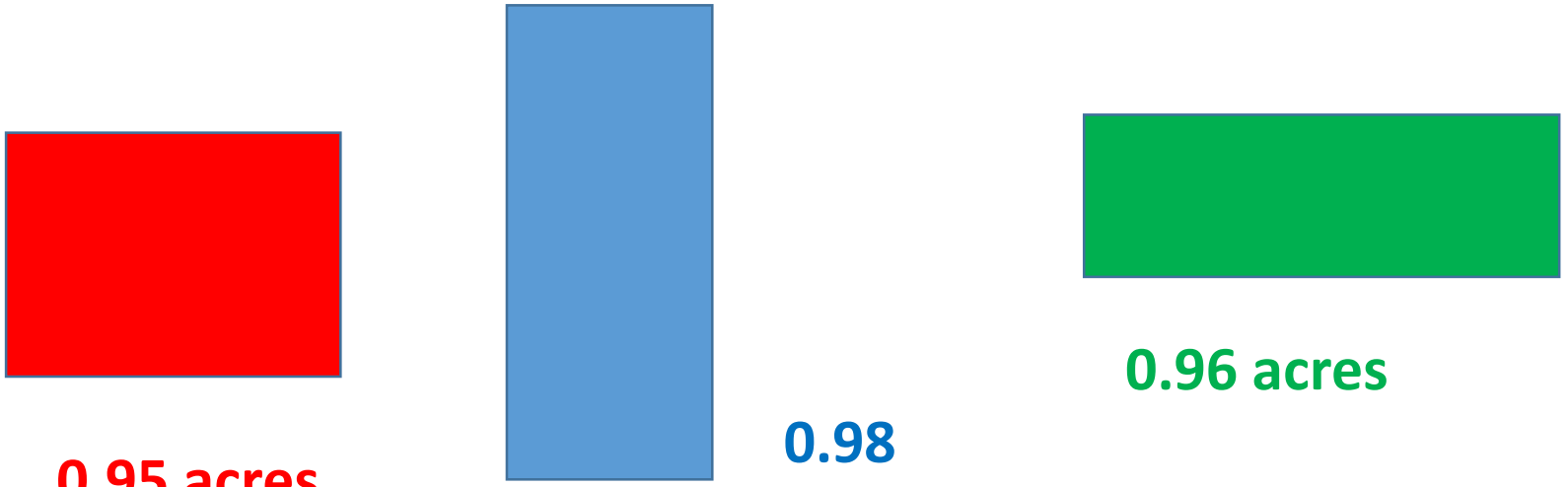
This bridge will carry 450 trains a day, with 200,000 riders



Changing expectations

Who needs NPDES ??

- Earth disturbance > 1 acre (43,560 square feet) *over the life of the project.*
- Earth disturbance on any portion, part, or stage of a larger *common plan of development* which involves disturbing > 1 acre

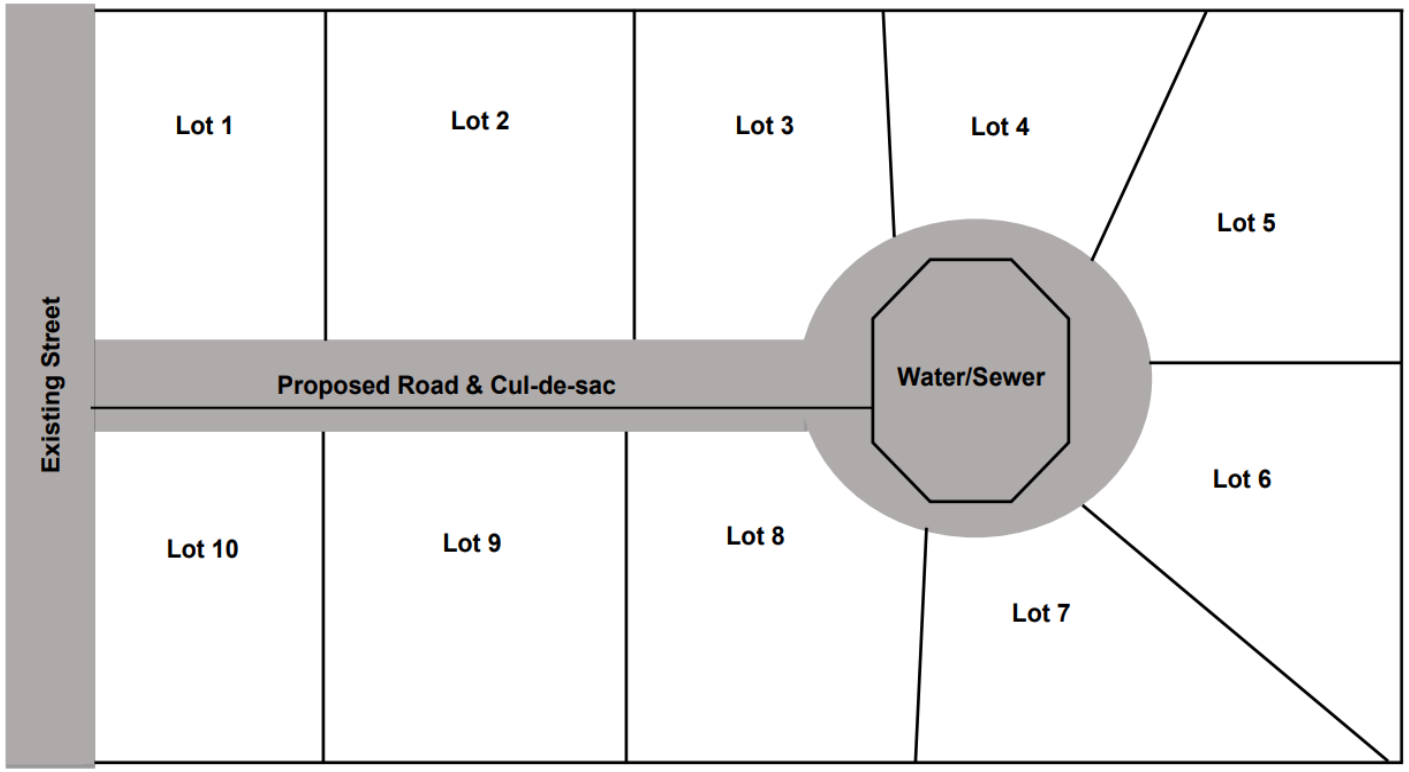


Common Plan of Development

- All lots included in a common plan of development or sale require NPDES coverage until completed
- NPDES coverage is the developer's responsibility
- If the common plan of development or sale is sold to a new developer then the NPDES permit coverage is to be transferred
- Building permits should be withheld by the municipality if a current NPDES permit is not obtained and current for the life of the project

What does a single-family home include, *over the life of the project*?

Figure 7.B



https://files.dep.state.pa.us/Water/BPNPSM/StormwaterManagement/ConstructionStormwater/Common_Plan_FAQ.pdf

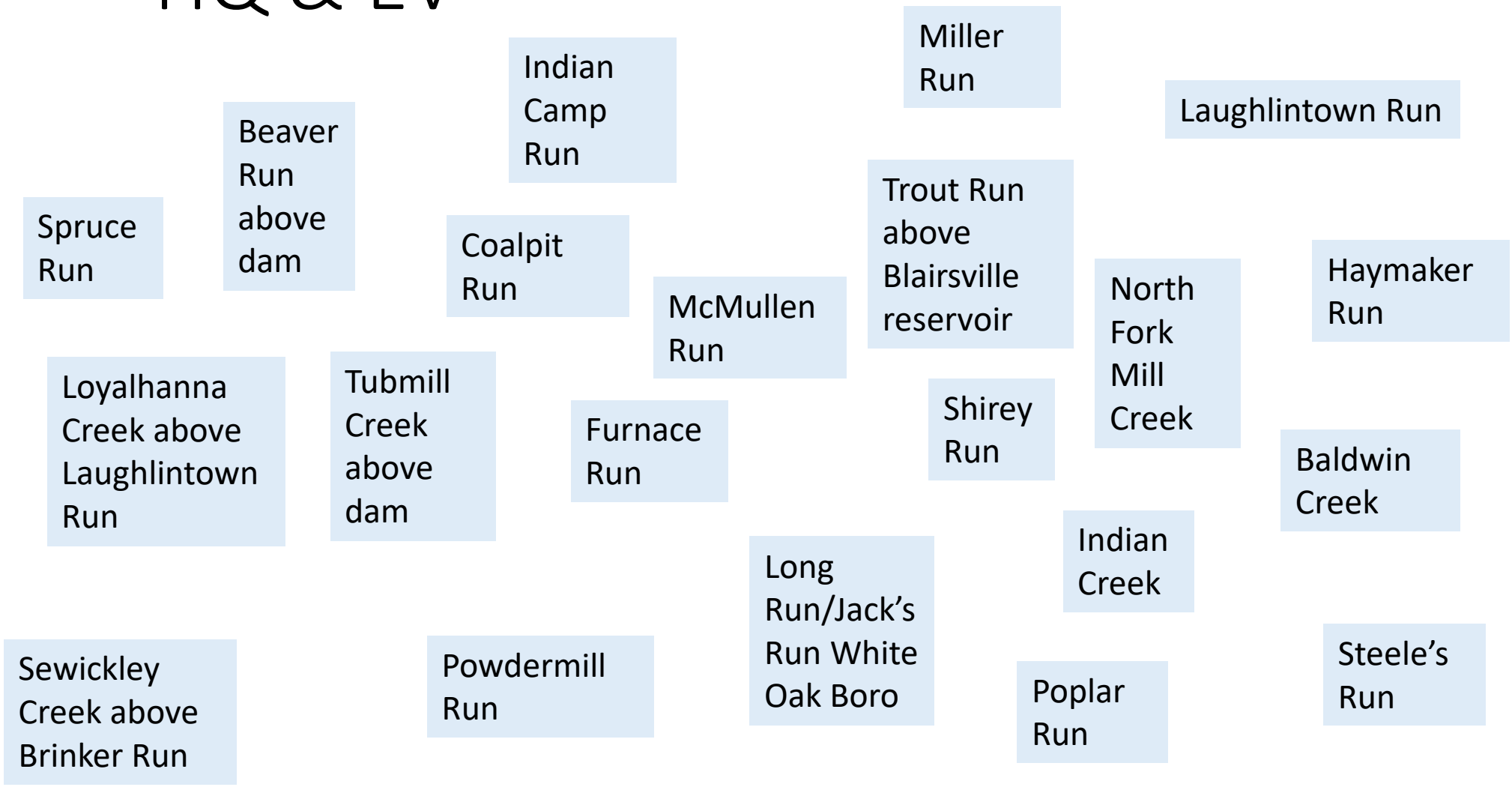
Common Plan of Development or Sale FAQ / Revised September 14, 2023 / Page 4

NPDES: general or individual?

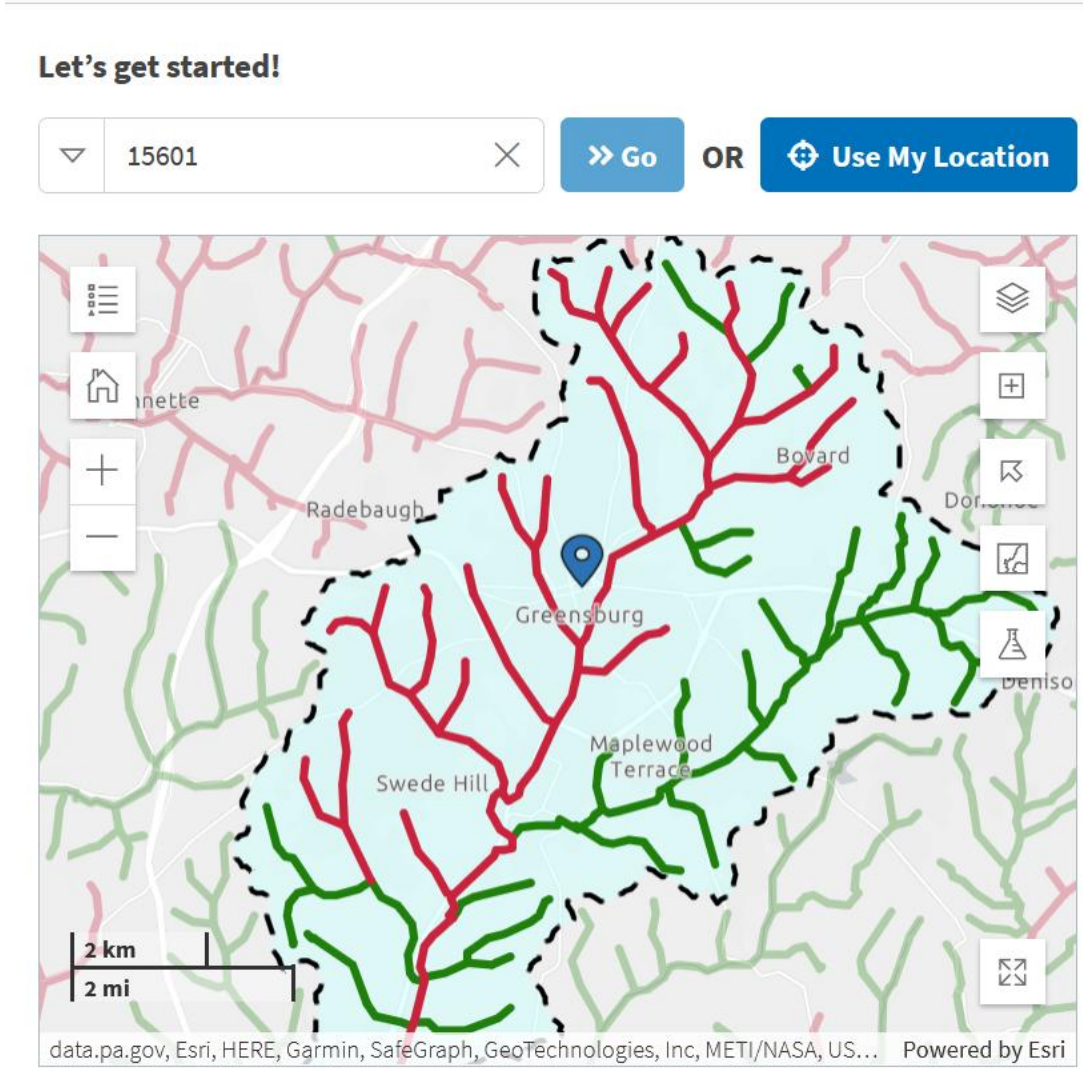
- NPDES Notice of Intent (General Permit or PAG02) → **Review by WCD**
  - Most construction sites disturbing > 1 acre
- NPDES (Individual permit) → **Review by WCD & SWRO**, **FINAL Review by SWRO**, **Permit issued by SWRO**
  - Earth Disturbance in a Special Protection watershed (High Quality or Exceptional Value) ***List available from WCD***
  - Earth Disturbance on a site where there may be contamination

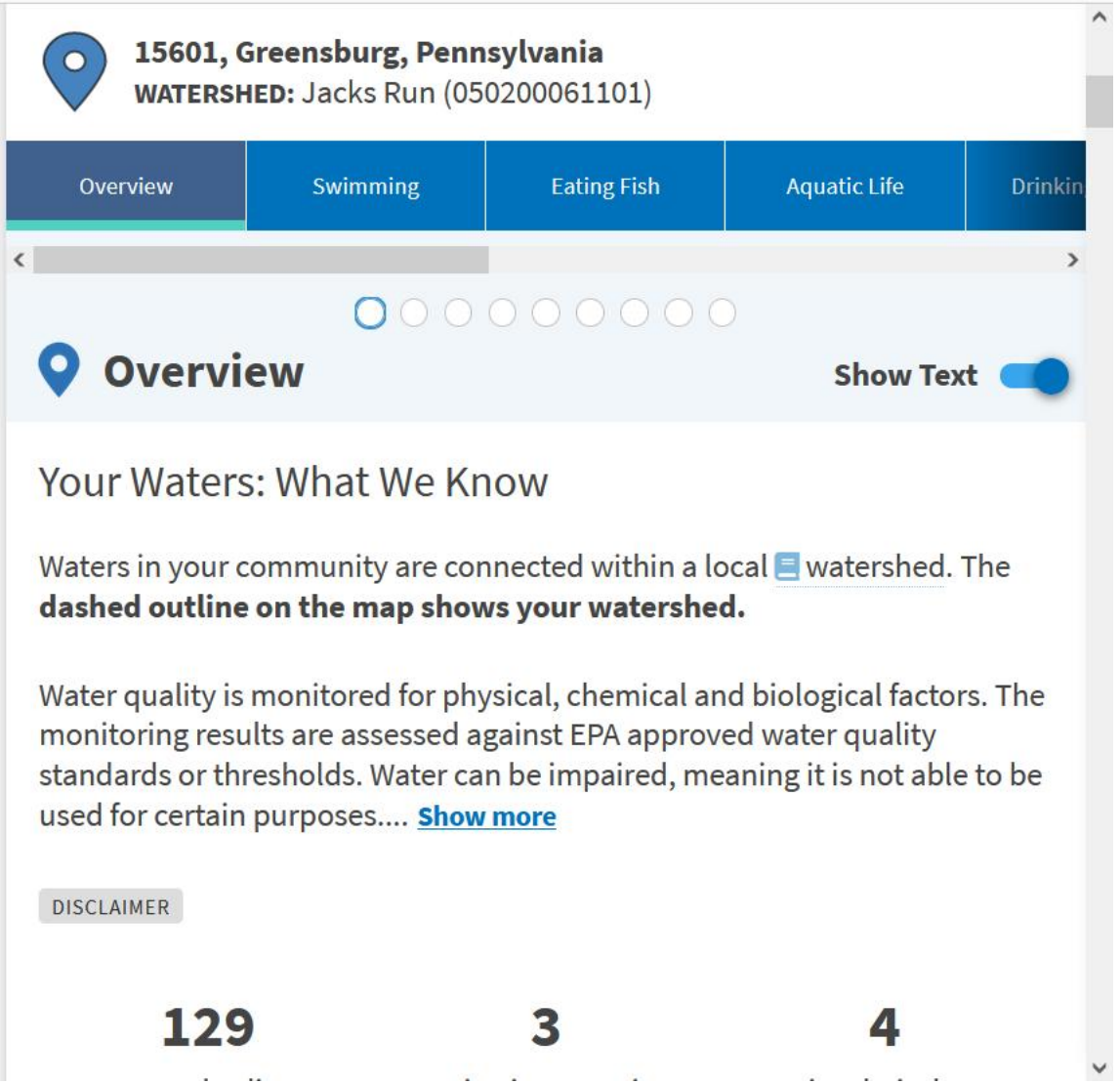
Act 2 Sites, Brownfields

Be sure you find the right stream: HQ & EV



Using EPA's How's My Waterway site:

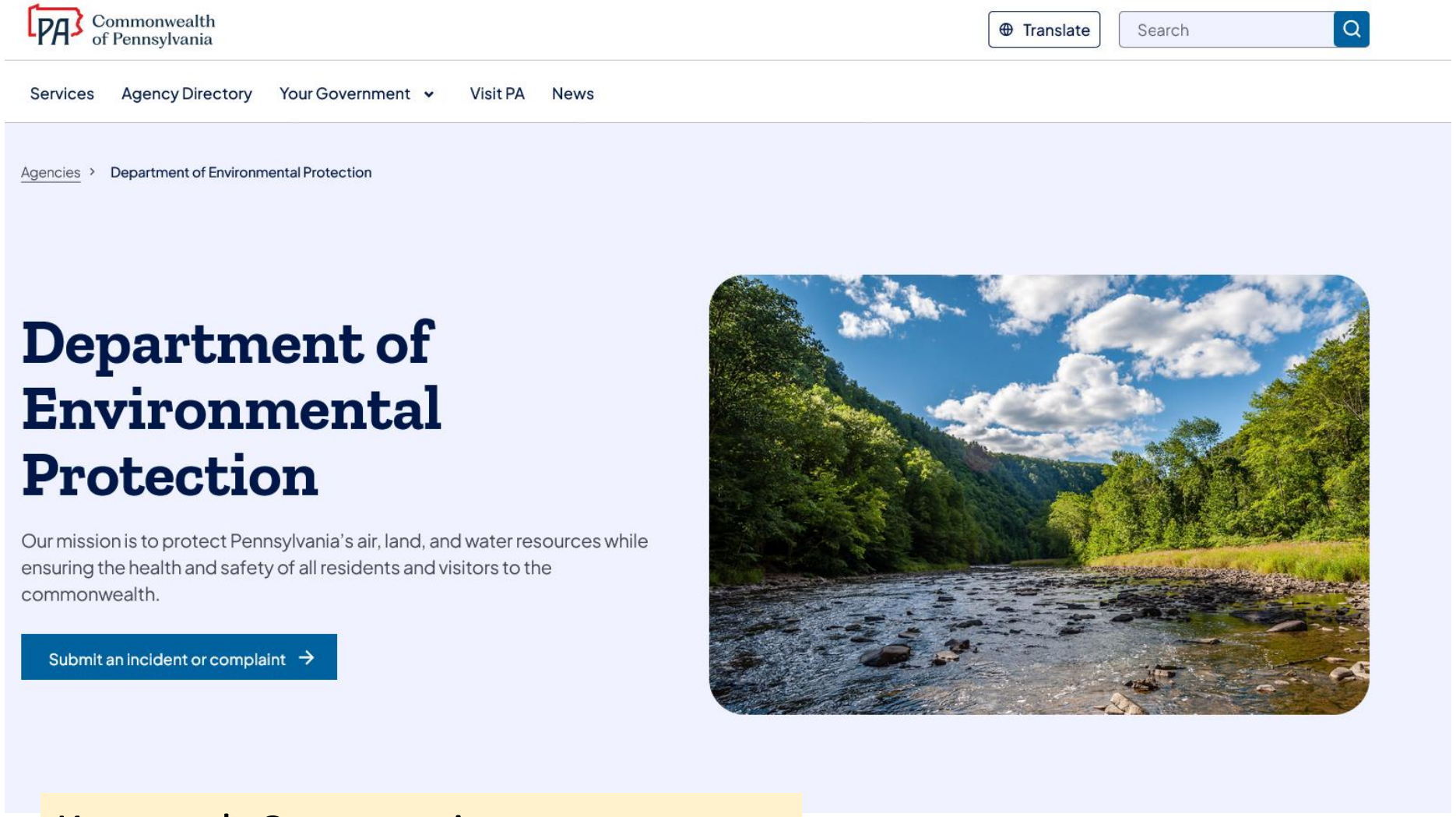




If you need an Individual NPDES permit

- Contact Tammy Woodward at WCD to get started.
- Contact the DEP regional office to set up a pre-application meeting.
- The Conservation District can help you but you need to follow SWRO's directions and guidance.

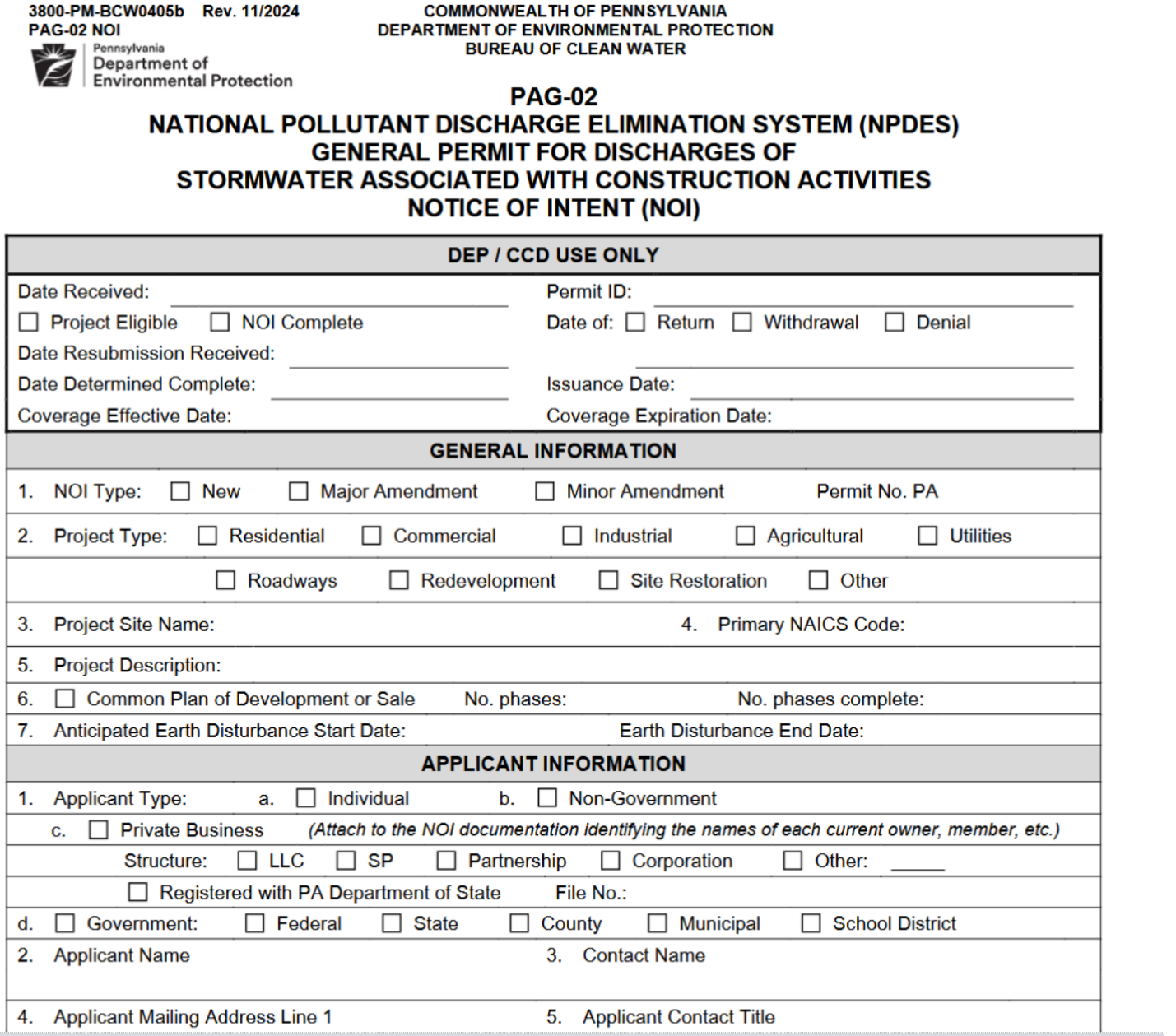
www.dep.pa.gov to find all the latest forms and info



Keyword: Construction stormwater

NPDES Notice of Intent PAG-02

Please don't leave anything blank!



3800-PM-BCW0405b Rev. 11/2024
PAG-02 NOI

Pennsylvania Department of Environmental Protection

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF CLEAN WATER

PAG-02
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
GENERAL PERMIT FOR DISCHARGES OF
STORMWATER ASSOCIATED WITH CONSTRUCTION ACTIVITIES
NOTICE OF INTENT (NOI)

DEP / CCD USE ONLY

Date Received: _____ Permit ID: _____
☐ Project Eligible ☐ NOI Complete Date of: ☐ Return ☐ Withdrawal ☐ Denial
Date Resubmission Received: _____ _____
Date Determined Complete: _____ Issuance Date: _____
Coverage Effective Date: Coverage Expiration Date:

GENERAL INFORMATION

1. NOI Type: ☐ New ☐ Major Amendment ☐ Minor Amendment Permit No. PA
2. Project Type: ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Utilities
☐ Roadways ☐ Redevelopment ☐ Site Restoration ☐ Other
3. Project Site Name: 4. Primary NAICS Code:
5. Project Description:
6. ☐ Common Plan of Development or Sale No. phases: No. phases complete:
7. Anticipated Earth Disturbance Start Date: Earth Disturbance End Date:

APPLICANT INFORMATION

1. Applicant Type: a. ☐ Individual b. ☐ Non-Government
c. ☐ Private Business *(Attach to the NOI documentation identifying the names of each current owner, member, etc.)*
Structure: ☐ LLC ☐ SP ☐ Partnership ☐ Corporation ☐ Other: _____
☐ Registered with PA Department of State File No.:
d. ☐ Government: ☐ Federal ☐ State ☐ County ☐ Municipal ☐ School District
2. Applicant Name 3. Contact Name
4. Applicant Mailing Address Line 1 5. Applicant Contact Title

Are you eligible to use the NOI?

3800-PM-BCW0405b Rev. 11/2024
PAG-02 NOI

ELIGIBILITY INFORMATION		
1. Stormwater discharges from the project site will not drain to surface waters, including wetlands, that are classified for special protection.	☐ True	☐ False
2. The applicant is not in violation of any DEP or EPA enforceable document, including any permit, schedule of compliance, consent assessment of civil penalty, or order at the project site or other sites or facilities owned or operated by the applicant in Pennsylvania, and has not shown a lack of ability or intention to comply with laws administered by DEP or EPA as indicated by past or continuing violations.	☐ True	☐ False
3. The PNDI receipt indicates either 1) "No Impact", or 2) "Conservation Measures", or 3) "Avoidance Measures" that have been agreed to by the applicant, or 4) "Potential Impact" or "Avoidance Measures" not agreed to by the applicant but clearance letters from jurisdictional agencies are attached to the NOI or otherwise will be submitted prior to General Permit coverage.	☐ True	☐ False
4. Soils in the area of the earth disturbance are not contaminated at levels exceeding residential or non-residential medium-specific concentrations (MSCs) in 25 Pa. Code Chapter 250 at residential or non-residential construction sites, respectively, unless a site-specific standard has been met or evidence is provided that the contamination is naturally occurring or the result of widespread atmospheric deposition.	☐ True	☐ False
5. Stormwater will not be discharged to MS4s or CSSs or will be discharged to MS4s or CSSs with a decrease or no net change in volume, rate or water quality or will be discharged to MS4s or CSSs with an increase in volume, rate or water quality and written consent of the MS4 or CSS permittee is provided.	☐ True	☐ False
6. All fill material imported to the project site will be clean fill or will be regulated fill that has been authorized for use on the project site by DEP's Waste Management Program or will be used on an Act 2 site in accordance with standards established by DEP's Land Recycling and Environmental Remediation Standards Program.	☐ True	☐ False
7. Stormwater discharges will not occur that would contain toxic or hazardous pollutants as defined in sections 307 and 311 of the Clean Water Act (33 U.S.C. §§ 1317 and 1321) or any other substance that – because of its quantity, concentration, or physical, chemical or infectious characteristics – may cause or contribute to an increase in mortality or morbidity in either an individual or the total population, or pose a substantial present or future hazard to human health or the environment when discharged into surface waters.	☐ True	☐ False
8. Stormwater will not be discharged to impaired waters caused by: siltation; turbidity; Total Suspended Solids (TSS); algae; eutrophication; nutrients; flow regime modification; and/or habitat alterations, or stormwater will be discharged to impaired waters but the applicant will implement non-discharge alternative(s) or ABACT BMPs.	☐ True	☐ False
9. Stormwater will not be discharged to waters with an EPA-approved or established TMDL for: siltation; turbidity; Total Suspended Solids (TSS); algae; eutrophication; nutrients; flow regime modification; and/or habitat alterations, or will be discharged to TMDL waters (including the Chesapeake Bay) but the applicant will implement non-discharge alternative(s) or ABACT BMPs and any applicable wasteload allocation (WLA) will be achieved.	☐ True	☐ False

Notice of Intent… stormwater discharge information

Is your receiving stream impaired by siltation, sediment, turbidity, water/flow variability, flow alterations/modifications, or nutrients??

Is there a TMDL for your receiving stream, for siltation, suspended solids, or nutrients??

ABACT BMP'S

3800-PM-BCW405b Rev. 11/2024
PAG-02 NOI

STORMWATER DISCHARGE INFORMATION

1. List all stormwater discharge points (DPs) **during construction** and provide the information requested below (see instructions). ☐ Chesapeake Bay

DP ID	Latitude	Longitude	Name of Receiving Waters	Ch. 93	Distance to Waters	EP Analysis	Impaired?	TMDL?
					ft	☐	☐	☐
					ft	☐	☐	☐
					ft	☐	☐	☐
					ft	☐	☐	☐
					ft	☐	☐	☐
					ft	☐	☐	☐
					ft	☐	☐	☐
					ft	☐	☐	☐

2. List all stormwater DPs **after construction and stabilization are complete** and provide the information requested below.

DP ID	Latitude	Longitude	Name of Receiving Waters	Ch. 93	Distance to Waters	EP Analysis	Impaired?	TMDL?
					ft	☐	☐	☐
					ft	☐	☐	☐
					ft	☐	☐	☐
					ft	☐	☐	☐
					ft	☐	☐	☐
					ft	☐	☐	☐
					ft	☐	☐	☐
					ft	☐	☐	☐

3. Stormwater will be managed using ☐ non-discharge alternative(s) ☐ ABACT BMPs/SCMs for stormwater discharges during and following construction.

4. Will any of the points identified above discharge to a sewer system? ☐ Yes ☐ No Is the sewer an MS4 or CSS? ☐ Yes ☐ No
Name of storm sewer owner/operator: Will there be an increase in rate, volume or WQ? ☐ Yes ☐

5. Identify and describe all non-stormwater discharges that are expected to occur during permit coverage. Describe the frequency and volume of all such disch

☐ No non-stormwater discharges are anticipated.

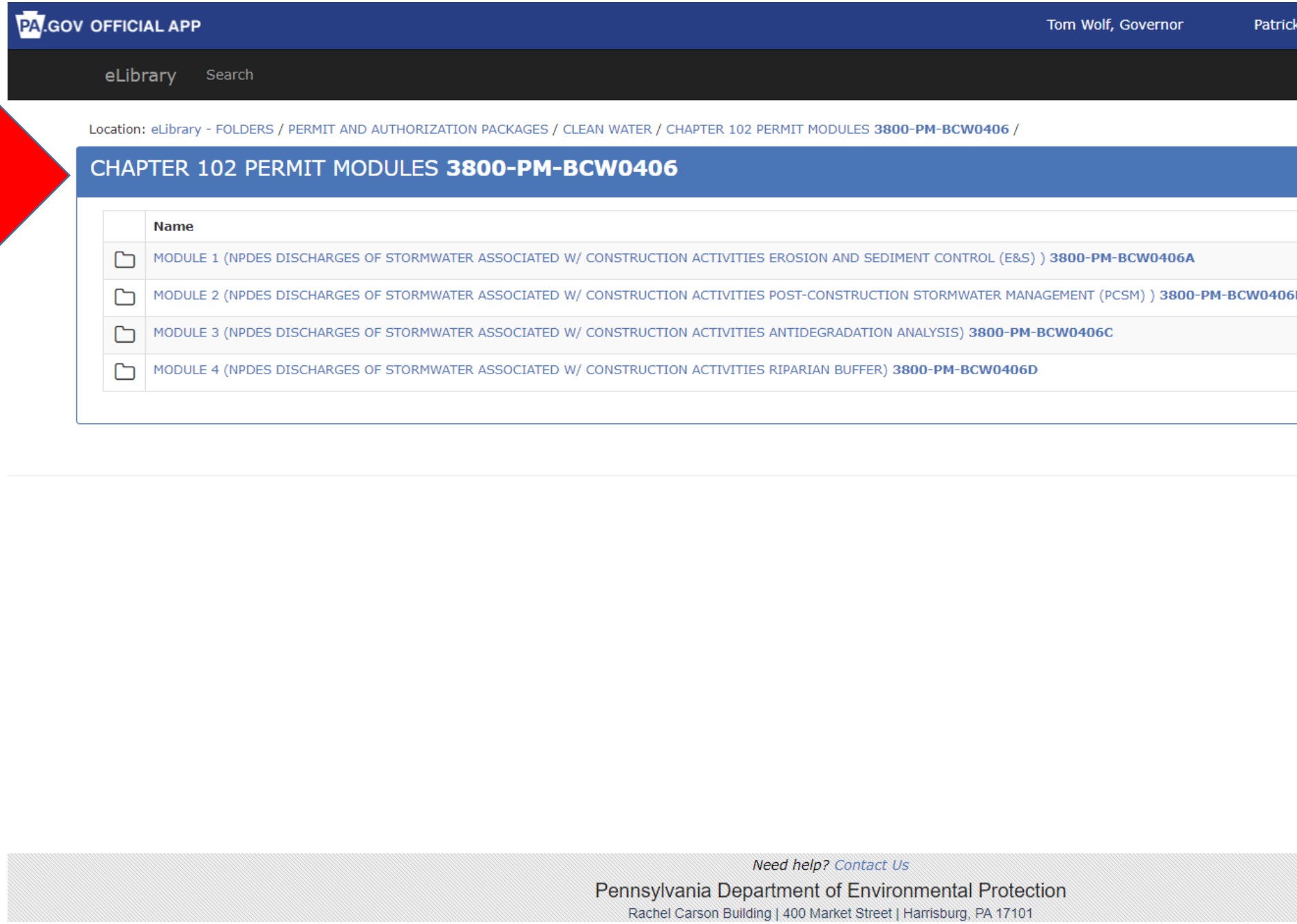
6. Will stormwater flow off the project site through properties owned by others prior to reaching a surface water or storm sewer during or following construction? ☐ Yes ☐ No

If Yes to #6, has an easement been obtained? ☐ Yes ☐ No

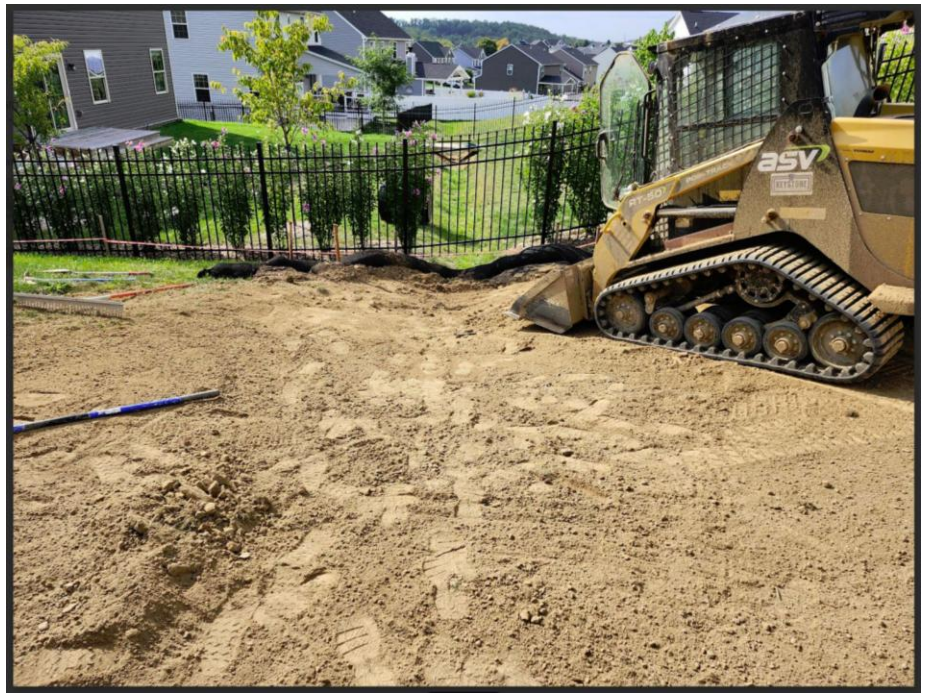
***NOTE** – The applicant is expected to: 1) secure legal authority for discharges on or through property not owned by the applicant; 2) provide for adequate E&S controls and a stable conveyance as necessary to prevent accelerated erosion; and 3) complete an EP Analysis when necessary according to the NOI Instructions.*

Modules

- Module 1
  - E&S
- Module 2
  - PCSM
- Module 3
  - ABACT (Individual Permit)
- Module 4
  - Riparian Buffer (Individual Permit)



Module 1 must be included. It is for erosion and sediment control.



3800-PM-BCW0406a Rev. 8/2024
E&S Module 1
Pennsylvania Department of Environmental Protection

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF CLEAN WATER

DISCHARGES OF STORMWATER ASSOCIATED WITH CONSTRUCTION ACTIVITIES
EROSION AND SEDIMENT CONTROL (E&S) MODULE 1

Applicant: Project Site Name:

E&S PLAN INFORMATION

1. Describe the existing topographic features of the project site and the immediate surrounding area.

2. a. Complete the following table for soils present at the project site or attach a separate table.

Map Unit Symbol	Map Unit Name	Acres	HSG	% of Disturbed Area	Site-Specific Limitation	Hydric
					☐	☐
					☐	☐
					☐	☐
					☐	☐

b. If there are any site-specific soil limitations identified in the table above, discuss how the E&S Plan was designed to address those limitations.

c. If hydric soils are present, is a wetland determination attached to this module? ☐ Yes ☐ No ☐ N/A
If No, explain:

d. If wetlands are found to be present, are a wetland delineation report and plan drawings showing the wetland boundary attached to this module? ☐ Yes ☐ No ☐ N/A

e. Was environmental due diligence conducted for on-site soils to be disturbed? ☐ Yes ☐ No

f. If on-site soils are known to be contaminated, 1) identify the pollutants exceeding Act 2 standards, 2) identify the extent of soil contamination on an E&S Plan Drawing that is attached to this module, and 3) describe the methods that will be used to avoid or minimize disturbance of the contaminated soils in the space provided below or separate sheet.

Wetland determination
Wetland delineation

The new version of Module 2, and instructions.

3800-PM-BCW0406a Rev. 2/2025
Module 1 Instructions

Pennsylvania Department of Environmental Protection

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF CLEAN WATER

DISCHARGES OF STORMWATER ASSOCIATED WITH CONSTRUCTION ACTIVITIES
POST-CONSTRUCTION STORMWATER MANAGEMENT (PCSM) MODULE 2
INSTRUCTIONS

PCSM Module 2 (3800-PM-BCW0406b) must be attached to the permit application or Notice of Intent (NOI) unless the project is considered a site restoration project as indicated on the application or NOI or unless the application or NOI Instructions specify that PCSM Module 2 is not required. Completion of PCSM Module 2 constitutes a PCSM Plan required by 25 Pa. Code § 102.8(f) when accompanied by PCSM Plan Drawings and supporting calculations. A separate PCSM narrative is not required.

NOTE 1 – Certain information required by 25 Pa. Code § 102.8(f) is intentionally left out of PCSM Module 2 because the same information is required by E&S Module 1. For these instances the Department of Environmental Protection (DEP) has approved the E&S and PCSM Plans to be combined, in accordance with 25 Pa. Code §§ 102.4(b)(5)(xiv) and 102.8(d).

Enter the Applicant Name and the Project Site Name as listed on the application or NOI.

Pre-Development Site Characterization

1. Check the appropriate box (Yes or No) to indicate whether a pre-development site characterization was completed for the project. If Yes, describe the activities undertaken in the space provided or in a separate narrative (a). If No, explain why a pre-development site characterization was not completed (b). In general, a pre-development site characterization to satisfy 25 Pa. Code § 102.8(g)(1) is required unless 1) the project qualifies as a site restoration project or 2) compliance with 25 Pa. Code §§ 102.8(g)(2) and (3) will be achieved entirely through the use of stormwater capture and use and/or riparian forest buffer SCMs. For projects meeting either of these criteria, the applicant may check the box for No and leave the remainder of the Pre-Development Site Characterization section blank.

2. Check the appropriate box to indicate whether test pits and/or boreholes were completed for the pre-development site characterization and report the number completed across the project site. The attachment of test pit / boring logs is optional but may be submitted by the applicant if there is information that is not identified in DEP's Pre-Development Site Characterization Spreadsheet that would assist DEP or delegated county conservation districts (CCDs) with review of Module 2. If not submitted, DEP/CCD may request this information during its review.

3. Report the number of infiltration (i.e., saturated hydraulic conductivity) tests completed and the field method(s) used.

4. List the area of the project site, in acres, as reported in the application or NOI. Enter the area that was investigated for potential infiltration capabilities, in acres. Attach to this module a map illustrating the area investigated for infiltration capabilities (including areas excluded from the investigation).

5. Check the appropriate box (Yes or No) to indicate whether DEP's Pre-Development Site Characterization (PDSC) Spreadsheet has been completed and is attached to this module. This Spreadsheet is utilized to evaluate whether an adequate pre-development site characterization has been completed and should be used if #1 is checked Yes. The PDSC Spreadsheet is available on DEP's website (visit www.dep.pa.gov/constructionstormwater, select "E&S Resources").

3800-PM-BCW0406b Rev. 10/2024
PCSM Module 2

Pennsylvania Department of Environmental Protection

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF CLEAN WATER

DISCHARGES OF STORMWATER ASSOCIATED WITH CONSTRUCTION ACTIVITIES
POST-CONSTRUCTION STORMWATER MANAGEMENT (PCSM) MODULE 2

Applicant: _____ Project Site Name: _____

PRE-DEVELOPMENT SITE CHARACTERIZATION
1. Was a pre-development site characterization completed for this project? ☐ Yes ☐ No If Yes, describe the activities undertaken.
2. No. Test Pits completed: No. Boreholes completed:
3. Number of Infiltration Tests completed: Method(s):
4. Project Site Area: acres Area investigated for infiltration capabilities: acres
5. DEP's Pre-Development Site Characterization Spreadsheet has been completed and is attached. ☐ Yes ☐ No
6. The infiltration potential of the site is: ☐ Limited ☐ Marginal ☐ Feasible ☐ Not Recommended
7. If the infiltration potential of the site is limited or is otherwise not advised, explain the limitations.
8. Is the project site located in an area with known karst features? ☐ Yes ☐ No If Yes, was a subsurface geotechnical investigation conducted and is a report attached? ☐ Yes ☐ No
9. Are there natural stormwater features on-site that will be protected? ☐ Yes ☐ No If Yes, describe the features and any increase or decrease in stormwater runoff volume to the features.

Pre-Development Site Characterization Spreadsheet

pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF CLEAN WATER

DEP PRE-DEVELOPMENT SITE CHARACTERIZATION SPREADSHEET INSTRUCTIONS

Revised, February 19, 2025

Introduction

The Department of Environmental Protection (DEP) has developed the Pre-Development Site Characterization (PDSC) Spreadsheet (Spreadsheet) to facilitate implementation of the requirements of 25 Pa. § 102.8(g)(1). The Spreadsheet was designed using the latest version of Microsoft Excel® and is in Excel macro workbook (XLSM) format. Completion of the Spreadsheet is a requirement of PCSM Module 2 for most projects needing a permit under Chapter 102.

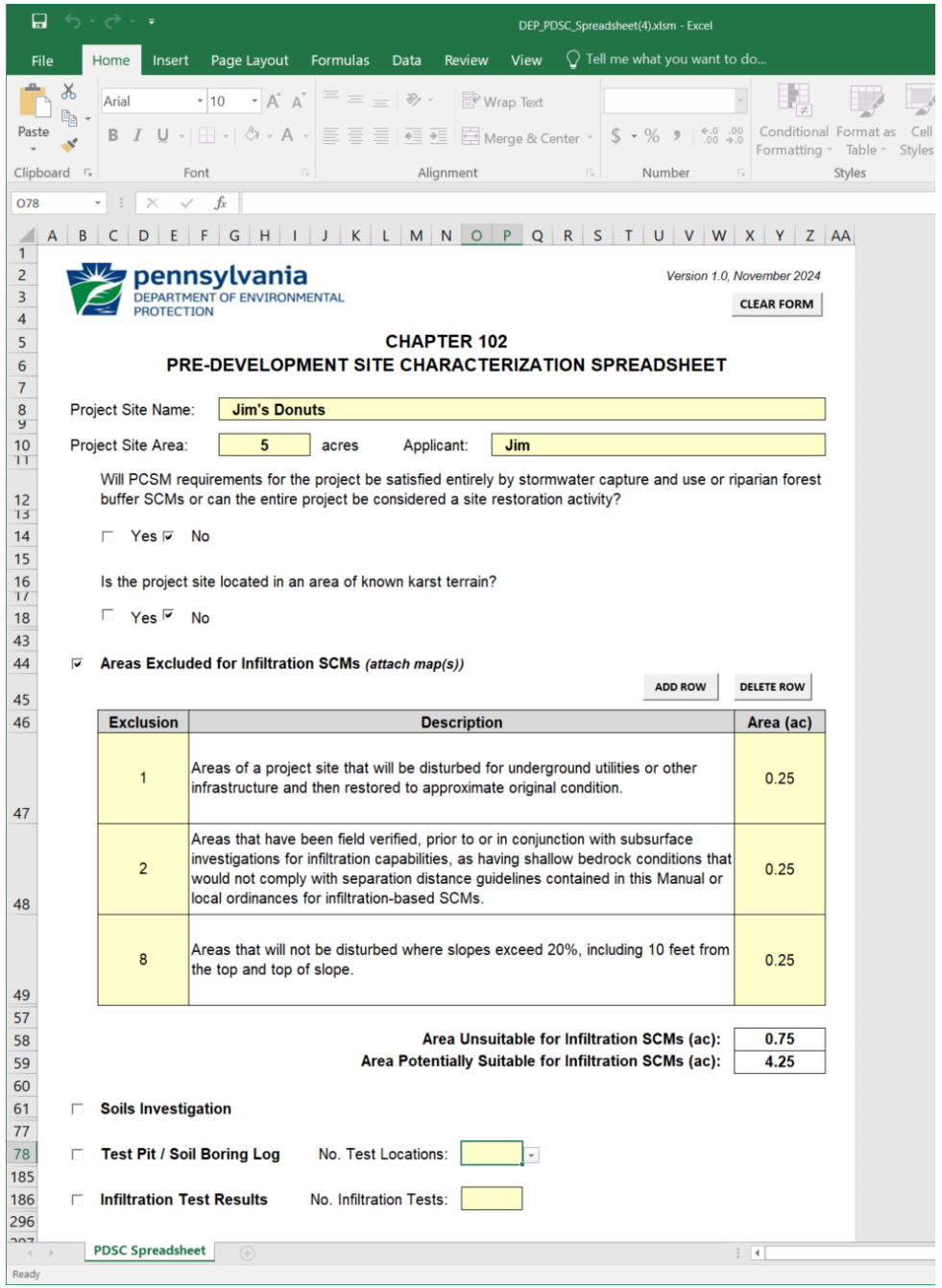
Users should check DEP's website periodically for updates to the spreadsheet and instructions by visiting www.dep.pa.gov/constructionstormwater and selecting "E&S Resources". In general, DEP/CCD will accept older versions of the spreadsheet no more than 6 months following the revision date of the spreadsheet. DEP/CCD also reserves the right to request completion of the latest version of the spreadsheet for any project.

Questions on the use of the spreadsheet can be directed to the Bureau of Clean Water at RA-EPCHAPTER102@pa.gov.

General Information

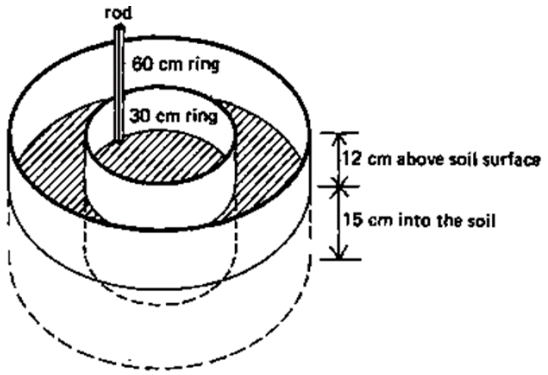
It is important that the user follow these instructions carefully. Omission of data in any cell designed for data entry may result in the failure of important calculations.

If prompted by Excel after opening the spreadsheet, enable editing and macros. *Note that you may need to add additional Trusted Locations in the Trust Center Settings of Excel in order to run the macros.* These locations may include server drives and/or locations where you intend to save the file for use. The following steps may be taken:



PDSC form expands as you fill it.

Soil testing and infiltration testing are necessary



☑ **Soils Investigation**

Investigation method(s): ☑ Test pits ☑ Soil borings ☐ Other:

Provide an explanation for completing soil borings in lieu of or in addition to test pits:

Name(s) of professional(s) overseeing soils investigation: ADD ROW DELETE ROW

Name	Company	License/Certification
Big Ed	Soil Testers Inc	

☑ **Test Pit / Soil Boring Log** No. Test Locations: 4

Test Location ID	Investigation Method	Total Depth Investigated (ft)	Limiting Zone Elevation (ft)	Limiting Zone Description	Infiltration Test(s) Completed?
1					

☑ **Infiltration Test Results** No. Infiltration Tests: 5

Test Location ID	Infiltration Test ID	Infiltration Test Elevation (ft)	Infiltration Test Method	Field Ksat (in/hr)	Temp (°F)	Adjusted Ksat (in/hr)

Recommended infiltration test location frequency: 1 test / 40,000 square feet (4 minimum)

Actual infiltration test location frequency: _____ test(s) / 40,000 square feet

PDSC Spreadsheet

Ready

Module 3 for Individual Permits, and its instructions

3800-PM-BCW0406c 12/2024
Module 3 Instructions

Pennsylvania Department of Environmental Protection

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF CLEAN WATER

DISCHARGES OF STORMWATER ASSOCIATED WITH CONSTRUCTION ACTIVITIES
ANTIDEGRADATION ANALYSIS MODULE 3
INSTRUCTIONS

Antidegradation Analysis Module 3 (3800-PM-BCW0406c) must be attached to all Individual NPDES Permit Applications when there will be any stormwater discharges during or following construction to surface waters with a designated or existing use of HQ or EV under 25 Pa. Code Chapter 93, including EV wetlands. Module 3 must also be completed for Individual NPDES Permit Applications when there will be any stormwater discharges during or following construction to surface waters that are impaired for siltation; turbidity; Total Suspended Solids (TSS); algae; eutrophication; nutrients; flow regime modification; and/or habitat alterations.

Enter the applicant name, project site name, the receiving surface water name, and the receiving surface water use as listed on the application. A separate Module 3 must be completed for each receiving surface water receiving stormwater discharges from the project site.

Antidegradation – Erosion and Sediment Control (E&S) Plan

Non-Discharge Alternative. A non-discharge alternative is an environmentally sound and cost effective BMP(s) that individually or collectively eliminate the net change in stormwater volume, rate and quality for storm events up to and including the 2-year/24-hour storm (net change) when compared to the stormwater rate, volume an
the earth disturbance activities to maintain and protect the existing quality of the receiving surfac
Commonwealth. Applicants must evaluate and include a non-discharge alternative in the Erosic
Control (E&S) Plan, unless a demonstration is made that non-discharge alternatives are not envir
and cost effective for the project site.

3800-PM-BCW0406c Rev. 12/2024
Antidegradation Module 3

Pennsylvania Department of Environmental Protection

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF CLEAN WATER

DISCHARGES OF STORMWATER ASSOCIATED WITH CONSTRUCTION ACTIVITIES
ANTIDEGRADATION ANALYSIS MODULE 3

Applicant:

Surface Water Name:

Project Site Name:

Surface Water Use:

ANTIDEGRADATION – EROSION AND SEDIMENT CONTROL (E&S) PLAN

☐ A **Non-Discharge Alternative will be utilized** for the project that will either individually or collectively eliminate the net change in stormwater volume, rate, and quality for storm events up to and including the 2-year/24-hour storm during earth disturbance activities.

Identify the E&S BMP(s) that will be utilized to achieve the non-discharge alternative:

☐ Alternative Siting: Location
☐ Alternative Siting: Configuration
☐ Alternative Siting: Location of Discharge
☐ Other:

☐ Limiting Extent & Duration of Disturbance
☐ Riparian Buffer (150 ft min.)
☐ Riparian Forest Buffer (150 ft min.)
☐ Limited Disturbed Area

Explain how the E&S BMP(s) will individually or collectively eliminate the net change in stormwater volume, rate, and quality for storm events up to and including the 2-year/24-hour storm during earth disturbance activities.

If a **Non-Discharge Alternative will not be utilized**, explain the rationale for non-selection, including why none of the alternatives are considered environmentally sound and cost-effective.

Photo by Tom Keller

Sewickley Creek Watershed Association volunteer tree planting at Jack's Run

Module 4, for Individual Permits, with its instructions

3800-PM-BCW0406d Rev. 12/2024
Riparian Buffer Module 4

Pennsylvania Department of Environmental Protection

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF CLEAN WATER

DISCHARGES OF STORMWATER ASSOCIATED WITH CONSTRUCTION ACTIVITIES
RIPARIAN BUFFER MODULE 4

Applicant: _____ Project Site Name: _____

Surface Water Name(s): _____ Surface Water Use(s): _____

APPLICABILITY INFORMATION

Permit Type: ☐ Individual NPDES Permit ☐ Erosion and Sediment Control (E&S) Permit

Check the appropriate box if the project is characterized by any of the following exceptions in 25 Pa. Code § 102.14(d)(1):

- ☐ Road maintenance activities where any existing riparian buffer will be undisturbed to the extent practicable.
- ☐ Repair and maintenance of existing pipelines and utilities where any existing buffer will be undisturbed to the extent practicable.
- ☐ Oil and gas, timber harvesting, or mining activities for which site reclamation or restoration is part of the permit authorization in Chapters 78, 86-90 and 102 where any existing buffer will be undisturbed to the extent practicable.
- ☐ A single-family home that is not part of a larger common plan of development or sale and the parcel was acquired by the applicant prior to November 19, 2010.
- ☐ Activities authorized by a DEP permit under other regulations which contain setback requirements and the activity complies with those setback requirements.

Check the appropriate box if the project is characterized by any of the following allowed or allowable activities in 25 Pa. Code §§ 102.14(f)(2) and (3):

- ☐ Activities or practices used to maintain the riparian buffer including the disturbance of existing vegetation, and tree and shrub removal, as needed to allow for natural succession of native vegetation and protection of public health and safety.
- ☐ Timber harvesting activities in accordance with the riparian forest buffer management plan as part of the PCSM Plan.
- ☐ Passive or low impact recreational activities so long as the functioning of the riparian buffer is maintained.
- ☐ Emergency response and other similar activities.
- ☐ Research and data collection activities, which may include water quality monitoring and stream gauging.
- ☐ Construction or placement of roads, bridges, trails, storm drainage, utilities or other structures that has been or is expected to be authorized by DEP.
- ☐ Water obstructions or encroachments that have been or are expected to be authorized by DEP.
- ☐ Restoration projects that have been or are expected to be authorized by DEP.

3800-PM-BCW0406d 12/2024
Module 4 Instructions

Pennsylvania Department of Environmental Protection

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF CLEAN WATER

DISCHARGES OF STORMWATER ASSOCIATED WITH CONSTRUCTION ACTIVITIES
RIPARIAN BUFFER MODULE 4
INSTRUCTIONS

Riparian Buffer Module 4 (3800-PM-BCW0406d) must be attached to all Individual NPDES Permit Applications for Discharges of Stormwater Associated with Construction Activities or Individual Erosion and Sediment Control (E&S) Permit Applications when the earth disturbance or project site boundary will extend to within 150 feet of a perennial or intermittent river, stream, creek, lake, pond or reservoir with a designated use of HQ or EV under 25 Pa. Code Chapter 93. Instructions for completing Riparian Buffer Module 4 are presented herein.

Enter the name of the applicant, Project Site Name, the receiving surface water name(s), and the receiving surface water use(s) as listed on the application.

Applicability Information

Identify the type of Chapter 102 permit application that is being applied for by checking the appropriate box for either Individual NPDES Permit or Erosion and Sediment Control (E&S) Permit. At a minimum, all applicants, subject to Module 4, must complete the remaining portion of the Applicability Information section, the Riparian Buffer or Riparian Forest Buffer Information section, and Certification section.

Exceptions. Check the appropriate box(es) to identify if the project entirely or partially meets any of the exceptions identified by 25 Pa. Code § 102.14(d)(1). Attach a separate sheet to the Module describing how the project either in its entirety or partially meets the identified exception(s).

If the project, in its entirety, meets one or more of the exceptions, the applicant can proceed to the Certification section of the Module. If the project partially meets one or more of the exceptions, the applicant must complete the remaining applicable portions of the Module based upon the portion of the project that does not meet an exception.

Allowed or Allowable Activities. Check the appropriate box(es) to identify if the project entirely or partially meets any of the allowed or allowable activities identified by 25 Pa. Code § 102.14(f)(2) and 102.14(f)(3). Attach a separate sheet to the Module describing how the project either in its entirety or partially meets the allowable or allowed activity(ies), including the authorization by DEP for the last three activities.

Exceptions, Allowable Activities, Waivers.

A method of determining if a stream is Ephemeral, Intermittent, or Perennial

North Carolina
Division of Water Quality

Methodology for Identification of Intermittent and Perennial Streams and Their Origins

Version 4.11
Effective Date: September 1, 2010

NC DWQ Stream Identification Form Version 4.11

Date:	**Project/Site:**	**Latitude:**
Evaluator:	**County:**	**Longitude:**
Total Points: *Stream is at least intermittent if ≥ 19 or perennial if ≥ 30**	**Stream Determination (circle one)** Ephemeral Intermittent Perennial	**Other** *e.g. Quad Name:*

A. Geomorphology (Subtotal = _____)	Absent	Weak	Moderate	Strong
1[a] Continuity of channel bed and bank	0	1	2	3
2. Sinuosity of channel along thalweg	0	1	2	3
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	1	2	3
4. Particle size of stream substrate	0	1	2	3
5. Active/relict floodplain	0	1	2	3
6. Depositional bars or benches	0	1	2	3
7. Recent alluvial deposits	0	1	2	3
8. Headcuts	0	1	2	3
9. Grade control	0	0.5	1	1.5
10. Natural valley	0	0.5	1	1.5
11. Second or greater order channel	No = 0		Yes = 3	

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology (Subtotal = _____)				
12. Presence of Baseflow	0	1	2	3
13. Iron oxidizing bacteria	0	1	2	3
14. Leaf litter	1.5	1	0.5	0
15. Sediment on plants or debris	0	0.5	1	1.5
16. Organic debris lines or piles	0	0.5	1	1.5
17. Soil-based evidence of high water table?	No = 0		Yes = 3	

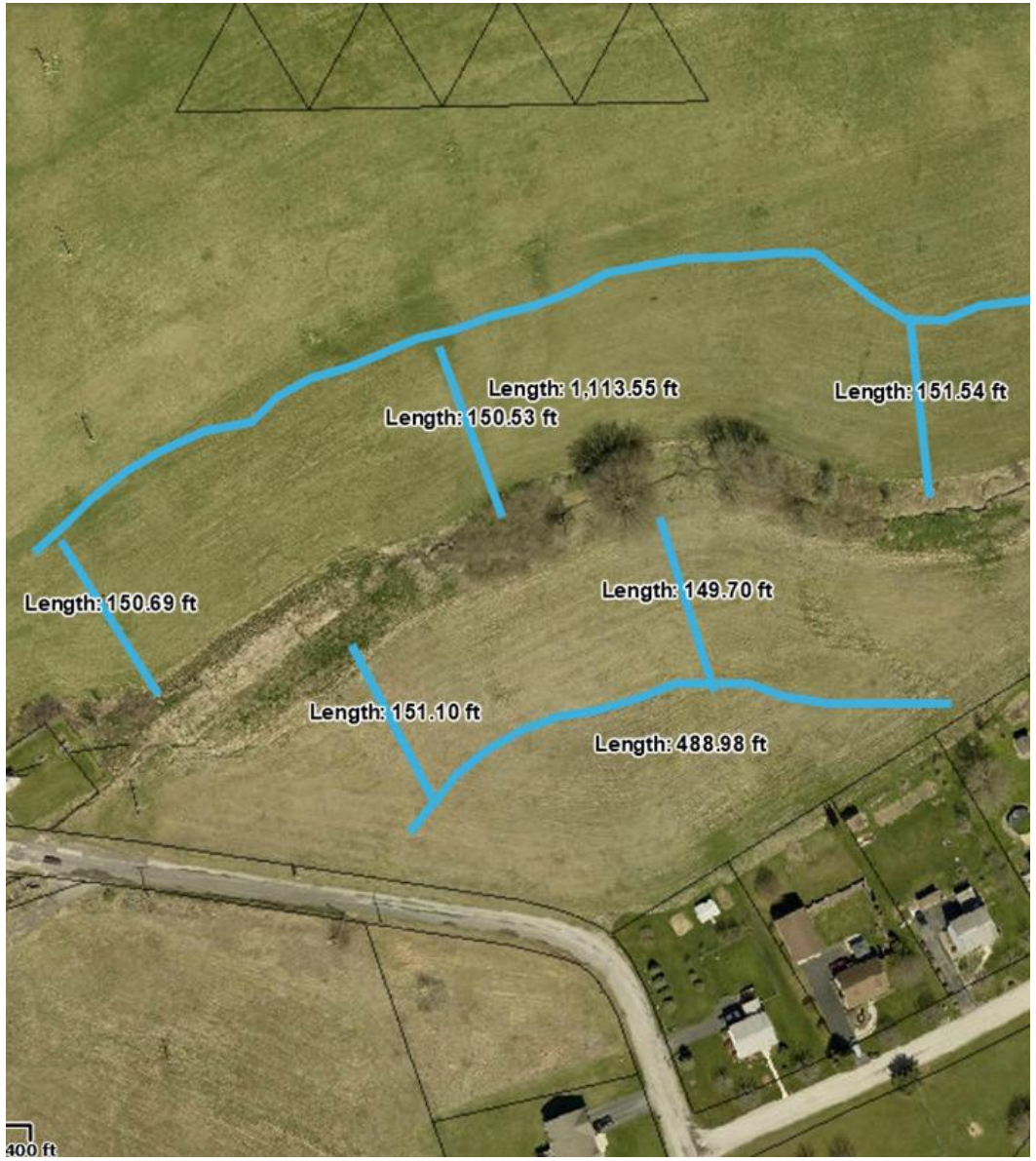
C. Biology (Subtotal = _____)				
18. Fibrous roots in streambed	3	2	1	0
19. Rooted upland plants in streambed	3	2	1	0
20. Macrobenthos (note diversity and abundance)	0	1	2	3
21. Aquatic Mollusks	0	1	2	3
22. Fish	0	0.5	1	1.5
23. Crayfish	0	0.5	1	1.5
24. Amphibians	0	0.5	1	1.5
25. Algae	0	0.5	1	1.5
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = 0			

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch:

Module 4: Riparian Buffers



RIPARIAN BUFFER OR RIPARIAN FOREST BUFFER INFORMATION

1. Will earth disturbance activities occur within 150 feet of a perennial or intermittent stream, creek, lake, pond or reservoir with a designated use of High Quality Waters (HQ) or Exceptional Value Waters (EV)?

   ☐ Yes ☐ No

   If Yes to question #1, identify the option selected by the applicant to meet the requirements of 25 Pa. Code § 102.14(a)(1) or Act 162 of 2014:

   ☐ A 150-foot (min.) riparian buffer or riparian forest buffer will be implemented *(Individual NPDES Permits Only)*.

   ☐ An equivalency demonstration will be conducted *(Individual NPDES Permits Only)*.

   ☐ Applicant is seeking a waiver *(E&S Permits Only)*.

2. Will the project site exist within 150 feet of a perennial or intermittent stream, creek, lake, pond or reservoir with a designated use of High Quality Waters (HQ) or Exceptional Value Waters (EV) where the use is not being attained (i.e., water is impaired)?

   ☐ Yes ☐ No

If Yes to question #2, identify the option selected by the applicant to meet the requirements of 25 Pa. Code § 102.14(a)(2) or Act 162 of 2014:

☐ A 150-foot (min.) riparian forest buffer will be implemented (maintained, converted or established).

☐ An equivalency demonstration to a riparian forest buffer will be conducted *(Individual NPDES Permits Only)*.

☐ Applicant is seeking a waiver *(E&S Permits Only)*.

3. Species that will be planted: _____

4. Average minimum widths: Zone 1: _____ ft Zone 2: _____ ft

5. Buffer linear length: _____ ft

6. ☐ A riparian forest buffer management plan has been included in the PCSM Plan for the project.

7. The buffer will be protected in perpetuity by: ☐ Deed restriction ☐ Conservation easement
   ☐ Other: _____

Spreadsheets ought to be submitted with NPDES permits

- Using the DEP **Excel™** Spreadsheets to calculate for your site
- Start with the **General** spreadsheet and enter site data.
- The **Volume** and **Rate** spreadsheets are recommended; if you choose not to use them you need to provide alternative documentation that your project will meet these requirements
- The use of the **Quality** spreadsheet is required for all NPDES permits

Use of the Excel Spreadsheets will speed up your PCSM review!

When all else fails…
Read the instructions!

pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF CLEAN WATER

DEP POST-CONSTRUCTION STORMWATER MANAGEMENT (PCSM) SPREADSHEET INSTRUCTIONS

Revised, February 28, 2025

Introduction

The Department of Environmental Protection (DEP) has developed the DEP PCSM Spreadsheet (spreadsheet) to facilitate calculations necessary for completing the stormwater analysis required by § 102.8(g) for PCSM Plans. The spreadsheet is intended to streamline PCSM calculations and help applicants demonstrate compliance with the regulations when a permit under Chapter 102 is required. The spreadsheet was designed using the latest version of Microsoft Excel® and is in Excel binary workbook (XLSB) format.

The Volume Worksheet of the spreadsheet utilizes the Curve Number method from TR-55 to estimate runoff volumes from land covers. The Rate Worksheet utilizes the Graphical Peak Discharge Method from TR-55; as noted below, this method is limited in use and may not be appropriate in many cases. The Quality Worksheet utilizes the volumes determined in the Volume Worksheet to calculate pollutant loads from land cover concentrations using the National Stormwater Quality Database and stormwater control measure (SCM) outflow concentrations from the International BMP Database. The Quality Worksheet includes a Certification statement that must be acknowledged by the user of the spreadsheet for submission to DEP or delegated county conservation districts (CCDs) as part of a Chapter 102 permit application.

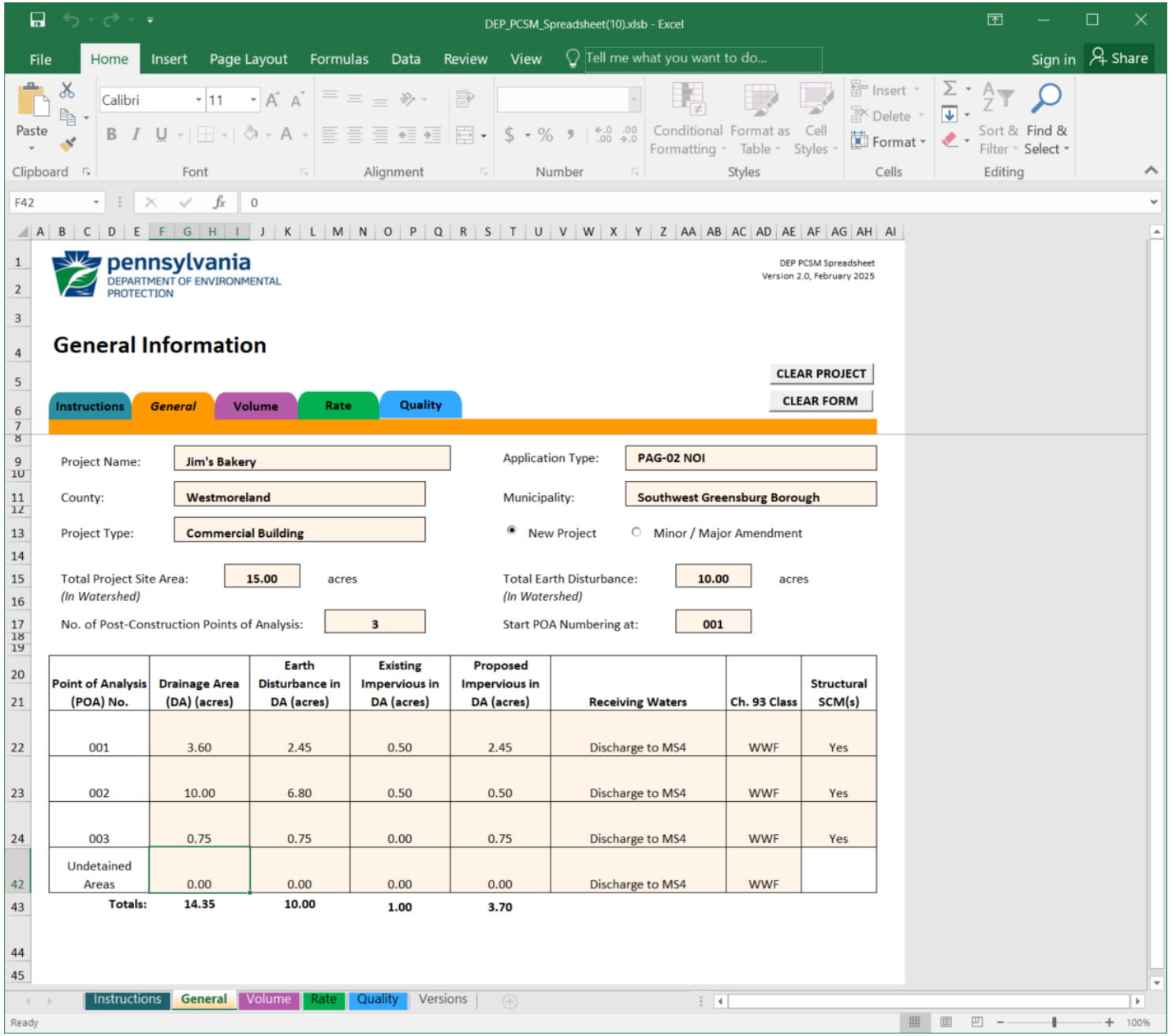
The spreadsheet contains default calculations that may in some cases be overridden by the user's own calculations through manual entry (e.g., runoff volumes), providing flexibility. However, if the user overrides any of the spreadsheet's calculations, the applicant should attach additional documentation explaining what specifically was overridden with justification. The use of the spreadsheet and attachment of spreadsheet printouts to Chapter 102 applications is encouraged, and in certain cases is required, because the reviewing agency will receive calculations in a consistent format, which is intended to provide for more efficient and timely reviews.

Users should check DEP's website periodically for updates to the spreadsheet and instructions by visiting www.dep.pa.gov/constructionstormwater and selecting "E&S Resources". In general, DEP/CCD will accept older versions of the spreadsheet no more than 6 months following the revision date of the spreadsheet. DEP/CCD also reserves the right to request completion of the latest version of the spreadsheet for any project.

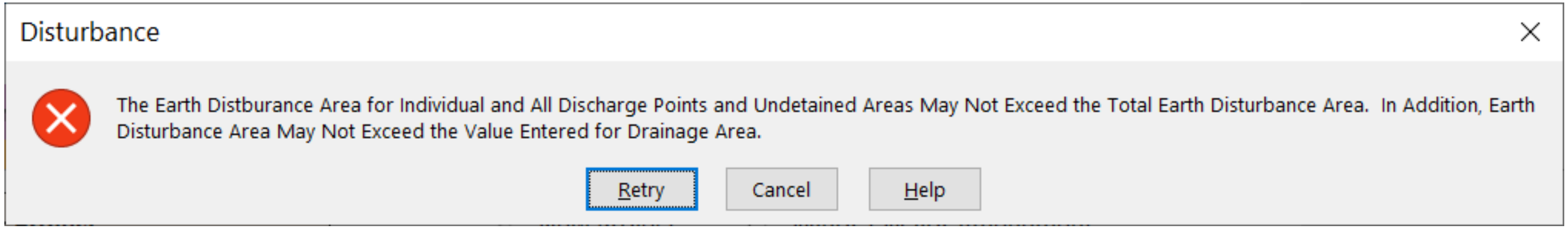
Questions on the use of the spreadsheet can be directed to the Bureau of Clean Water at **RA-EPCHAPTER102@pa.gov**.

DEP's PCSM spreadsheet, version 2.0, February 2025

As you fill the tan boxes, the spreadsheet adjusts to your input and more boxes become available



Sometimes you get an error message. Remember that data you enter is used on later slides and so the program catches “errors” you may make… Try again!!



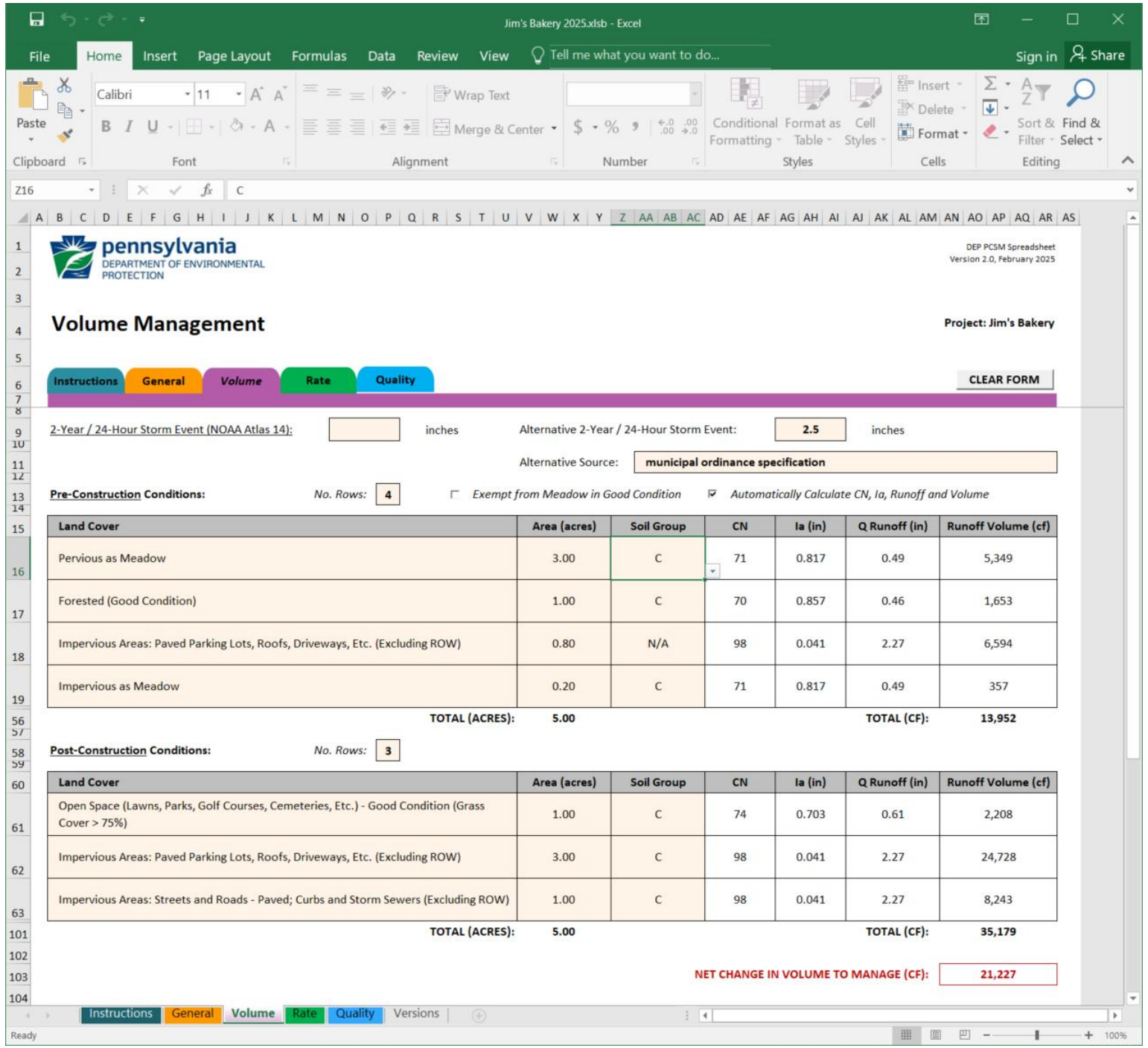
It is a computer program.
It has a few issues.
You have to learn to
work around them.

When you enter
data, use the
“return” button or
the “tab” button to
move to the next cell

Volume spreadsheet (top half)

Choose entries from the drop-down menu

You must show 20% of existing impervious surfaces as “meadow” unless you have a “site restoration” project or a highway job.



Jim's Bakery 2025.xlsb - Excel

pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

DEP PCSM Spreadsheet
Version 2.0, February 2025

Volume Management

Project: Jim's Bakery

Instructions | General | *Volume* | Rate | Quality

CLEAR FORM

2-Year / 24-Hour Storm Event (NOAA Atlas 14): inches

Alternative 2-Year / 24-Hour Storm Event: **2.5** inches

Alternative Source: **municipal ordinance specification**

Pre-Construction Conditions: *No. Rows:* **4** *Exempt from Meadow in Good Condition* *Automatically Calculate CN, Ia, Runoff and Volume*

Land Cover	Area (acres)	Soil Group	CN	Ia (in)	Q Runoff (in)	Runoff Volume (cf)
Pervious as Meadow	3.00	C	71	0.817	0.49	5,349
Forested (Good Condition)	1.00	C	70	0.857	0.46	1,653
Impervious Areas: Paved Parking Lots, Roofs, Driveways, Etc. (Excluding ROW)	0.80	N/A	98	0.041	2.27	6,594
Impervious as Meadow	0.20	C	71	0.817	0.49	357
TOTAL (ACRES):	**5.00**				**TOTAL (CF):**	**13,952**

Post-Construction Conditions: *No. Rows:* **3**

Land Cover	Area (acres)	Soil Group	CN	Ia (in)	Q Runoff (in)	Runoff Volume (cf)
Open Space (Lawns, Parks, Golf Courses, Cemeteries, Etc.) - Good Condition (Grass Cover > 75%)	1.00	C	74	0.703	0.61	2,208
Impervious Areas: Paved Parking Lots, Roofs, Driveways, Etc. (Excluding ROW)	3.00	C	98	0.041	2.27	24,728
Impervious Areas: Streets and Roads - Paved; Curbs and Storm Sewers (Excluding ROW)	1.00	C	98	0.041	2.27	8,243
TOTAL (ACRES):	**5.00**				**TOTAL (CF):**	**35,179**

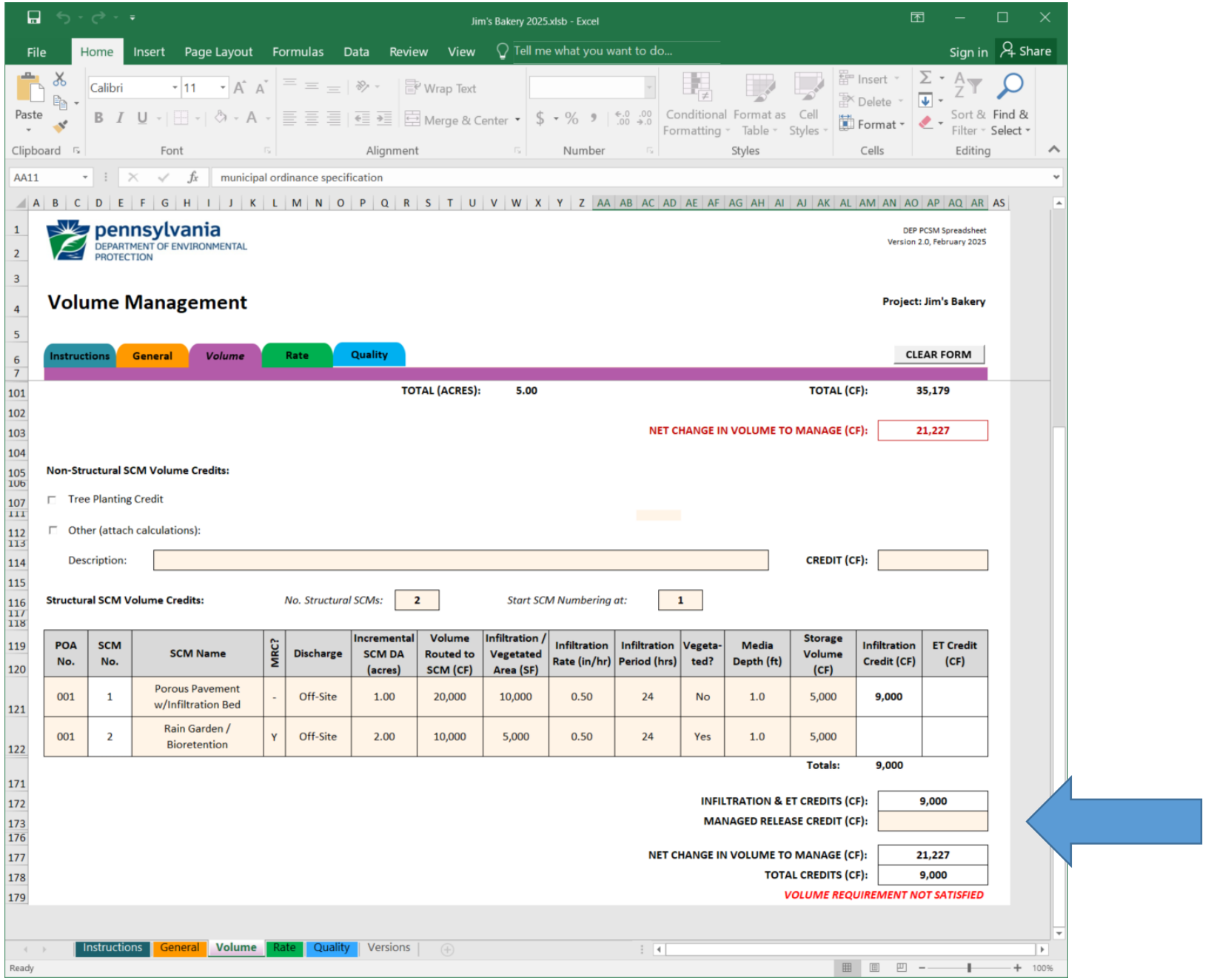
NET CHANGE IN VOLUME TO MANAGE (CF): **21,227**

Instructions | General | Volume | Rate | Quality | Versions

Ready

Volume Spreadsheet (bottom half)

Looks like we aren't OK…. But we forgot to do the MRC spreadsheet.



Jim's Bakery 2025.xlsb - Excel

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DEPARTMENT OF ENVIRONMENTAL PROTECTION

DEP PCSM Spreadsheet
Version 2.0, February 2025

Volume Management

Project: Jim's Bakery

Instructions | General | *Volume* | Rate | Quality

CLEAR FORM

TOTAL (ACRES): 5.00 **TOTAL (CF):** 35,179

NET CHANGE IN VOLUME TO MANAGE (CF): 21,227

Non-Structural SCM Volume Credits:

☐ Tree Planting Credit

☐ Other (attach calculations):

Description: **CREDIT (CF):**

Structural SCM Volume Credits: *No. Structural SCMs:* 2 *Start SCM Numbering at:* 1

POA No.	SCM No.	SCM Name	MRC?	Discharge	Incremental SCM DA (acres)	Volume Routed to SCM (CF)	Infiltration / Vegetated Area (SF)	Infiltration Rate (in/hr)	Infiltration Period (hrs)	Vegeta-ted?	Media Depth (ft)	Storage Volume (CF)	Infiltration Credit (CF)	ET Credit (CF)
001	1	Porous Pavement w/Infiltration Bed	-	Off-Site	1.00	20,000	10,000	0.50	24	No	1.0	5,000	**9,000**	
001	2	Rain Garden / Bioretention	Y	Off-Site	2.00	10,000	5,000	0.50	24	Yes	1.0	5,000		
												Totals:	**9,000**	

INFILTRATION & ET CREDITS (CF): 9,000

MANAGED RELEASE CREDIT (CF):

NET CHANGE IN VOLUME TO MANAGE (CF): 21,227

TOTAL CREDITS (CF): 9,000

VOLUME REQUIREMENT NOT SATISFIED

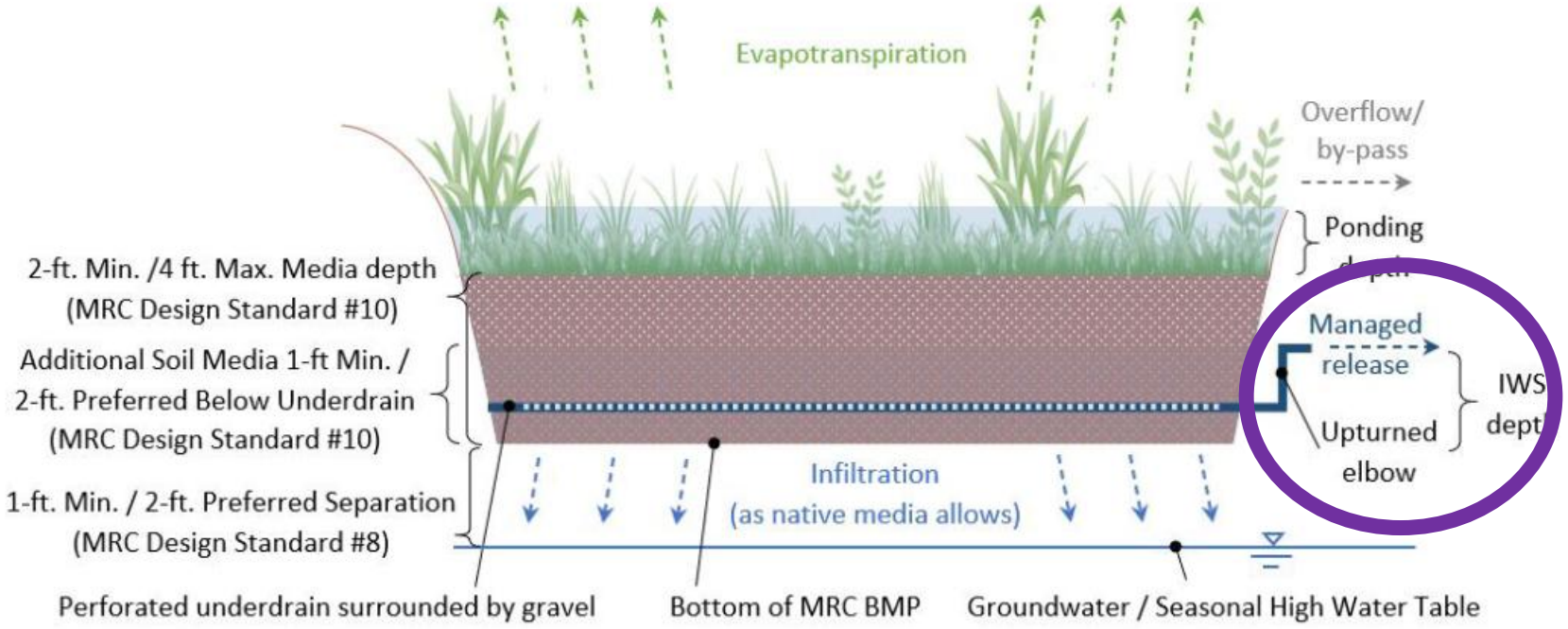
Instructions | General | Volume | Rate | Quality | Versions

Ready

Managed Release Concept

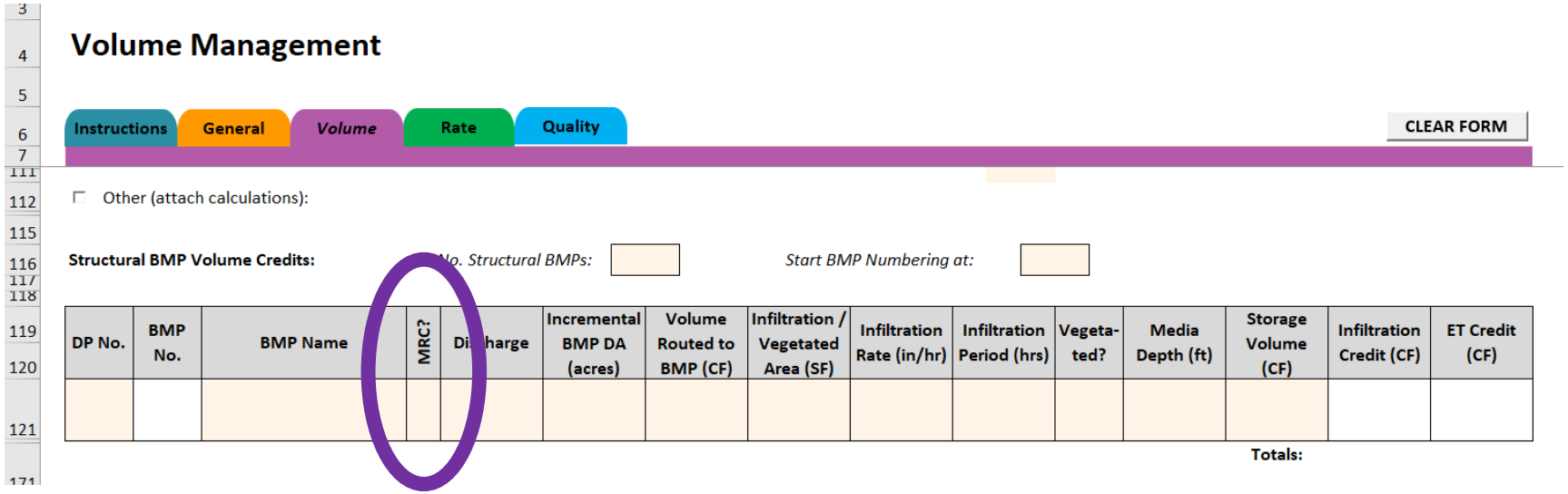
- To meet water quality requirements
- Use where infiltration is considered limited… **must do tests!!**
- Use where other BMP's are not sufficient to manage volume
- Has an underdrain and **internal water storage** to remove nitrogen

MRC PDF available



Managed Release Concept

- If used with a non-vegetated BMP, must provide pre-treatment
- For small drainage areas only, ideally < 2 acres
- Runoff from the 1.2 inch, 2 hour storm is managed to 0.02 cfs/acre of equivalent impervious area
- Maximum drawdown time 72 hours



Volume Management

Instructions | General | *Volume* | Rate | Quality

CLEAR FORM

☐ Other (attach calculations):

Structural BMP Volume Credits: *No. Structural BMPs:* *Start BMP Numbering at:*

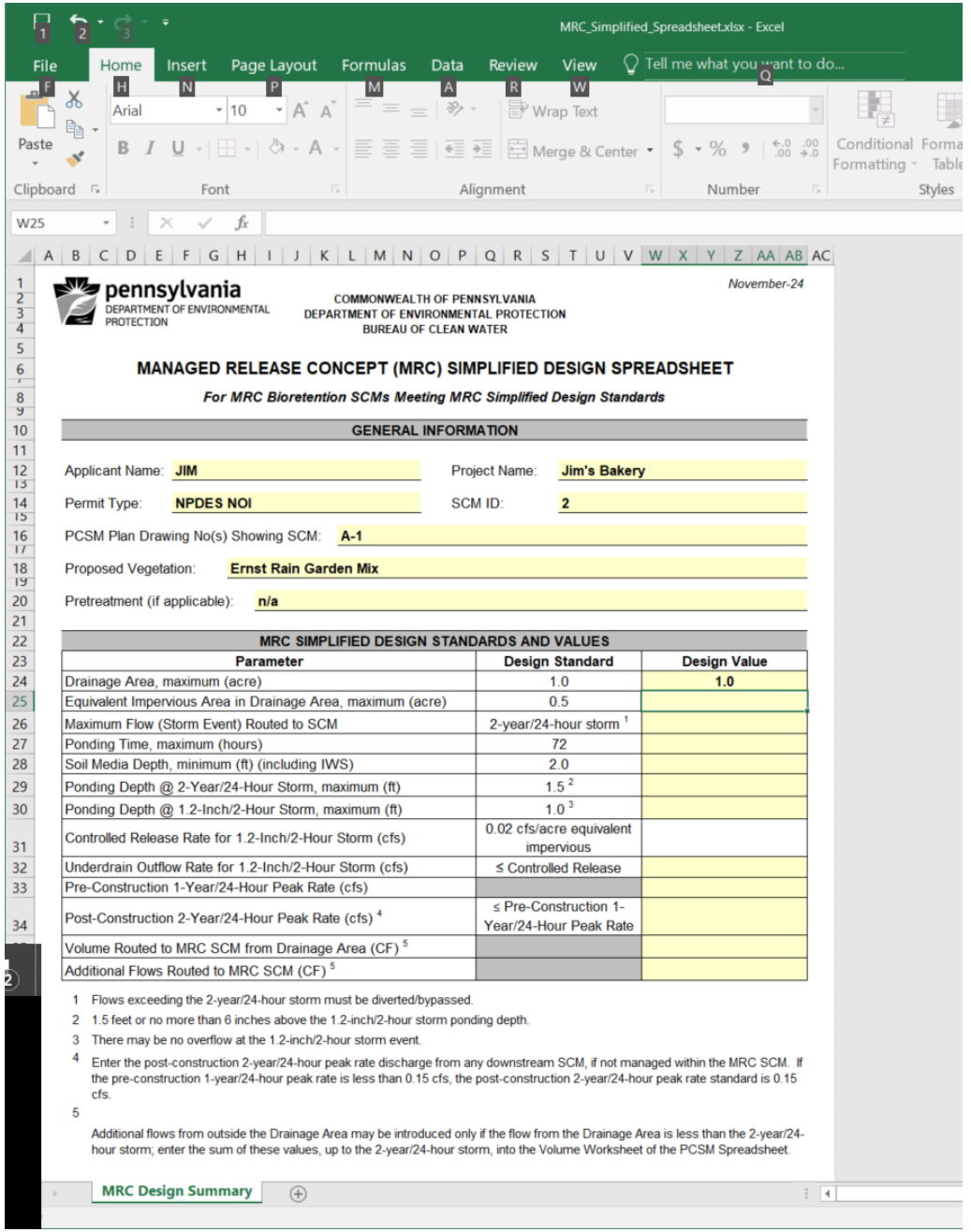
DP No.	BMP No.	BMP Name		MRC?	Discharge	Incremental BMP DA (acres)	Volume Routed to BMP (CF)	Infiltration / Vegetated Area (SF)	Infiltration Rate (in/hr)	Infiltration Period (hrs)	Vegeta-ted?	Media Depth (ft)	Storage Volume (CF)	Infiltration Credit (CF)	ET Credit (CF)

Totals:

MRC appears on both the Volume and Quality spreadsheets

Simplified MRC design spreadsheet

For sites which meet the pre-determined parameters: site is one acre or less of disturbance and the maximum impervious is one half acre.



MRC_Simplified_Spreadsheet.xlsx - Excel

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DEPARTMENT OF ENVIRONMENTAL PROTECTION

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF CLEAN WATER

November-24

MANAGED RELEASE CONCEPT (MRC) SIMPLIFIED DESIGN SPREADSHEET

For MRC Bioretention SCMs Meeting MRC Simplified Design Standards

GENERAL INFORMATION

Applicant Name: **JIM** Project Name: **Jim's Bakery**

Permit Type: **NPDES NOI** SCM ID: **2**

PCSM Plan Drawing No(s) Showing SCM: **A-1**

Proposed Vegetation: **Ernst Rain Garden Mix**

Pretreatment (if applicable): **n/a**

MRC SIMPLIFIED DESIGN STANDARDS AND VALUES

Parameter	Design Standard	Design Value
Drainage Area, maximum (acre)	1.0	1.0
Equivalent Impervious Area in Drainage Area, maximum (acre)	0.5	
Maximum Flow (Storm Event) Routed to SCM	2-year/24-hour storm [1]	
Ponding Time, maximum (hours)	72	
Soil Media Depth, minimum (ft) (including IWS)	2.0	
Ponding Depth @ 2-Year/24-Hour Storm, maximum (ft)	1.5 [2]	
Ponding Depth @ 1.2-Inch/2-Hour Storm, maximum (ft)	1.0 [3]	
Controlled Release Rate for 1.2-Inch/2-Hour Storm (cfs)	0.02 cfs/acre equivalent impervious	
Underdrain Outflow Rate for 1.2-Inch/2-Hour Storm (cfs)	≤ Controlled Release	
Pre-Construction 1-Year/24-Hour Peak Rate (cfs)		
Post-Construction 2-Year/24-Hour Peak Rate (cfs) [4]	≤ Pre-Construction 1-Year/24-Hour Peak Rate	
Volume Routed to MRC SCM from Drainage Area (CF) [5]		
Additional Flows Routed to MRC SCM (CF) [5]		

1 Flows exceeding the 2-year/24-hour storm must be diverted/bypassed.

2 1.5 feet or no more than 6 inches above the 1.2-inch/2-hour storm ponding depth.

3 There may be no overflow at the 1.2-inch/2-hour storm event.

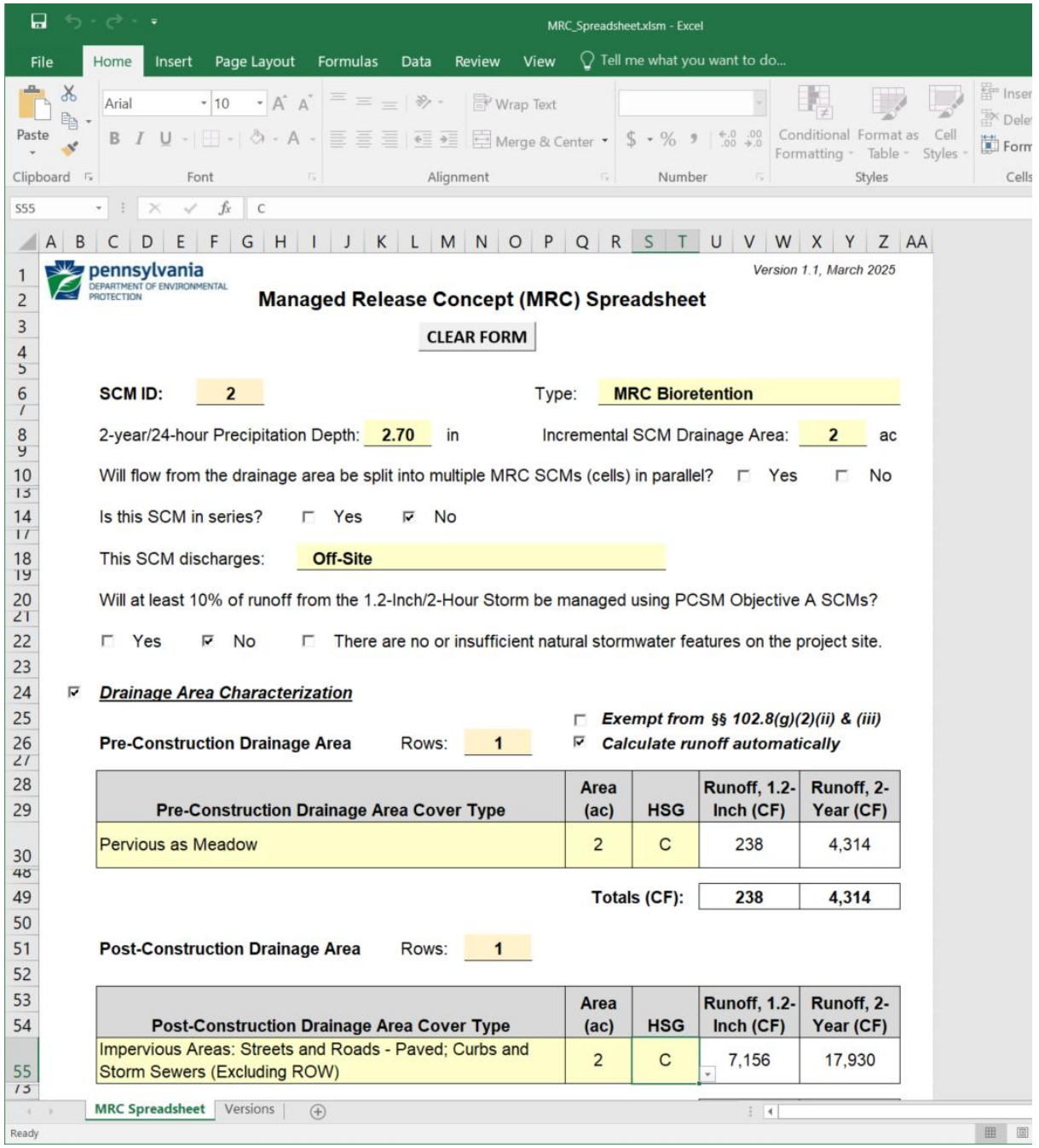
4 Enter the post-construction 2-year/24-hour peak rate discharge from any downstream SCM, if not managed within the MRC SCM. If the pre-construction 1-year/24-hour peak rate is less than 0.15 cfs, the post-construction 2-year/24-hour peak rate standard is 0.15 cfs.

5 Additional flows from outside the Drainage Area may be introduced only if the flow from the Drainage Area is less than the 2-year/24-hour storm; enter the sum of these values, up to the 2-year/24-hour storm, into the Volume Worksheet of the PCSM Spreadsheet.

MRC Design Summary

MRC Spreadsheet (regular)

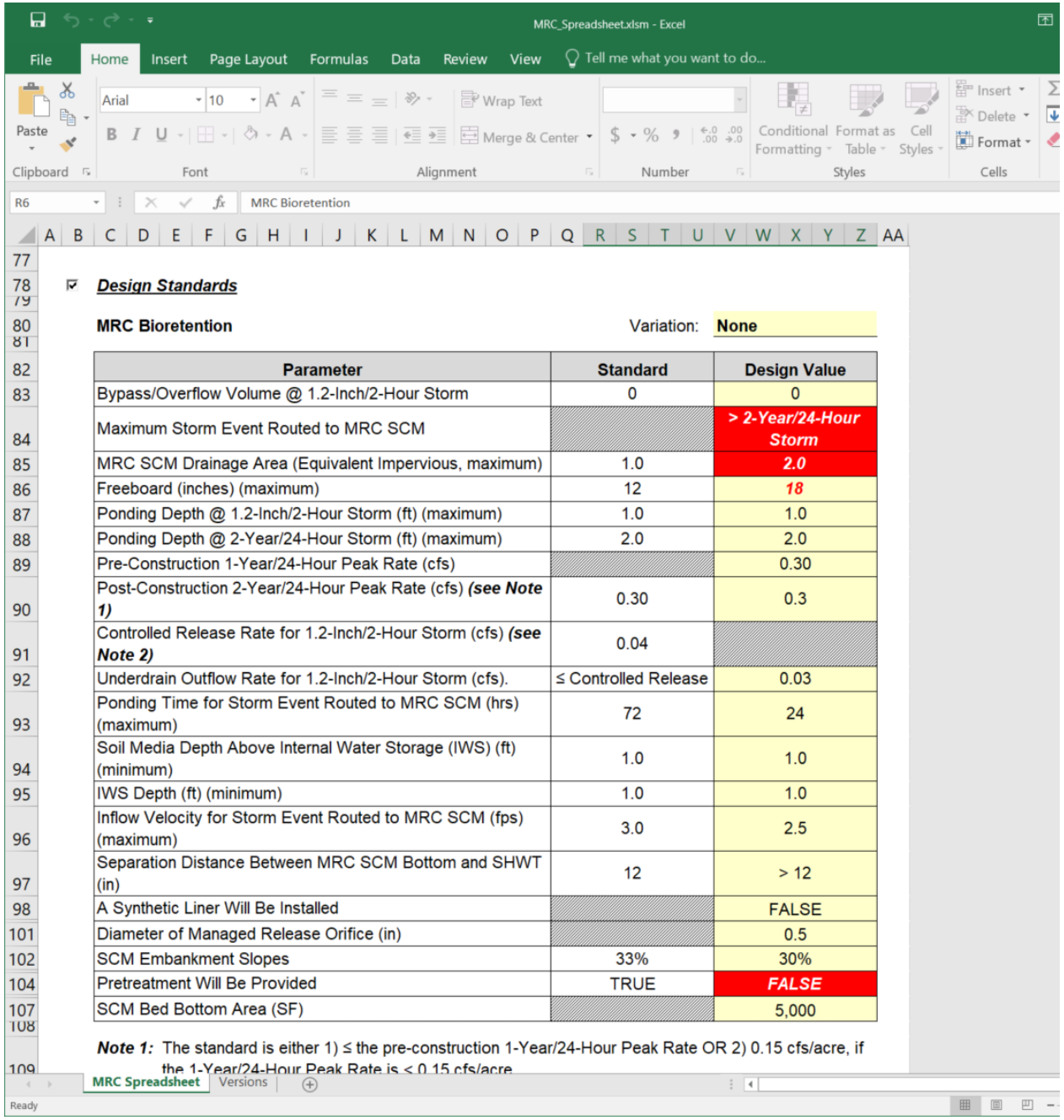
The spreadsheet expands as you fill in the boxes



MRC spreadsheet continued

Cells that are out of parameter show up in RED. This is allowable but may require extra DEP review.

You should consider your design and make adjustments



Design Standards

MRC Bioretention Variation: **None**

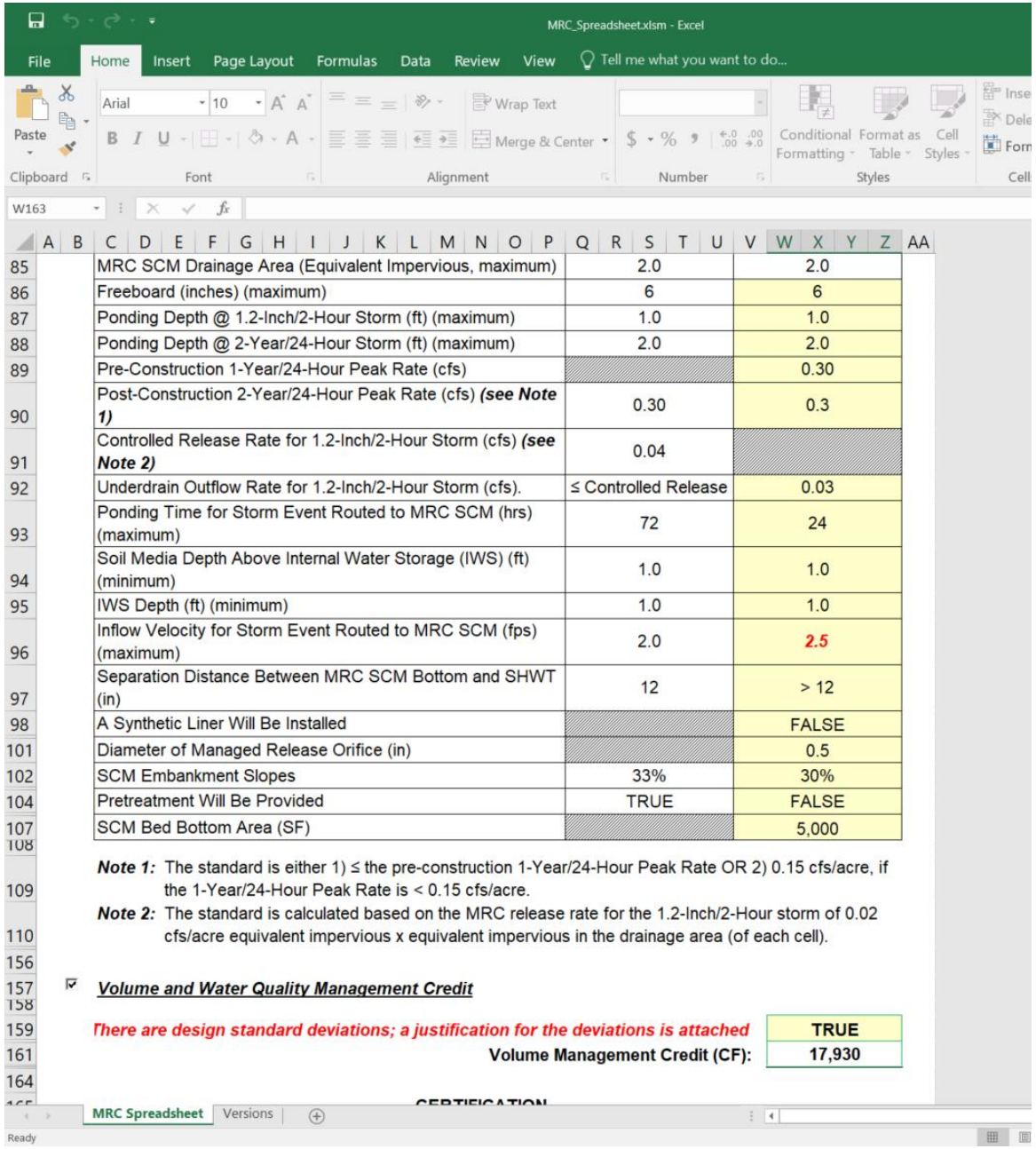
Parameter	Standard	Design Value
Bypass/Overflow Volume @ 1.2-Inch/2-Hour Storm	0	0
Maximum Storm Event Routed to MRC SCM		***> 2-Year/24-Hour Storm***
MRC SCM Drainage Area (Equivalent Impervious, maximum)	1.0	***2.0***
Freeboard (inches) (maximum)	12	***18***
Ponding Depth @ 1.2-Inch/2-Hour Storm (ft) (maximum)	1.0	1.0
Ponding Depth @ 2-Year/24-Hour Storm (ft) (maximum)	2.0	2.0
Pre-Construction 1-Year/24-Hour Peak Rate (cfs)		0.30
Post-Construction 2-Year/24-Hour Peak Rate (cfs) ***(see Note 1)***	0.30	0.3
Controlled Release Rate for 1.2-Inch/2-Hour Storm (cfs) ***(see Note 2)***	0.04	
Underdrain Outflow Rate for 1.2-Inch/2-Hour Storm (cfs).	≤ Controlled Release	0.03
Ponding Time for Storm Event Routed to MRC SCM (hrs) (maximum)	72	24
Soil Media Depth Above Internal Water Storage (IWS) (ft) (minimum)	1.0	1.0
IWS Depth (ft) (minimum)	1.0	1.0
Inflow Velocity for Storm Event Routed to MRC SCM (fps) (maximum)	3.0	2.5
Separation Distance Between MRC SCM Bottom and SHWT (in)	12	> 12
A Synthetic Liner Will Be Installed		FALSE
Diameter of Managed Release Orifice (in)		0.5
SCM Embankment Slopes	33%	30%
Pretreatment Will Be Provided	TRUE	***FALSE***
SCM Bed Bottom Area (SF)		5,000

Note 1: The standard is either 1) ≤ the pre-construction 1-Year/24-Hour Peak Rate OR 2) 0.15 cfs/acre, if the 1-Year/24-Hour Peak Rate is < 0.15 cfs/acre

MRC spreadsheet, continued

It will give you a number for Volume Management Credit

Take that number back to the Volume Spreadsheet



85	MRC SCM Drainage Area (Equivalent Impervious, maximum)	2.0	2.0
86	Freeboard (inches) (maximum)	6	6
87	Ponding Depth @ 1.2-Inch/2-Hour Storm (ft) (maximum)	1.0	1.0
88	Ponding Depth @ 2-Year/24-Hour Storm (ft) (maximum)	2.0	2.0
89	Pre-Construction 1-Year/24-Hour Peak Rate (cfs)		0.30
90	Post-Construction 2-Year/24-Hour Peak Rate (cfs) ***(see Note 1)***	0.30	0.3
91	Controlled Release Rate for 1.2-Inch/2-Hour Storm (cfs) ***(see Note 2)***	0.04	
92	Underdrain Outflow Rate for 1.2-Inch/2-Hour Storm (cfs).	≤ Controlled Release	0.03
93	Ponding Time for Storm Event Routed to MRC SCM (hrs) (maximum)	72	24
94	Soil Media Depth Above Internal Water Storage (IWS) (ft) (minimum)	1.0	1.0
95	IWS Depth (ft) (minimum)	1.0	1.0
96	Inflow Velocity for Storm Event Routed to MRC SCM (fps) (maximum)	2.0	***2.5***
97	Separation Distance Between MRC SCM Bottom and SHWT (in)	12	> 12
98	A Synthetic Liner Will Be Installed		FALSE
101	Diameter of Managed Release Orifice (in)		0.5
102	SCM Embankment Slopes	33%	30%
104	Pretreatment Will Be Provided	TRUE	FALSE
107	SCM Bed Bottom Area (SF)		5,000

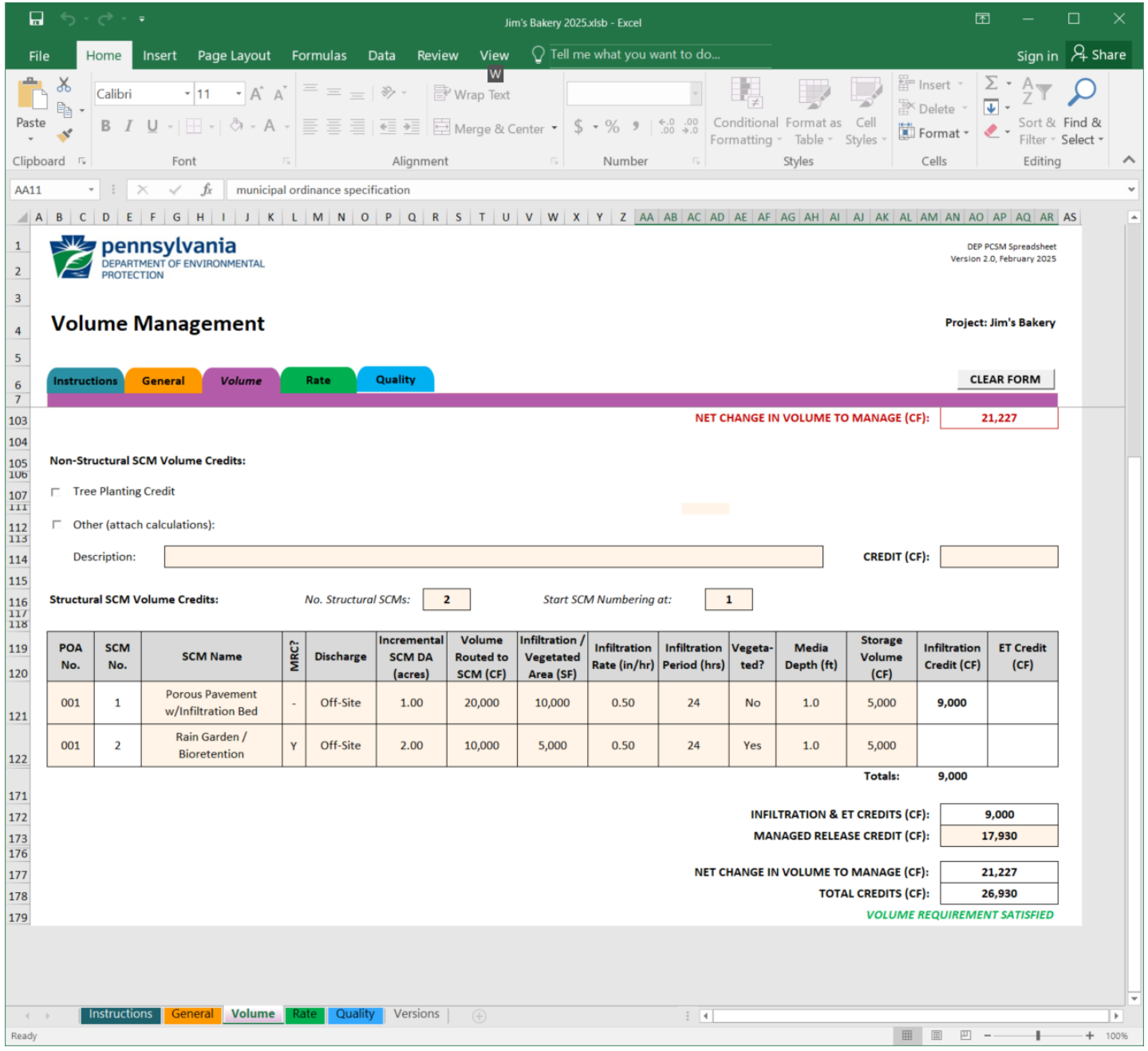
Note 1: The standard is either 1) ≤ the pre-construction 1-Year/24-Hour Peak Rate OR 2) 0.15 cfs/acre, if the 1-Year/24-Hour Peak Rate is < 0.15 cfs/acre.

Note 2: The standard is calculated based on the MRC release rate for the 1.2-Inch/2-Hour storm of 0.02 cfs/acre equivalent impervious x equivalent impervious in the drainage area (of each cell).

Volume and Water Quality Management Credit

There are design standard deviations; a justification for the deviations is attached	TRUE
Volume Management Credit (CF):	17,930

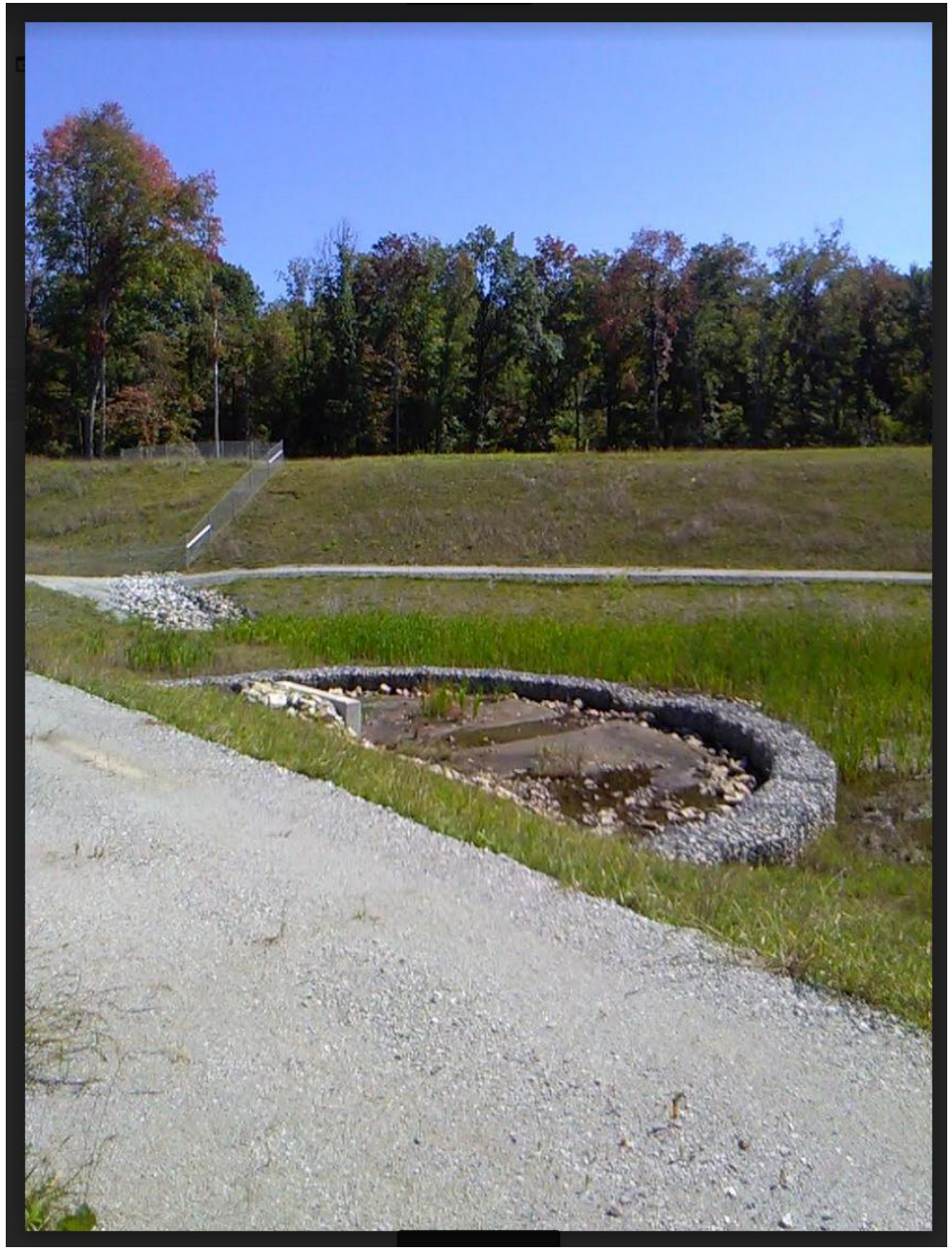
Looks like we are OK!!
MRC did the job.
But DEP's view of MRC is that you should try other things first, MRC is to be used as a second option, not first.



Ideally you would combine MRC with…

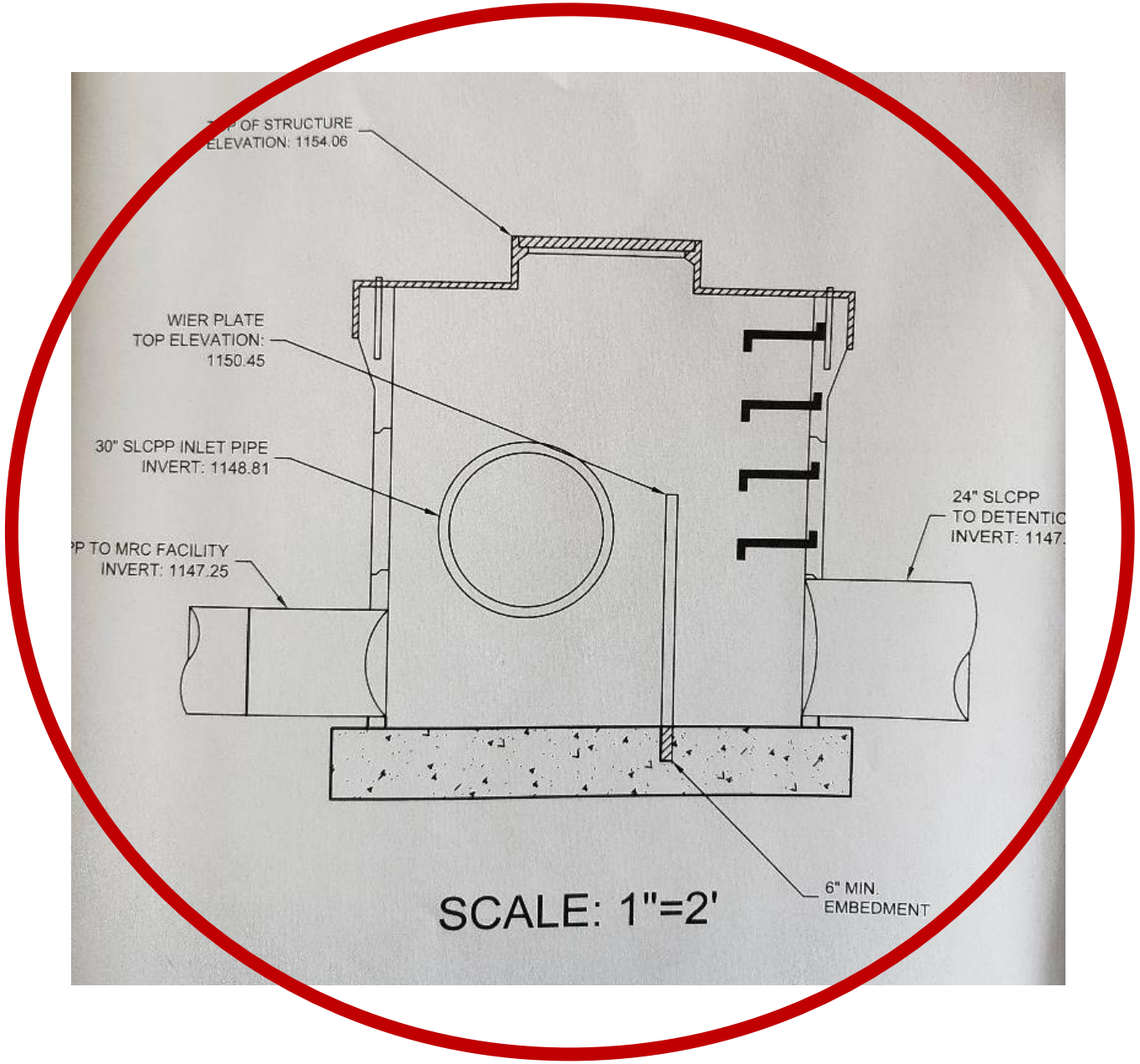
A forebay to capture “gross pollutants”

A flow splitter to divert high flows around the MRC BMP



Flow splitter for use with MRC

All pipe sizes and elevations labeled clearly



Commonly-used computation software will model the Flow Splitter if you enter the variables correctly!

Summary for Pond Splitter: Splitter Manhole

Inflow Area = 20.720 ac, 20.13% Impervious, Inflow Depth = 0.80" for 2-yr event
Inflow = 13.21 cfs @ 12.22 hrs, Volume= 1.378 af
Outflow = 13.21 cfs @ 12.22 hrs, Volume= 1.378 af, Atten= 0%, Lag= 0.0 min
Primary = 13.21 cfs @ 12.22 hrs, Volume= 1.378 af
Routed to Pond MRC-RTE : MRC
Secondary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
Routed to Pond Detention - Rte : Detention Pond

2 yr

Routing by Dyn-Stor-Ind method, Time Span= 0.00-118.00 hrs, dt= 0.05 hrs
Peak Elev= 1,150.41' @ 12.22 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	1,147.25'	**18.000" Round Culvert** L= 16.9' RCP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 1,147.25' / 1,147.00' S= 0.0148 '/' Cc= 0.900 n= 0.012, Flow Area= 1.77 sf
#2	Secondary	1,147.25'	**24.000" Round Culvert** L= 161.8' RCP, sq.cut end projecting, Ke= 0.500 Inlet / Outlet Invert= 1,147.25' / 1,106.32' S= 0.2530 '/' Cc= 0.900 n= 0.012, Flow Area= 3.14 sf
#3	Device 2	1,150.45'	**4.0' long Sharp-Crested Rectangular Weir** 0 End Contraction(s)

Primary OutFlow Max=13.09 cfs @ 12.22 hrs HW=1,150.37' TW=1,147.90' (Dynamic Tailwater)
↑**1=Culvert** (Inlet Controls 13.09 cfs @ 7.41 fps)

Secondary OutFlow Max=0.00 cfs @ 0.00 hrs HW=1,147.25' TW=1,105.00' (Dynamic Tailwater)
↑**2=Culvert** (Controls 0.00 cfs)
↑**3=Sharp-Crested Rectangular Weir** (Controls 0.00 cfs)

Summary for Pond Splitter: Splitter Manhole

Inflow Area = 20.720 ac, 20.13% Impervious, Inflow Depth = 1.40" for 10-yr event
Inflow = 24.56 cfs @ 12.21 hrs, Volume= 2.413 af
Outflow = 24.56 cfs @ 12.21 hrs, Volume= 2.413 af, Atten= 0%, Lag= 0.0 min
Primary = 14.79 cfs @ 12.12 hrs, Volume= 2.146 af
Routed to Pond MRC-RTE : MRC
Secondary = 10.39 cfs @ 12.23 hrs, Volume= 0.267 af
Routed to Pond Detention - Rte : Detention Pond

10 yr

Routing by Dyn-Stor-Ind method, Time Span= 0.00-118.00 hrs, dt= 0.05 hrs
Peak Elev= 1,151.31' @ 12.23 hrs

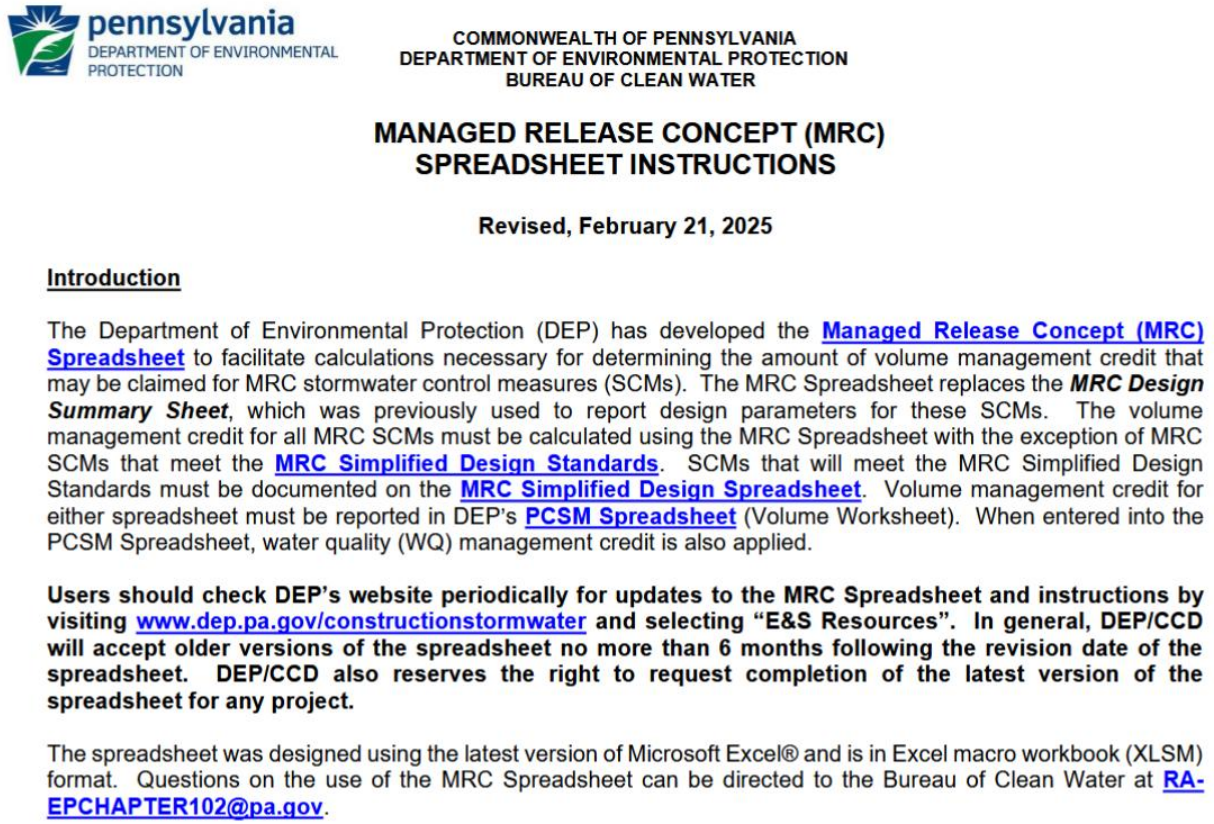
Device	Routing	Invert	Outlet Devices
#1	Primary	1,147.25'	**18.000" Round Culvert** L= 16.9' RCP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 1,147.25' / 1,147.00' S= 0.0148 '/' Cc= 0.900 n= 0.012, Flow Area= 1.77 sf
#2	Secondary	1,147.25'	**24.000" Round Culvert** L= 161.8' RCP, sq.cut end projecting, Ke= 0.500 Inlet / Outlet Invert= 1,147.25' / 1,106.32' S= 0.2530 '/' Cc= 0.900 n= 0.012, Flow Area= 3.14 sf
#3	Device 2	1,150.45'	**4.0' long Sharp-Crested Rectangular Weir** 0 End Contraction(s)

Primary OutFlow Max=14.12 cfs @ 12.12 hrs HW=1,151.08' TW=1,148.33' (Dynamic Tailwater)
↑**1=Culvert** (Inlet Controls 14.12 cfs @ 7.99 fps)

Secondary OutFlow Max=10.25 cfs @ 12.23 hrs HW=1,151.30' TW=1,108.03' (Dynamic Tailwater)
↑**2=Culvert** (Passes 10.25 cfs of 26.42 cfs potential flow)
↑**3=Sharp-Crested Rectangular Weir** (Weir Controls 10.25 cfs @ 3.01 fps)

MRC resources for you:

- MRC Concept Paper
- MRC Spreadsheet Instructions
- MRC FAQ
- MRC Design examples



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BUREAU OF CLEAN WATER

MANAGED RELEASE CONCEPT (MRC)
SPREADSHEET INSTRUCTIONS

Revised, February 21, 2025

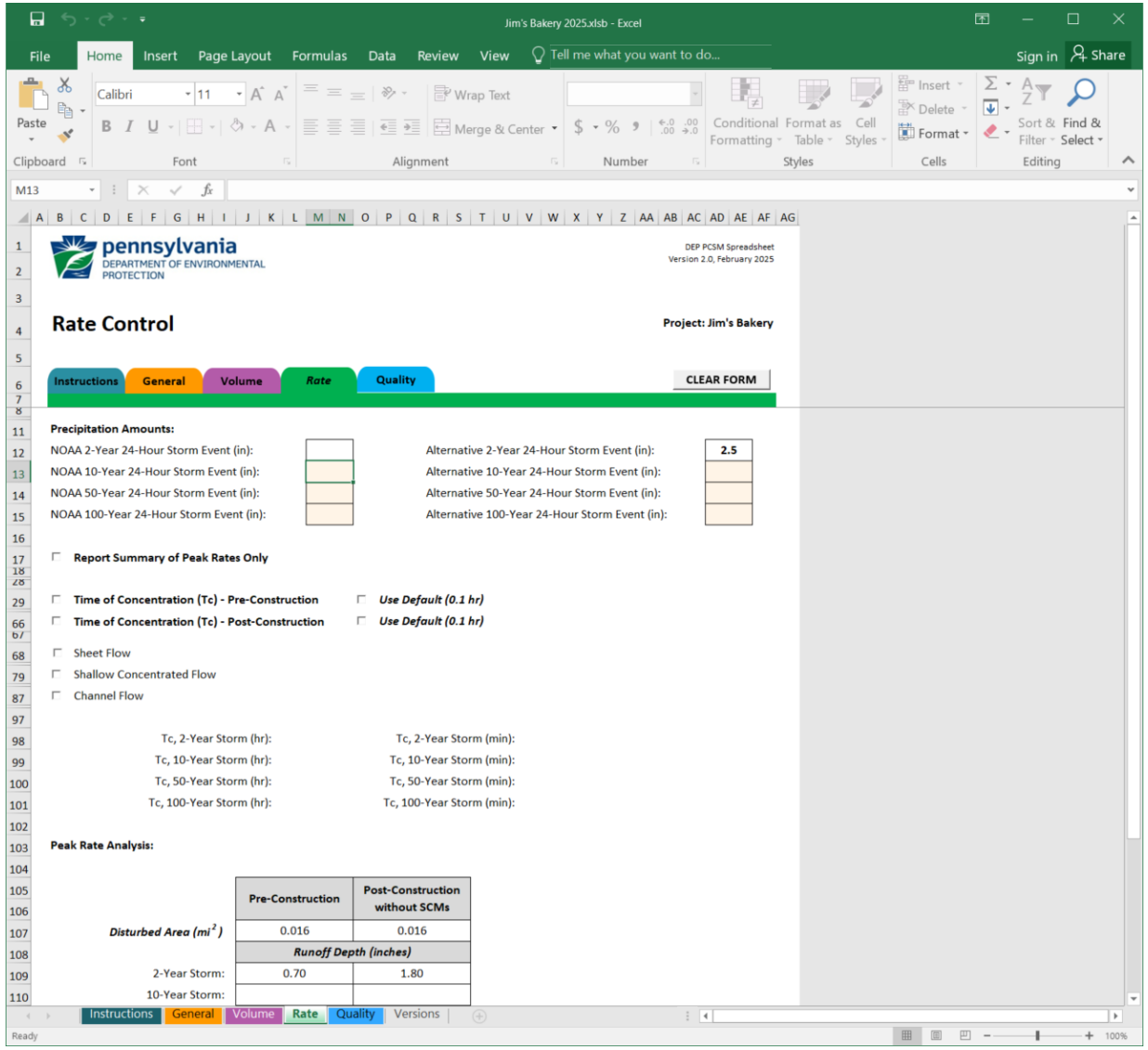
Introduction

The Department of Environmental Protection (DEP) has developed the Managed Release Concept (MRC) Spreadsheet to facilitate calculations necessary for determining the amount of volume management credit that may be claimed for MRC stormwater control measures (SCMs). The MRC Spreadsheet replaces the ***MRC Design Summary Sheet***, which was previously used to report design parameters for these SCMs. The volume management credit for all MRC SCMs must be calculated using the MRC Spreadsheet with the exception of MRC SCMs that meet the MRC Simplified Design Standards. SCMs that will meet the MRC Simplified Design Standards must be documented on the MRC Simplified Design Spreadsheet. Volume management credit for either spreadsheet must be reported in DEP's PCSM Spreadsheet (Volume Worksheet). When entered into the PCSM Spreadsheet, water quality (WQ) management credit is also applied.

Users should check DEP's website periodically for updates to the MRC Spreadsheet and instructions by visiting www.dep.pa.gov/constructionstormwater and selecting "E&S Resources". In general, DEP/CCD will accept older versions of the spreadsheet no more than 6 months following the revision date of the spreadsheet. DEP/CCD also reserves the right to request completion of the latest version of the spreadsheet for any project.

The spreadsheet was designed using the latest version of Microsoft Excel® and is in Excel macro workbook (XLSM) format. Questions on the use of the MRC Spreadsheet can be directed to the Bureau of Clean Water at RA-EPCHAPTER102@pa.gov.

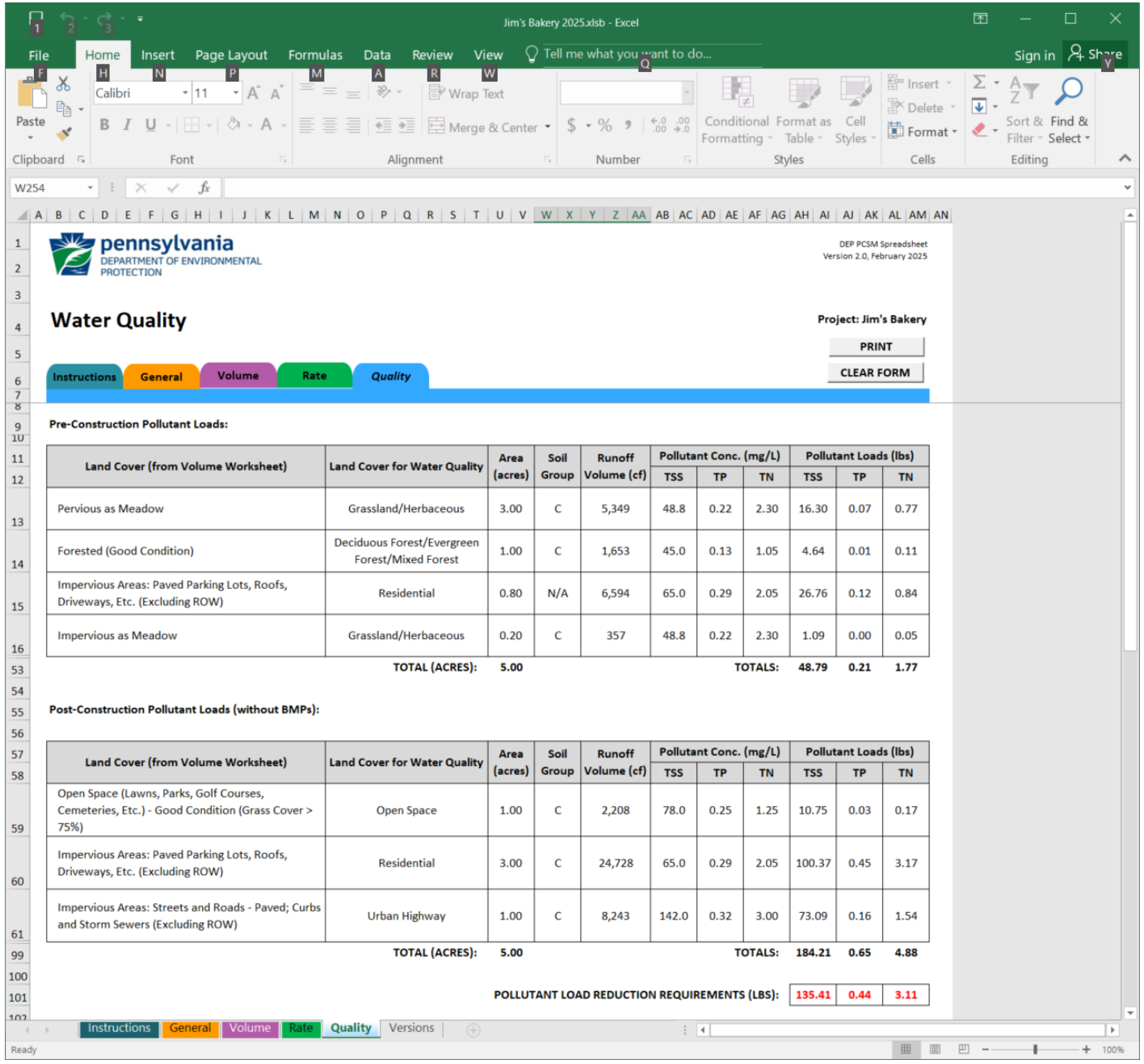
Excel Spreadsheets: Rate Control



Rate control worksheet does not calculate orifices, spillways, pipes, etc. You have to do that yourself and provide the input for the table. Remember to show your work for the reviewer!!

Water Quality spreadsheet is required.

The WQ spreadsheet calculates the effectiveness of the BMP's you have chosen.



Jim's Bakery 2025.xlsb - Excel

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DEPARTMENT OF ENVIRONMENTAL PROTECTION

DEP PCSM Spreadsheet
Version 2.0, February 2025

Water Quality

Project: Jim's Bakery

PRINT
CLEAR FORM

Instructions | General | Volume | Rate | *Quality*

Pre-Construction Pollutant Loads:

Land Cover (from Volume Worksheet)	Land Cover for Water Quality	Area (acres)	Soil Group	Runoff Volume (cf)	Pollutant Conc. (mg/L) TSS	TP	TN	Pollutant Loads (lbs) TSS	TP	TN
Pervious as Meadow	Grassland/Herbaceous	3.00	C	5,349	48.8	0.22	2.30	16.30	0.07	0.77
Forested (Good Condition)	Deciduous Forest/Evergreen Forest/Mixed Forest	1.00	C	1,653	45.0	0.13	1.05	4.64	0.01	0.11
Impervious Areas: Paved Parking Lots, Roofs, Driveways, Etc. (Excluding ROW)	Residential	0.80	N/A	6,594	65.0	0.29	2.05	26.76	0.12	0.84
Impervious as Meadow	Grassland/Herbaceous	0.20	C	357	48.8	0.22	2.30	1.09	0.00	0.05
	TOTAL (ACRES):	**5.00**					**TOTALS:**	**48.79**	**0.21**	**1.77**

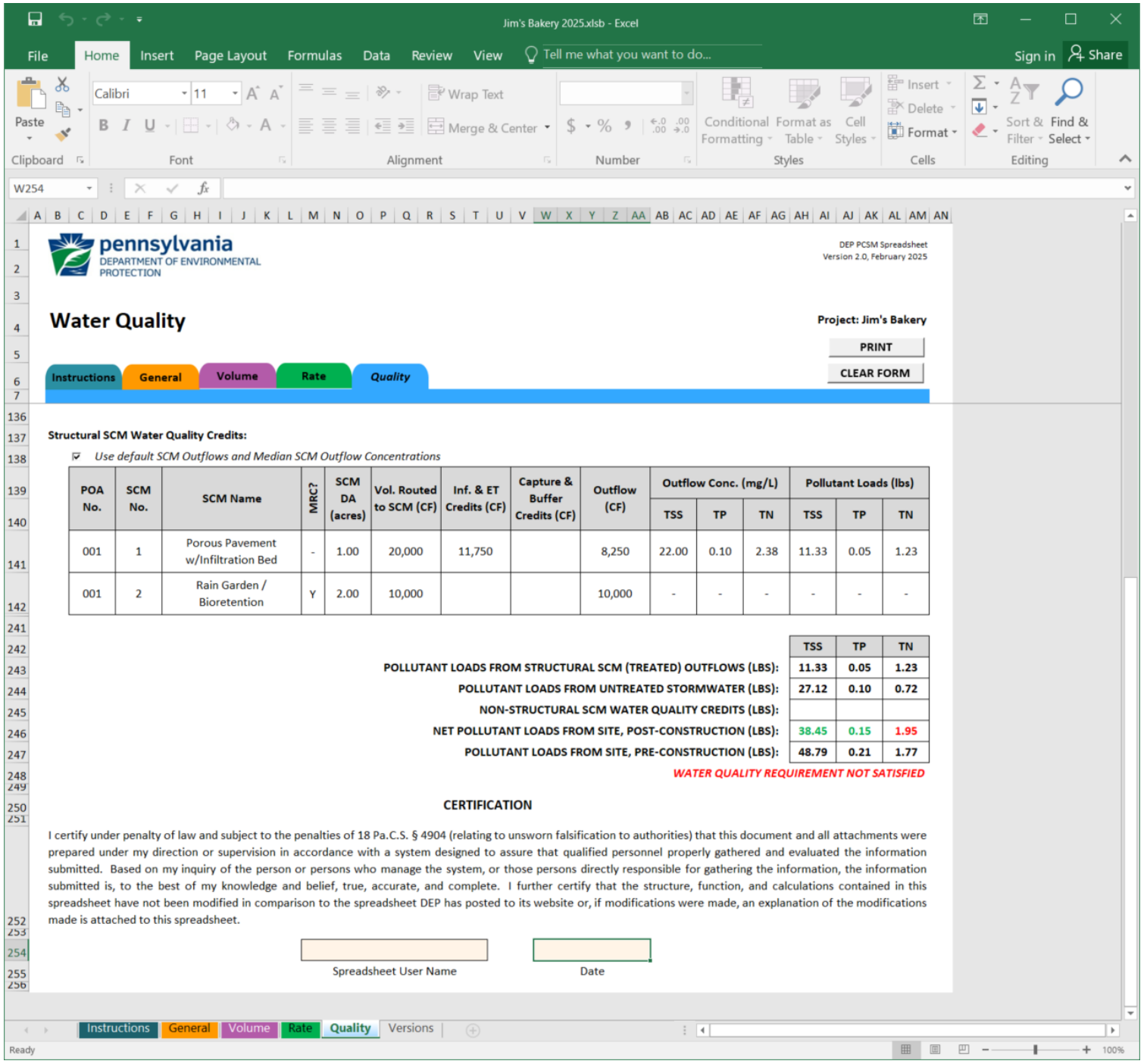
Post-Construction Pollutant Loads (without BMPs):

Land Cover (from Volume Worksheet)	Land Cover for Water Quality	Area (acres)	Soil Group	Runoff Volume (cf)	Pollutant Conc. (mg/L) TSS	TP	TN	Pollutant Loads (lbs) TSS	TP	TN
Open Space (Lawns, Parks, Golf Courses, Cemeteries, Etc.) - Good Condition (Grass Cover > 75%)	Open Space	1.00	C	2,208	78.0	0.25	1.25	10.75	0.03	0.17
Impervious Areas: Paved Parking Lots, Roofs, Driveways, Etc. (Excluding ROW)	Residential	3.00	C	24,728	65.0	0.29	2.05	100.37	0.45	3.17
Impervious Areas: Streets and Roads - Paved; Curbs and Storm Sewers (Excluding ROW)	Urban Highway	1.00	C	8,243	142.0	0.32	3.00	73.09	0.16	1.54
	TOTAL (ACRES):	**5.00**					**TOTALS:**	**184.21**	**0.65**	**4.88**
							POLLUTANT LOAD REDUCTION REQUIREMENTS (LBS):	**135.41**	**0.44**	**3.11**

Instructions | General | Volume | Rate | Quality | Versions

Ready

Notice it's difficult to get Nitrogen down. You have to add and enlarge your plan's BMP's and route more water through them.



Jim's Bakery 2025.xlsb - Excel

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DEPARTMENT OF ENVIRONMENTAL PROTECTION

DEP PCSM Spreadsheet
Version 2.0, February 2025

Water Quality

Project: Jim's Bakery

PRINT
CLEAR FORM

Instructions | General | Volume | Rate | *Quality*

Structural SCM Water Quality Credits:

☑ *Use default SCM Outflows and Median SCM Outflow Concentrations*

POA No.	SCM No.	SCM Name	MRC?	SCM DA (acres)	Vol. Routed to SCM (CF)	Inf. & ET Credits (CF)	Capture & Buffer Credits (CF)	Outflow (CF)	Outflow Conc. (mg/L)			Pollutant Loads (lbs)		
									TSS	TP	TN	TSS	TP	TN
001	1	Porous Pavement w/Infiltration Bed	-	1.00	20,000	11,750		8,250	22.00	0.10	2.38	11.33	0.05	1.23
001	2	Rain Garden / Bioretention	Y	2.00	10,000			10,000	-	-	-	-	-	-

	TSS	TP	TN
POLLUTANT LOADS FROM STRUCTURAL SCM (TREATED) OUTFLOWS (LBS):	11.33	0.05	1.23
POLLUTANT LOADS FROM UNTREATED STORMWATER (LBS):	27.12	0.10	0.72
NON-STRUCTURAL SCM WATER QUALITY CREDITS (LBS):			
NET POLLUTANT LOADS FROM SITE, POST-CONSTRUCTION (LBS):	38.45	0.15	1.95
POLLUTANT LOADS FROM SITE, PRE-CONSTRUCTION (LBS):	48.79	0.21	1.77

WATER QUALITY REQUIREMENT NOT SATISFIED

CERTIFICATION

I certify under penalty of law and subject to the penalties of 18 Pa.C.S. § 4904 (relating to unsworn falsification to authorities) that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I further certify that the structure, function, and calculations contained in this spreadsheet have not been modified in comparison to the spreadsheet DEP has posted to its website or, if modifications were made, an explanation of the modifications made is attached to this spreadsheet.

Spreadsheet User Name | Date

Instructions | General | Volume | Rate | Quality | Versions

Ready

Over time, expectations change…

Expectations changing at the plan development level…

- Greater level of site information and investigation, including infiltration tests
- Higher level of design effort: MRC, Spreadsheets, Erosion Potential Analysis (former Off-Site Discharge), VSIR, NOT, New Homeowners Notification, Municipal notification…
- New types of BMP's add cost & complexity
- Need to communicate with the client!
- Client needs to communicate with homebuyers!

Erosion Potential Analysis may be required.

(formerly called Off-Site Discharge Analysis)

Is this a Surface Water?

3800-FM-BCW0271h Rev. 10/2024
Erosion Potential Analysis
Pennsylvania Department of Environmental Protection

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF CLEAN WATER

EROSION POTENTIAL ANALYSIS FOR CHAPTER 102 PERMITS

DISCHARGE POINT (DP) ID: _____ ☐ **DURING** ☐ **FOLLOWING CONSTRUCTION**

Applicant Name: Project Site Name:

CONVEYANCE INFORMATION

Type of Conveyance:

☐ Existing channel/swale or other flow path that will be partially improved

☐ Existing channel/swale or other flow path that will not be improved

Distance to Property Boundary: ft Distance to Surface Water or Storm Sewer: ft

FLOW PATH INFORMATION

The entire flow path is shown on: ☐ E&S ☐ PCSM Plan Drawings

Plan Drawing No(s): _____

Description of land cover of flow path: _____

☐ Photographs of the flow path are attached.

Critical Section Data:

Peak discharge rate at 10-year/24-hour storm *(attach calculations or model output)*: _____ cfs

Slope: _____ % Soil type(s): _____ Soil Erodibility (k) factor: _____

Maximum Allowable Velocity: _____ fps Source: _____

Maximum Allowable Shear: _____ psf Source: _____

Calculated Maximum Velocity: _____ fps *(Attach calculations or model output)*

Calculated Maximum Shear: _____ psf *(Attach calculations or model output)*

Source of topographic data for flow path: _____

☐ The flow path will be improved as described below.

Affected Landowners: ☐ Stormwater discharges will not flow off-site.

Landowner Name	Address	Phone No.	Email

A level spreader, properly designed and constructed, is suitable for a discharge to an area that is not a surface water.

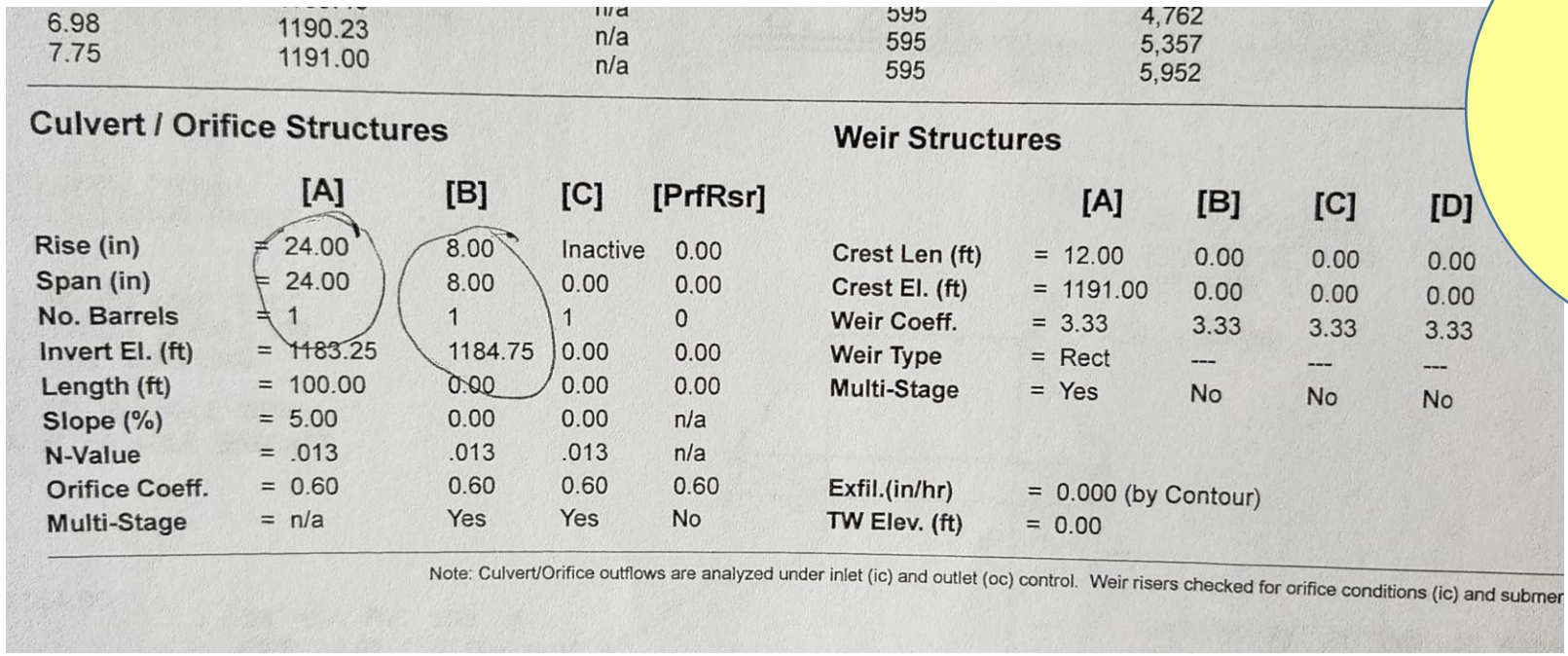
Expectations changing at the construction level…

- Construction of more BMP's across a site. BMP's for the entire site as well as for individual properties.
- Complexity of BMP's. Infiltration BMP's. Managed Release Concept (MRC) BMP's.
- Inspection by qualified professional
- Recorder of Deeds, etc…
- Need to communicate with your client

Avoiding errors in stormwater detention pond design and construction

Riser/orifice calculations

Please make sure the orifice sizes, number of orifices, weirs, and elevations match what's on the drawing!



6.98	1190.23	n/a	595	4,762
7.75	1191.00	n/a	595	5,357
			595	5,952

Culvert / Orifice Structures

	[A]	[B]	[C]	[PrfRsr]
Rise (in)	= 24.00	8.00	Inactive	0.00
Span (in)	= 24.00	8.00	0.00	0.00
No. Barrels	= 1	1	1	0
Invert El. (ft)	= 1183.25	1184.75	0.00	0.00
Length (ft)	= 100.00	0.00	0.00	0.00
Slope (%)	= 5.00	0.00	0.00	n/a
N-Value	= .013	.013	.013	n/a
Orifice Coeff.	= 0.60	0.60	0.60	0.60
Multi-Stage	= n/a	Yes	Yes	No

Weir Structures

	[A]	[B]	[C]	[D]
Crest Len (ft)	= 12.00	0.00	0.00	0.00
Crest El. (ft)	= 1191.00	0.00	0.00	0.00
Weir Coeff.	= 3.33	3.33	3.33	3.33
Weir Type	= Rect	---	---	---
Multi-Stage	= Yes	No	No	No

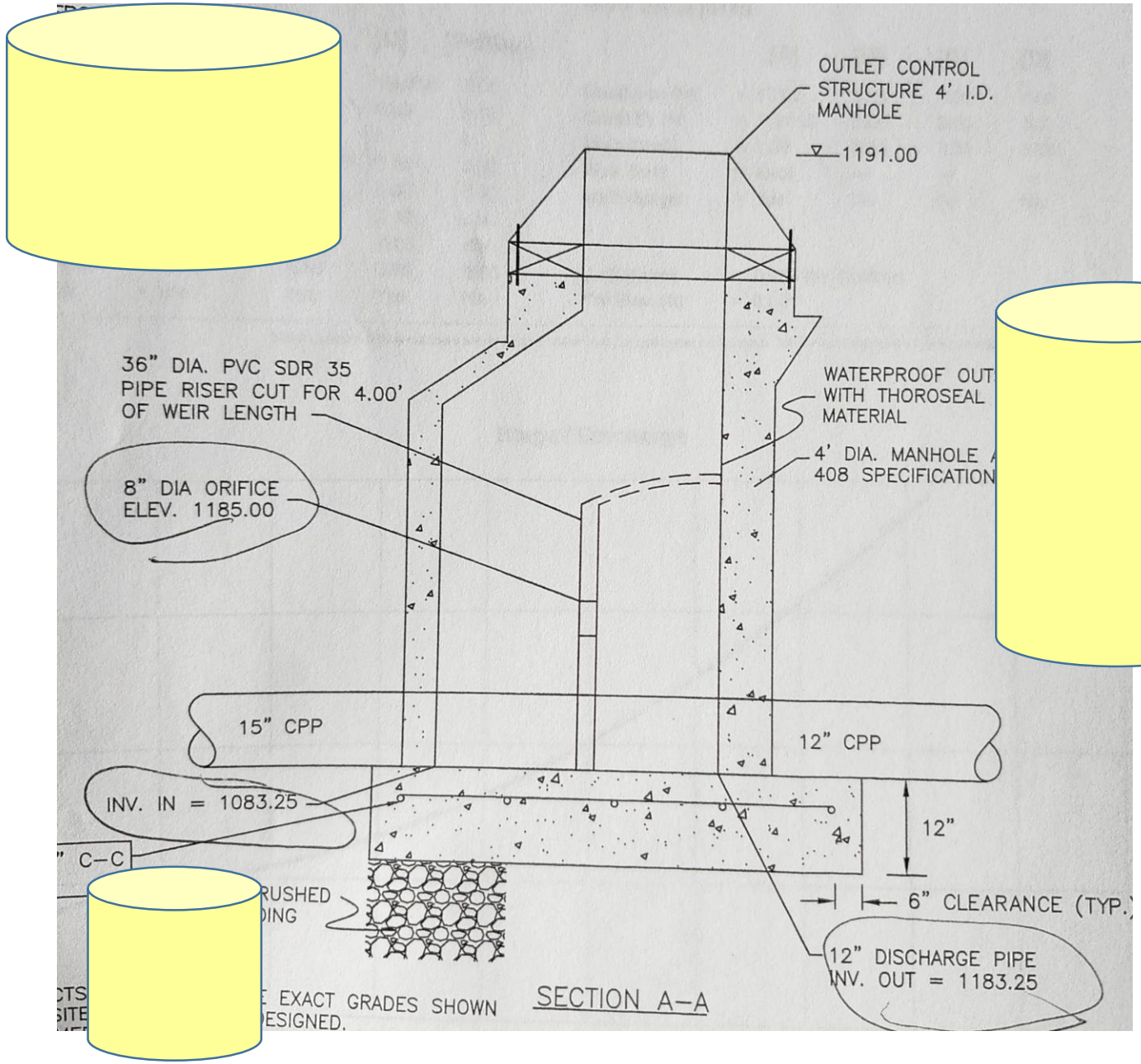
Exfil.(in/hr) = 0.000 (by Contour)

TW Elev. (ft) = 0.00

Note: Culvert/Orifice outflows are analyzed under inlet (ic) and outlet (oc) control. Weir risers checked for orifice conditions (ic) and submer

Riser/orifice drawing

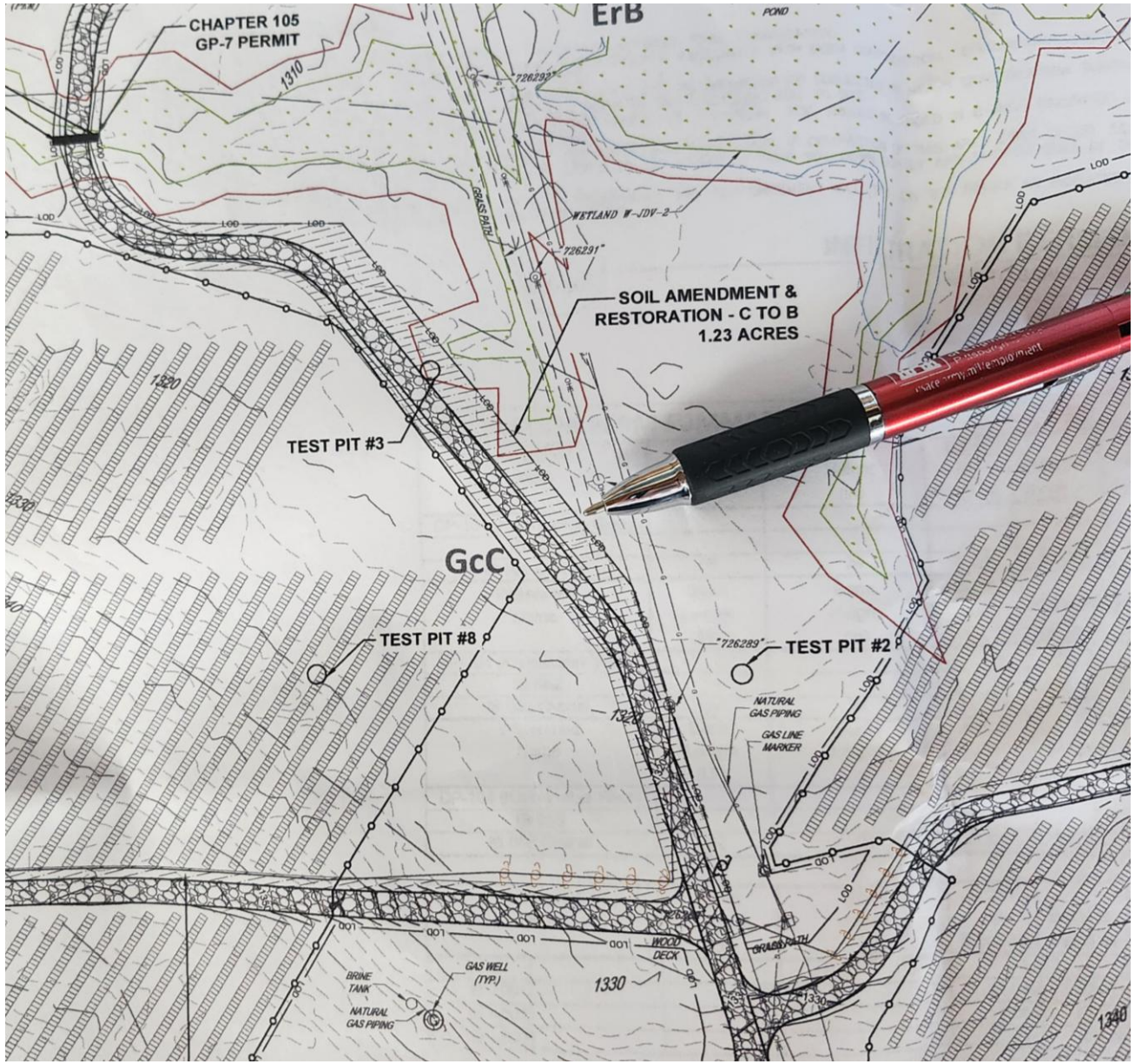
Please make sure that the arrangement of orifices, weirs, sizes, elevations, etc. matches the calculations!



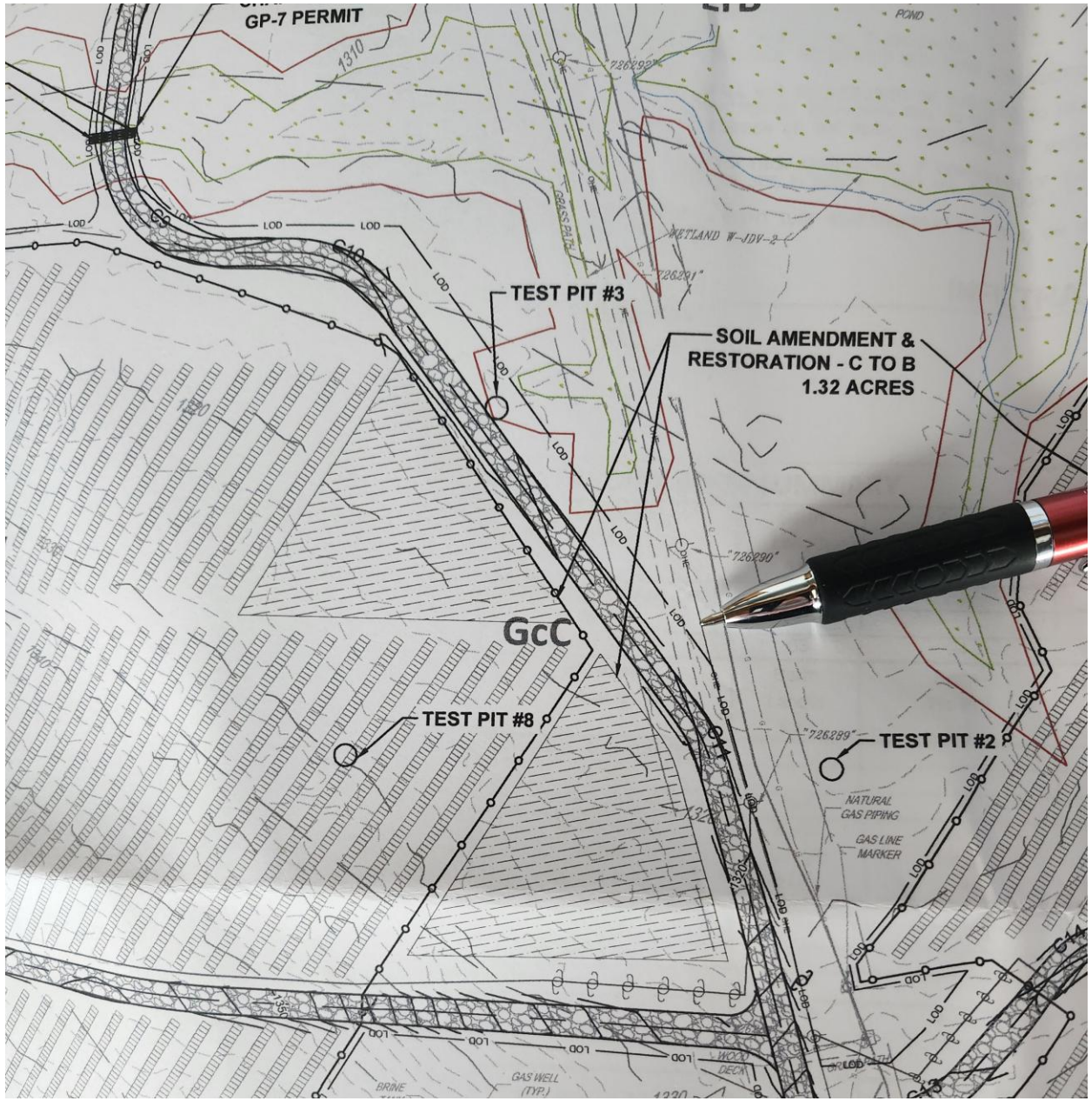
When in doubt, just add more orifices!

A proposal to use “amended soil” as a SWM BMP.

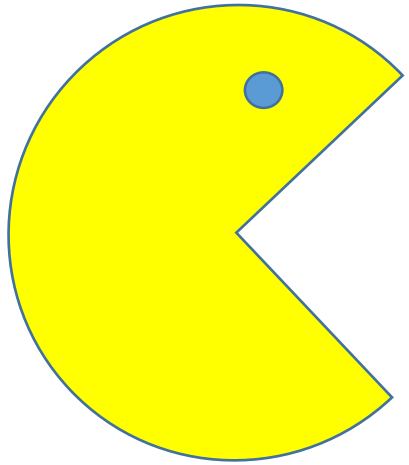
Linear shape posed some problems…



As revised, the amended soils SWM BMP is now in a more compact shape.



New Expectation: Visual Site Inspection Report



Communicate with your client!

3800-FM-BCW0271d Rev. 12/2024
Inspection Report
Pennsylvania Department of Environmental Protection

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF CLEAN WATER

CHAPTER 102 VISUAL SITE INSPECTION REPORT

GENERAL INFORMATION

Project Site Name: _____ Permit No.: _____

Permit Type: ☐ PAG-01 ☐ PAG-02 ☐ Individual NPDES ☐ Individual E&S ☐ ESCGP

Approval Date: _____ Expiration Date: _____

Permittee Name: _____ Municipality: _____

Inspector Name: _____ County: _____

Inspector Firm: _____ Inspector Title: _____

Inspector Email: _____ Inspector Phone: _____

☐ The inspector named above is qualified *(check the appropriate box below)*

☐ DEP's Clean Water Academy Program ☐ CPESC ☐ CESSWI ☐ Other (equivalent)

INSPECTION INFORMATION

Inspection Date: _____ Inspection Time: _____ AM / PM Inspection No.: _____

Precipitation (Previous 24 hrs): _____ inch(es) Source: _____

Current Site Conditions: ☐ Active Earth Disturbance ☐ Fully Stabilized ☐ Snow Covered ☐ Other

Current Weather Conditions: ☐ Rain/Sleet/Snow ☐ Overcast ☐ Sunny/Partly Sunny

Inspection Type: ☐ Routine (Weekly) ☐ Post-Storm (≥ 0.25 inch) ☐ Corrective Action

INSPECTION CHECKLIST

Inspect all of the following areas of the project site. Check the box to certify these areas have been inspected and describe problems or deficiencies identified, if any. Use a separate sheet as necessary.

1. Areas that have been cleared and grubbed, graded, excavated, or otherwise disturbed and are not yet stabilized.
   - ☐ These areas have been inspected ☐ N/A (no areas on-site meet these conditions)
   - ☐ Areas are dormant for four (4) days or longer and are not temporarily stabilized.
   - ☐ Areas have been final graded but have not yet been stabilized.
   - ☐ All disturbances are being actively graded and are not yet ready for temporary or permanent stabilization.

2. BMPs/SCMs installed to comply with the permit (including site perimeter BMPs).
   - ☐ BMPs/SCMs have been inspected ☐ N/A (there are no BMPs/SCMs on-site at the time of inspection)
   - ☐ Photographs of BMPs/SCMs on-site are attached with a date/time stamp.
   - ☐ Photographs of all observed deficiencies are attached with a date/time stamp.
   - ☐ A BMP/SCM Inspection checklist has been completed and is attached for one or more BMPs/SCMs.

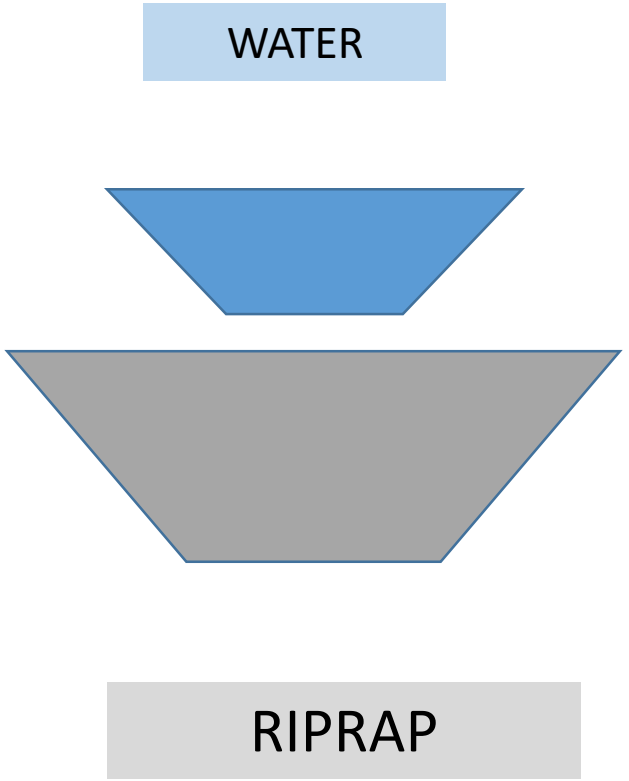
   Description of problems or deficiencies identified: ☐ No deficiencies identified

No freeboard!

Water might run in the door!

This rock-lined ditch is not really a ditch at all. Without capacity inside the ditch, water will start running alongside the ditch outside of the rock.

A very nice Rock-Lined Ditch—Cranberry Township



Certifying a stormwater control measure (SCM)

Communicate with your client!

3800-FM-BCW0271j 8/2024
SCM Certification Form
Pennsylvania Department of Environmental Protection

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF CLEAN WATER

CHAPTER 102 SCM CONSTRUCTION CERTIFICATION FORM

GENERAL PROJECT AND SCM INFORMATION

Project Site Name:		Permit No.:	
Permittee Name:		Expiration Date:	
SCM Name:		SCM ID No.:	
Designer Name:		Municipality:	
Designer Firm:		County:	
Recording Date:		SCM Latitude:	
Drainage Area:	acres	SCM Longitude:	
Impervious Area:	acres	Date Complete:	

☐ New SCM ☐ Modified SCM Person(s) responsible for long-term O&M:

Report all inspections of the SCM and provide the information requested in the table below or as an attachment.

Inspection Date	Critical Stage(s)	Inspector Name	Inspector Firm

CONSTRUCTION INFORMATION

☐ Photographs of each critical stage with date/time stamps and appropriate captions are attached (**required**).

Explain any deviations made during construction in comparison to the approved PCSM Plan and if the deviations were approved by DEP/CCD.

Describe measurements taken by the inspector to evaluate conformance of the SCM and its components with approved plans.

Was volume management credit claimed in the PCSM Plan using infiltration for this SCM? ☐ Yes ☐ No

Describe the method(s) used to confirm in the field that the SCM will infiltrate as designed.

Describe corrective measures as a result of confirmation testing, if any.

Rain garden with riser, trash rack, underdrain, baffle, soil mix

A $1.5 million home with a rain garden in the front yard!!

Communicate with your client!

Photo by Paul Pillsbury

New property owner form for PCSM BMP's

3800-FM-BCW0271i 8/2024
Notification Form

Pennsylvania Department of Environmental Protection

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF CLEAN WATER

NOTICE TO NEW PROPERTY OWNERS OF PCSM SCMs AND O&M REQUIREMENTS
"NEW PROPERTY OWNER NOTIFICATION FORM"

The property that you are purchasing or that you own contains one or more post-construction stormwater management (PCSM) stormwater control measures (SCMs) that require long-term operation and maintenance (O&M) to continue performing their intended functions. The long-term O&M requirements have been recorded as part of a covenant that affects this property. You have the right to enter into an agreement with a third party to perform long-term O&M. Note – Completion of long-term O&M may be enforced by your municipality under the terms of local ordinances.

PROJECT SITE INFORMATION

Project Site Name: _____ Permit No.: _____

Permittee Name: _____ Date of Sale: _____

Will the sale of property also include a transfer of the Chapter 102 permit? ☐ Yes ☐ No

PROPERTY CONTAINING PCSM SCM(s)

Municipality: _____ County: _____

Plot Book Volume: _____ Page: _____

Tax Parcel # / UPI: _____ Owner: _____

Address: _____ Phone: _____

City, State, ZIP: _____ Email: _____

PCSM SCM INFORMATION

Name / Description of SCM: _____

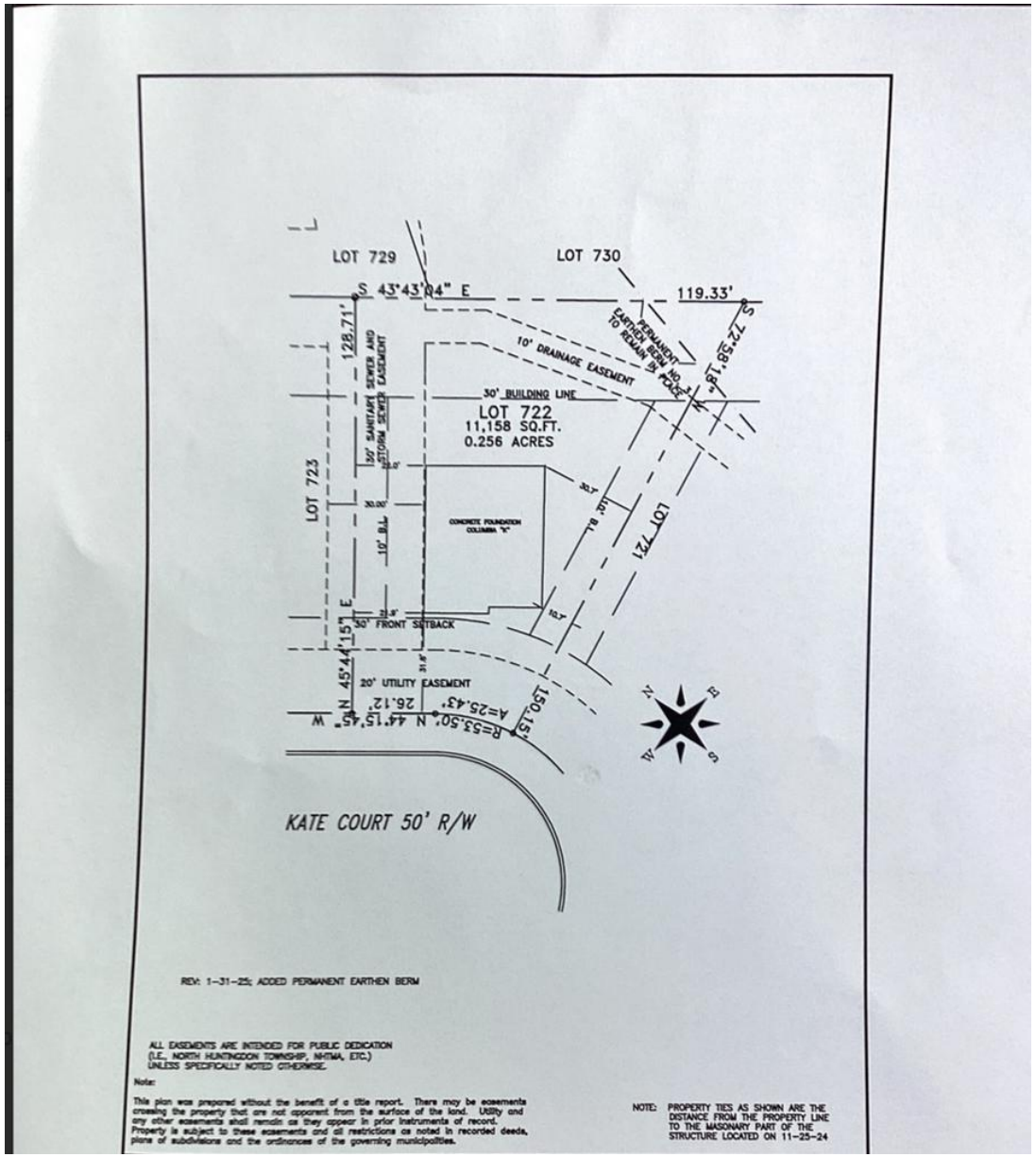
Location of SCM on Property: _____

Describe Access to SCM: _____

Impervious Area Treated: _____ acre(s) _____ square feet

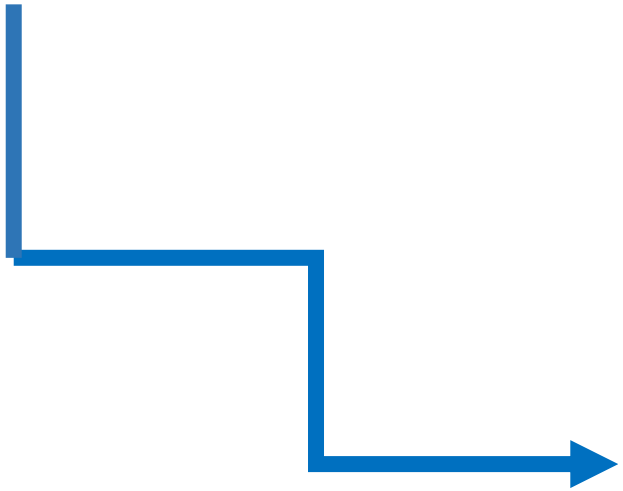
☐ The PCSM SCM has been identified in a legal instrument that has been recorded with the County Recorder of Deeds.

☐ The new property owner has been provided the O&M Plan for the PCSM SCM. The O&M Plan has been recorded.



If you discharge to an MS4 or to a CSS, you need this form…

And the municipality needs to accept it



3800-FM-BCW0271f Rev. 3/2024
MS4/CSS Notification Form

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF CLEAN WATER

NOTIFICATION OF PROPOSED STORMWATER DISCHARGES TO MS4s AND CSSs FOR CHAPTER 102 PERMITS

GENERAL INFORMATION (COMPLETED BY APPLICANT)

Applicant Name: _____ Contact Name: _____

Applicant Address: _____ Contact Phone: _____

Applicant City, State, ZIP: _____ County: _____

Project Site Name: Municipality:

SEWER SYSTEM AND DISCHARGE INFORMATION (COMPLETED BY APPLICANT)

Stormwater will be discharged to a(n): ☐ MS4 ☐ CSS ☐ During Construction ☐ After Construction

Name of MS4 or CSS Owner: ____ Discharge Point ID: ____

Proposed Change(s) in Stormwater Runoff ***Peak Discharge Rate*** (cfs): ☐ No Change

☐ Increase @ ☐ 2-yr ____ ☐ 10-yr ____ ☐ 50-yr ____ ☐ 100-yr ____

☐ Decrease @ ☐ 2-yr ____ ☐ 10-yr ____ ☐ 50-yr ____ ☐ 100-yr ____

Proposed Change in Stormwater Runoff ***Volume*** up to the 2-year/24-hour storm (CF): ☐ No Change

☐ Increase ____ ☐ Decrease ____

Proposed Change in Stormwater ***Quality (Pollutant Loads)*** up to the 2-year/24-hour storm (lbs): ☐ No Change

APPLICANT CERTIFICATION

I certify under penalty of law (see 18 Pa.C.S. § 4904 (relating to unsworn falsification)) that the information reported herein 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 information, 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.

Applicant Name **Official Title**

Applicant Signature **Date Signed**

ACCEPTANCE OF DISCHARGE (COMPLETED BY MS4/CSS OWNER, IF REQUIRED)

☐ I agree to accept the increase in stormwater runoff rate, volume or quality (pollutant loads) if identified above.

Name of Person Signing for MS4 or CSS Permittee **Official Title**

MS4 or CSS Permittee Signature **Date Signed**

Notice of Termination

3800-PM-BCW0229b Rev. 2/2025
Notice of Termination
Pennsylvania Department of Environmental Protection

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF CLEAN WATER

NOTICE OF TERMINATION (NOT)
FOR CHAPTER 102 PERMITS

1. GENERAL INFORMATION

Permittee Name: _____ Contact: _____
Permittee Address: _____ Email: _____
Permittee City, State, Zip: _____ Phone: _____
Site Name: _____ Municipality: _____
Site Address: _____ County: _____
Site City, State, Zip: _____ Latitude: _____
Longitude: _____

Co-Permittees:

Name	Address	Email	Phone	Operator
				☐
				☐

2. PERMIT TERMINATION REQUEST

Permit Type: ☐ PAG-01 ☐ PAG-02 ☐ Individual NPDES ☐ Individual E&S ☐ ESCGP

Permit No.: _____ Expiration Date: _____

Project Completion Status:

☐ Project Complete – All planned earth disturbance activities have been completed and all PCSM SCMs have been installed.

☐ Project Complete – Some of the planned earth disturbance activities have been completed and all planned PCSM SCMs have been installed.

☐ Project Complete – Some of the planned earth disturbance activities have been completed and not all PCSM SCMs have been installed

☐ Project Cancelled or Postponed – No planned earth disturbance conducted (*skip to Section 9*).

☐ Project Partially Complete – Seeking termination of the permit for a portion of the project site.

Have temporary Erosion and Sediment Control (E&S) BMPs been removed per § 102.22(a)(1)? ☐ Yes ☐ No

Is the area of earth disturbance addressed by this NOT permanently stabilized per § 102.22(a)(2)? ☐ Yes ☐ No

3. GENERAL PCSM SCM INFORMATION

☐ The project site has been restored or reclaimed in accordance with 25 Pa. Code § 102.8(n) *(skip to Section 7)*.

☐ The project site includes structural and/or non-structural PCSM SCMs that are subject to long-term O&M. Section 4 has been completed.

- ☐ An O&M Plan(s) has been prepared for each PCSM SCM that requires long-term O&M. The O&M Plan(s) has been provided to the person(s) responsible for long-term O&M and is(are) attached to this NOT.
- ☐ A person has been identified to complete O&M for each PCSM SCM requiring long-term O&M. Section 5 has been completed. The person identified in Section 5 has received record drawing(s) for the PCSM SCM(s) they are responsible for maintaining.

Stormwater Management

Is your friend.

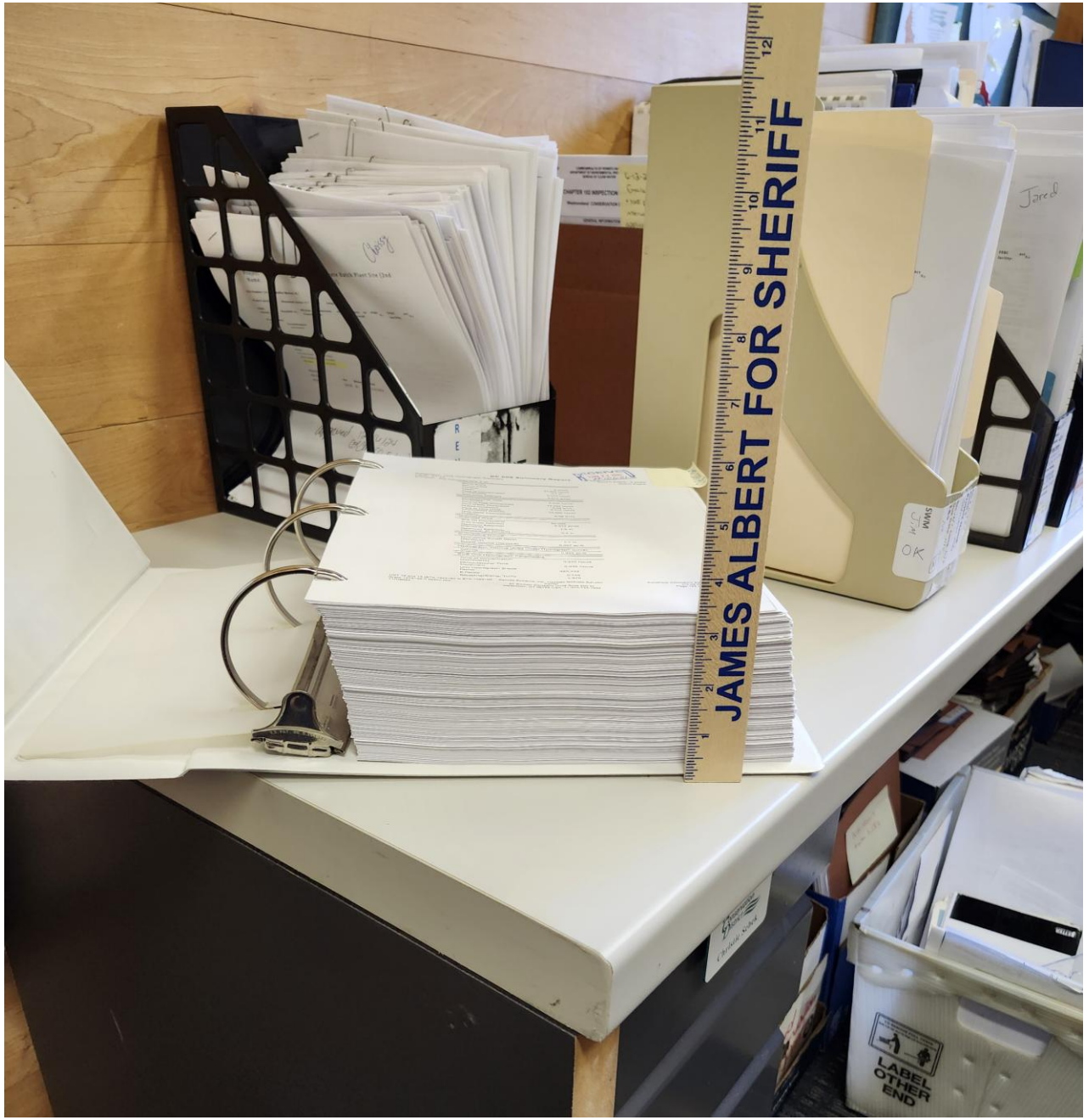
Jim Pillsbury

Westmoreland Conservation District

jim@wcdpa.com

Westmorelandconservation.org

3½ inches of plan…
with no dividers!



A recent birthday present for Jim the engineer!!

Please print things out so that they can be easily read.