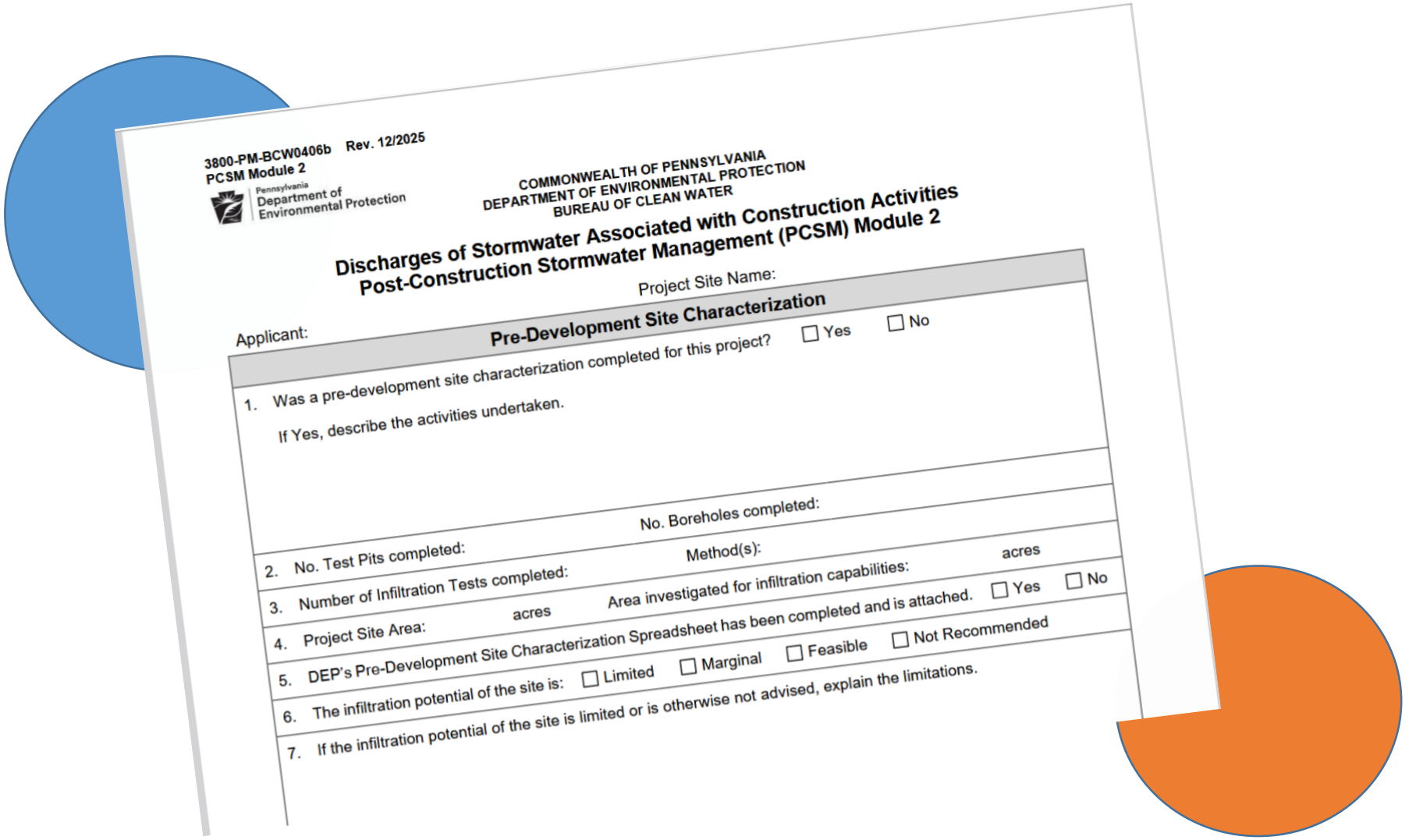
Module 2

Westmoreland Conservation District

Engineers Workshop

March 19-20, 2026

Module 2: be sure to get the latest version from the DEP website



3800-PM-BCW0406b Rev. 12/2025
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.

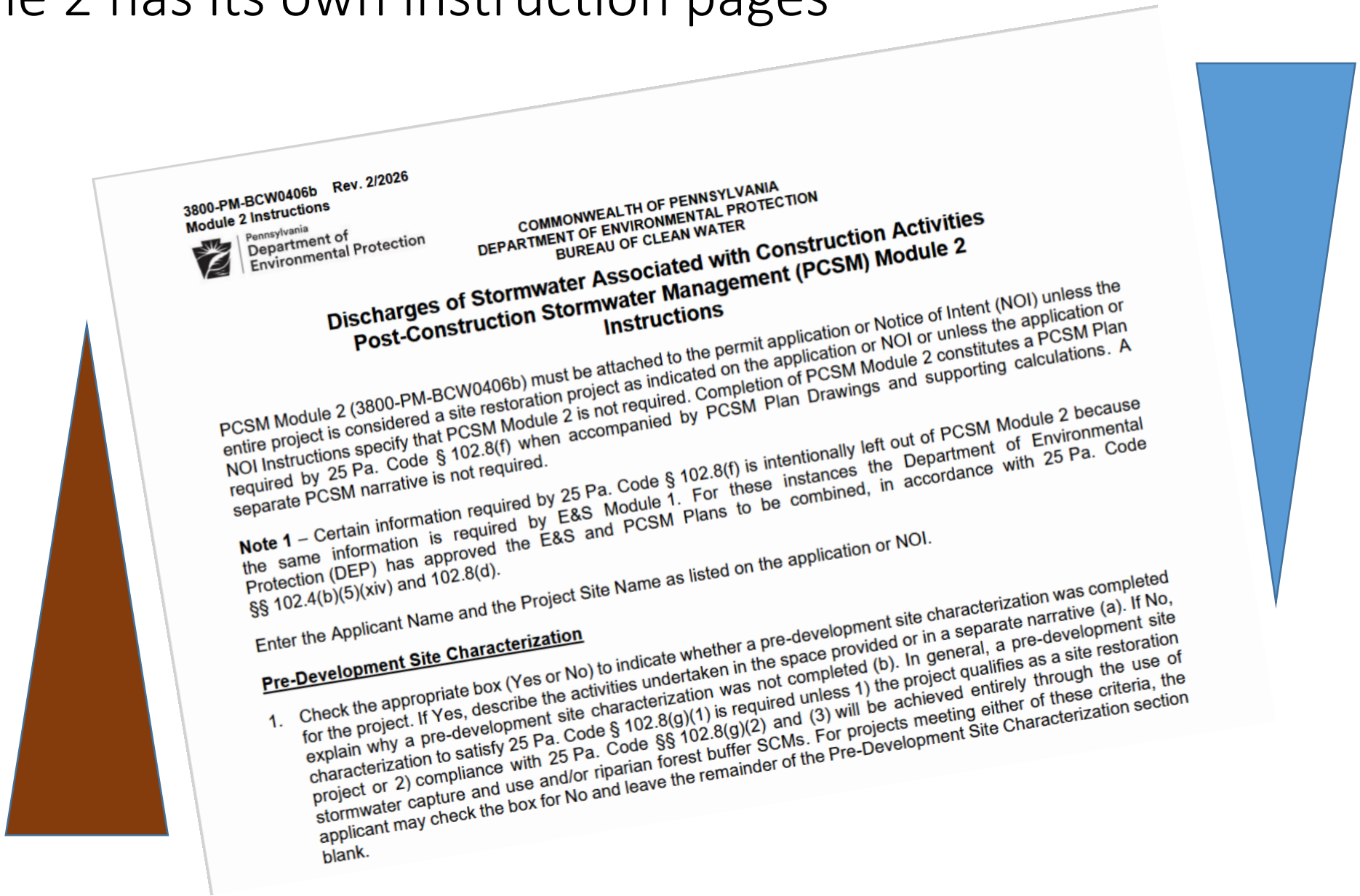
Module 2 is…

- Part of an NPDES permit submission
- One of four possible Modules that you may need

(Module 1, E&S; Module 2, PCSM; Module 3, ABACT BMP's; Module 4, Riparian buffers)

- How you document the various stormwater features of your plan
- An easy-to-review summary of your stormwater plan

Module 2 has its own instruction pages



3800-PM-BCW0406b Rev. 2/2026
Module 2 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 entire 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.

The start of Module 2 focuses on Pre-Development Site Characterization

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PCSM Module 2

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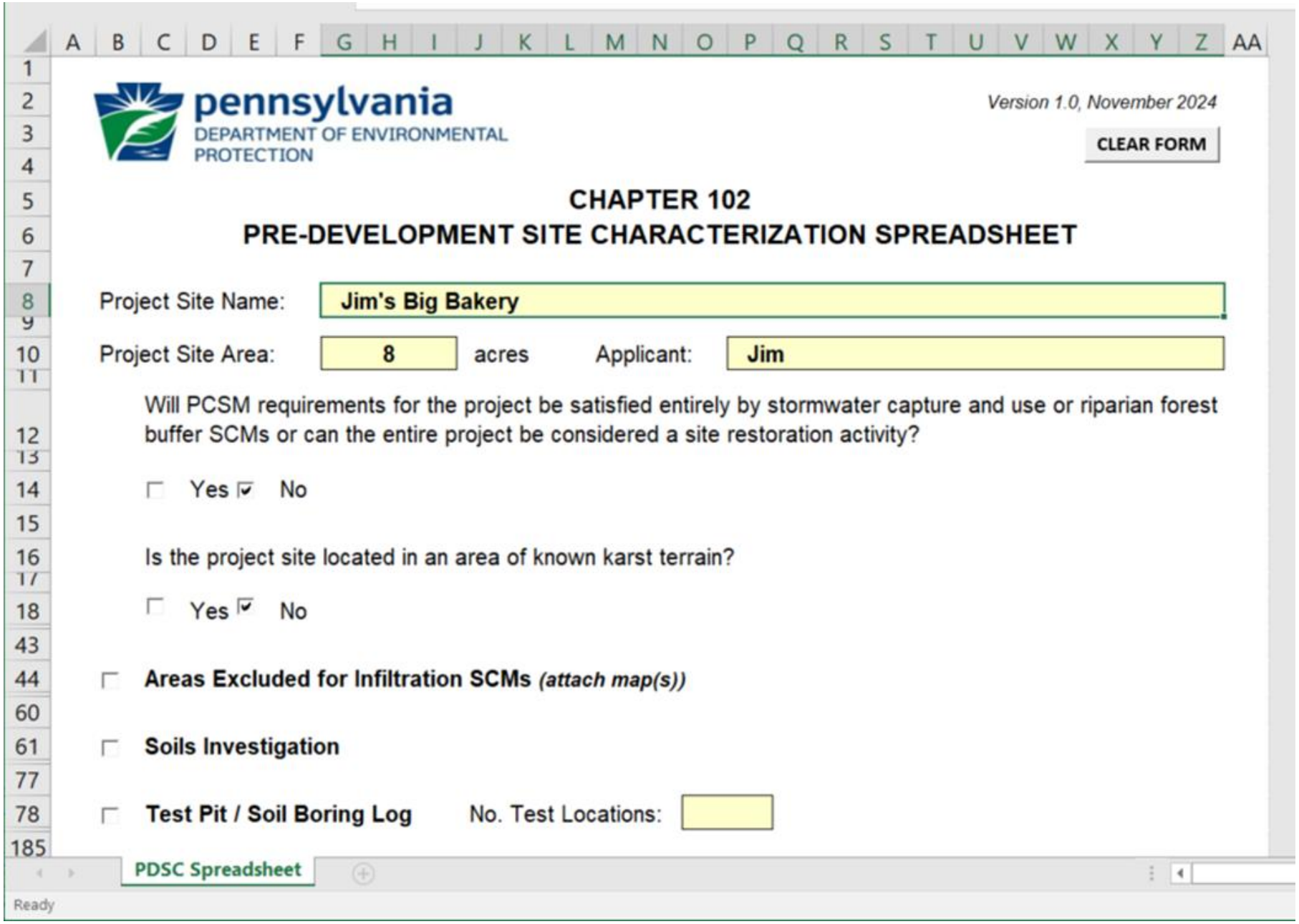
Discharges of Stormwater Associated with Construction Activities
Post-Construction Stormwater Management (PCSM) Module 2

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.

PDSC Spreadsheet should be submitted as part of your NPDES



pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

Version 1.0, November 2024

CLEAR FORM

CHAPTER 102
PRE-DEVELOPMENT SITE CHARACTERIZATION SPREADSHEET

Project Site Name: Jim's Big Bakery

Project Site Area: 8 acres Applicant: Jim

Will PCSM requirements for the project be satisfied entirely by stormwater capture and use or riparian forest buffer SCMs or can the entire project be considered a site restoration activity?

☐ Yes ☑ No

Is the project site located in an area of known karst terrain?

☐ Yes ☑ No

☐ **Areas Excluded for Infiltration SCMs** ***(attach map(s))***

☐ **Soils Investigation**

☐ **Test Pit / Soil Boring Log** No. Test Locations:

PDSC Spreadsheet

Ready

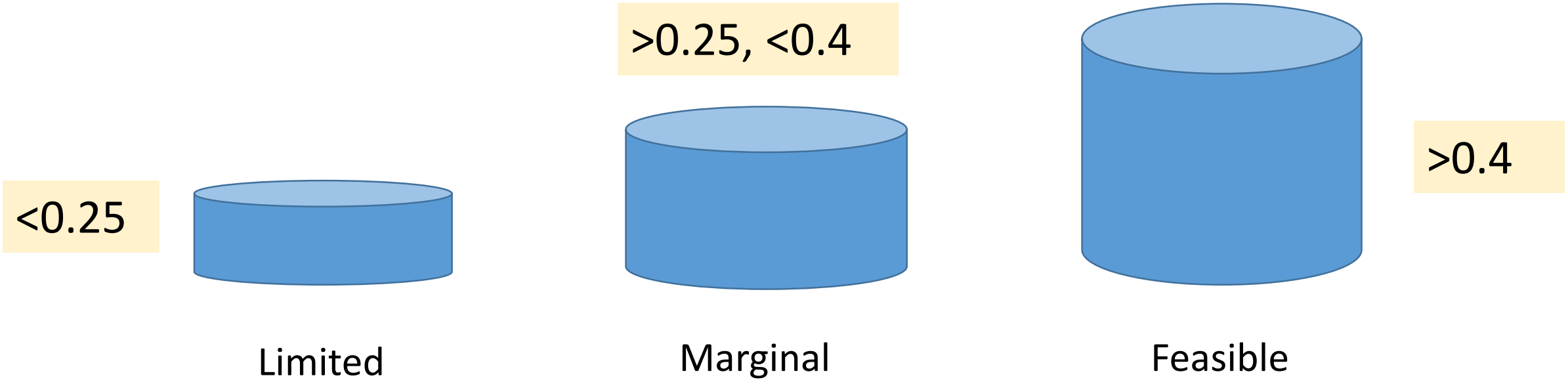
The infiltration potential of the site is Limited, Marginal, Feasible.

6. Check the appropriate box to indicate whether the infiltration potential of the project site is limited, marginal or feasible using the following criteria:
   - Where all infiltration test results across the project site are less than or equal to 0.25 inch/hour, select limited.
   - Where one or more infiltration test results across the project site are greater than 0.25 inch/hour but less than 0.4 inch/hour, select marginal.
   - Where one or more infiltration test results across the project site are greater than or equal to 0.4 inch/hour, select feasible.

   Select “Not Recommended” if the PCSM Plan preparer believes infiltration should be avoided.

Infiltration tests done across the site…

Across the site means you followed the recommendations of the PDSC Spreadsheet



Protecting natural drainage features—they must be placed in an easement and protected during and after construction

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.

You also need to protect the drainage patterns of any wetlands

Choose Points of Analysis (POA) and identify them on the plan drawings

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PCSM Module 2

POINTS OF ANALYSIS (POAS)				
1. Identify all POAs used for the stormwater analysis and provide the information requested. All runoff from the site must be accounted for.				
POA No.	**Latitude**	**Longitude**	**DA (acres)**	**Surface Water Name**

- POA is located either at the project site boundary or at a surface water
- POA can receive stormwater from all or a portion of a site
- POA must be shown on plan drawings.

PCSM SCM Inventory

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PCSM Module 2

PCSM SCM Inventory							
1. Identify all PCSM SCMs planned for the project site and provide the information requested.							
SCM ID	**SCM Name**	**Latitude**	**Longitude**	**DA Treated (acres)**	**Infiltration?**	**Factor of Safety**	**Design Infiltration Rate or Ksat (in/hr)**
					☐		
					☐		
					☐		
					☐		

- Each SCM needs a specific number or name which should be consistent thru the spreadsheets, the calculations, and the drawings
- Show the drainage area for each SCM


HELLO
my name is
POND 1

PCSM SCM inventory, continued

					☐		
					☐		
2. Area not treated by an SCM, Earth Disturbance Area (acres):					Area not treated by an SCM, Project Site Area (acres):		
3. ☐ One or more SCMs will be located off-site. SCM IDs:							

- Areas not treated by an SCM are listed and quantified
- This shows up on the PCSM Spreadsheet also

PCSM SCM inventory, continued

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PCSM Module 2

PCSM SCM Inventory

4. For each infiltration-based SCM identified in Question #1, provide the information requested or attach separate sheets with this information.

SCM ID: ☐ **Separate sheets attached**

Test Pit / Boring ID	Ground Surface Elevation (ft msl)	Proposed SCM Invert Elevation (ft msl)	Test Pit / Boring Bottom Elevation (ft msl)	Limiting Zone Elevation (ft msl)	Limiting Zone Type	Infiltration Test ID	Infiltration Test Elevation (ft msl)	Infiltration / Ksat Rate (in/hr)	Infiltration Test Method

- Fill out this form if you are doing an infiltration SCM
- DEP Guidance is oriented towards you doing infiltration as much as possible

Module 2, continued: Critical Stages

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PCSM SCM Inventory					
5. List the critical stages for each SCM and identify the licensed professional and/or company that will sign SCM Construction Certification forms for the SCM.					
SCM ID	**Critical Stages**	**LP Name**	**Company**	**LP Employed by Company**	**Contract**
				☐	☐
				☐	☐
				☐	☐

- You, the designer, must be present during Critical Stages to verify that the plan is being implemented properly
- Critical stages include portions of SCMs which cannot be observed after construction is complete

You should be there to inspect this SCM before they backfill it

Especially since this is right across the street!

Module 2, Volume of Runoff

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PCSM Module 2

Stormwater Analysis – Runoff Volume											
Surface Water Name:							**POA(s):**				
1. ☐ The design standard is based on volume management requirements in an Act 167 Plan approved by DEP within the past five years.											
2. ☐ The design standard is based on managing the net change for storms up to and including the 2-year/24-hour storm.											
3. ☐ An alternative design standard is being used.											
4. ☐ A printout of DEP's PCSM Spreadsheet – Volume Worksheet is attached.											
5. 2-Year/24-Hour Storm Event: inches Source of precipitation data:											
6. Stormwater Runoff Volume @ 2-Year/24-Hour Storm, Pre-Construction: CF											
7. Stormwater Runoff Volume @ 2-Year/24-Hour Storm, Post-Construction: CF											
8. Net Change (Post-Construction – Pre-Construction Volumes): CF											
9. Identify all selected structural PCSM SCMs and provide the information requested. ☐ Calculations attached											
SCM ID	**Series**	**MRC**	**Vol. Routed to SCM (CF)**	**Inf. Area (SF)**	**Inf. Rate (in/hr)**	**Inf. Period (hrs)**	**Veg?**	**Media Depth (ft)**	**Storage Vol. (CF)**	**Inf. Credit (CF)**	**ET Credit (CF)**
		☐					☐				
		☐					☐				
		☐					☐				

Stormwater Analysis—Runoff Volume

- Stormwater Analysis must address each POA
- Manage Net Change in the 2 year, 24 hour storm
- PCSM Spreadsheet – Volume – is attached

  You can use the Spreadsheet for calculations and put the results into the Runoff Volume table here.

Module 2, Runoff Volume, continued

- If the SCM is designed as an infiltration SCM, you can count the bottom area of the SCM, not the sides, as infiltration area.
- Infiltration rates as determined by testing in the field
- Infiltration period in days, should be determined by testing.

Module 2, runoff volume, continued.

- Evapotranspiration credit may be claimed for a vegetated SCM, but only if the vegetation is not just grass, but deep-rooted plants

Report a summary of your rate calculations here

Filling out these tables helps us to review the plan.

It also helps you to make sure you have got everything you need.

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PCSM Module 2

Stormwater Analysis – Peak Rate								
Surface Water Name:					**POA(s):**			
1. ☐ The design standard is based on rate requirements in an Act 167 Plan approved by DEP within the past five years.								
2. ☐ The design standard is based on managing the net change for 2-, 10-, 50-, and 100-year/24-hour storms.								
3. ☐ An alternative design standard is being used.								
4. ☐ DEP's PCSM Spreadsheet – Rate Worksheet was used for peak rate calculations and is attached.								
5. ☐ Alternative rate calculations are attached.								
6. Identify precipitation amounts. Source of precipitation data:								
2-Year/24-Hour Storm:					10-Year/24-Hour Storm			
50-Year/24-Hour Storm:					100-Year/24-Hour Storm			
7. Identify all SCMs used to mitigate peak rate differences and provide the requested information.								
SCM ID	**Inflow to SCM (cfs)**				**Outflow from SCM (cfs)**			
	2-Yr	**10-Yr**	**50-Yr**	**100-Yr**	**2-Yr**	**10-Yr**	**50-Yr**	**100-Yr**

Peak Rate

- Act 167: WCD is in process of updating our Act 167 Plan but PA DEP has informed us that the current plan is still valid for SWM purposes

Module 2 – Water Quality

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PCSM Module 2

Stormwater Analysis – Water Quality	
☐	A printout of DEP's PCSM Spreadsheet – Quality Worksheet is attached for all surface waters receiving discharges.

Other Information		
1.	☐	A long-term operation and maintenance (O&M) plan has been prepared for each SCM.
2.	☐	A long-term O&M plan will be recorded with a legal instrument for each property containing an SCM.
3.	☐	PCSM Plan Drawings have been developed for the project and are attached to the NOI/application.
4.	☐	The PCSM Plan has been planned, designed, and will be implemented to be consistent with the E&S Plan.
5.	☐	Recycling and proper disposal of materials associated with PCSM SCMs are addressed as part of long-term operation and maintenance of the PCSM SCMs.
6.	☐	There are pre-construction stormwater discharges to wetlands from the project site.

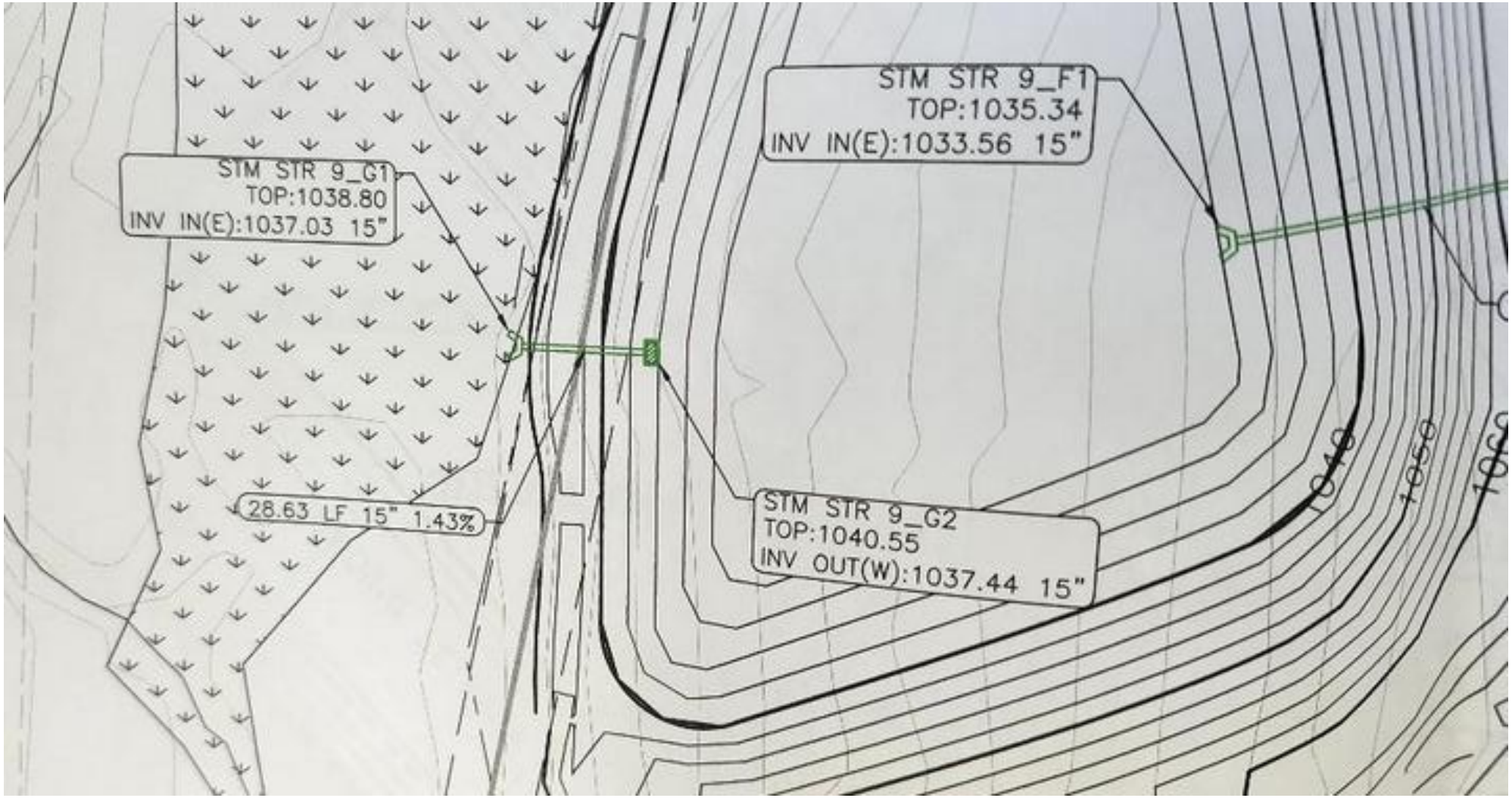
	Pre-Construction		Post-Construction		
Wetland ID	**Drainage Area (ac)**	**Volume (CF)**	**Drainage Area (ac)**	**Volume (CF)**	**Ponding Depth Increase or Decrease (±%)**

Module 2 – Water Quality, continued…

- You must meet requirements for Total Suspended Solids (TSS); Total Phosphorus (TP); and Total Nitrogen (TN) for up to and including the 2 year, 24 hour storm.

- Provide other information as required: O&M, drawings, recycling, and info on wetlands

Discharges to wetlands on the site?



Discharges to wetlands on the site?

6. ☐ There are pre-construction stormwater discharges to wetlands from the project site.

	Pre-Construction		Post-Construction		
Wetland ID	**Drainage Area (ac)**	**Volume (CF)**	**Drainage Area (ac)**	**Volume (CF)**	**Ponding Depth Increase or Decrease (±%)**

- You should not increase or decrease flow to a wetland
- Nearby filling and cutting may affect wetland hydrology
- Be careful to allow room for your work adjacent to the wetland
- A level spreader is suggested for a discharge to a wetland

Module 2: Thermal impacts

Determining if rate control SCMs receive water from impervious surfaces

Comparing the drainage area of your site to the drainage area of the receiving water

PA DEP is in the process of coming up with a thermal impacts spreadsheet

Module 2: Multi-Lot Development

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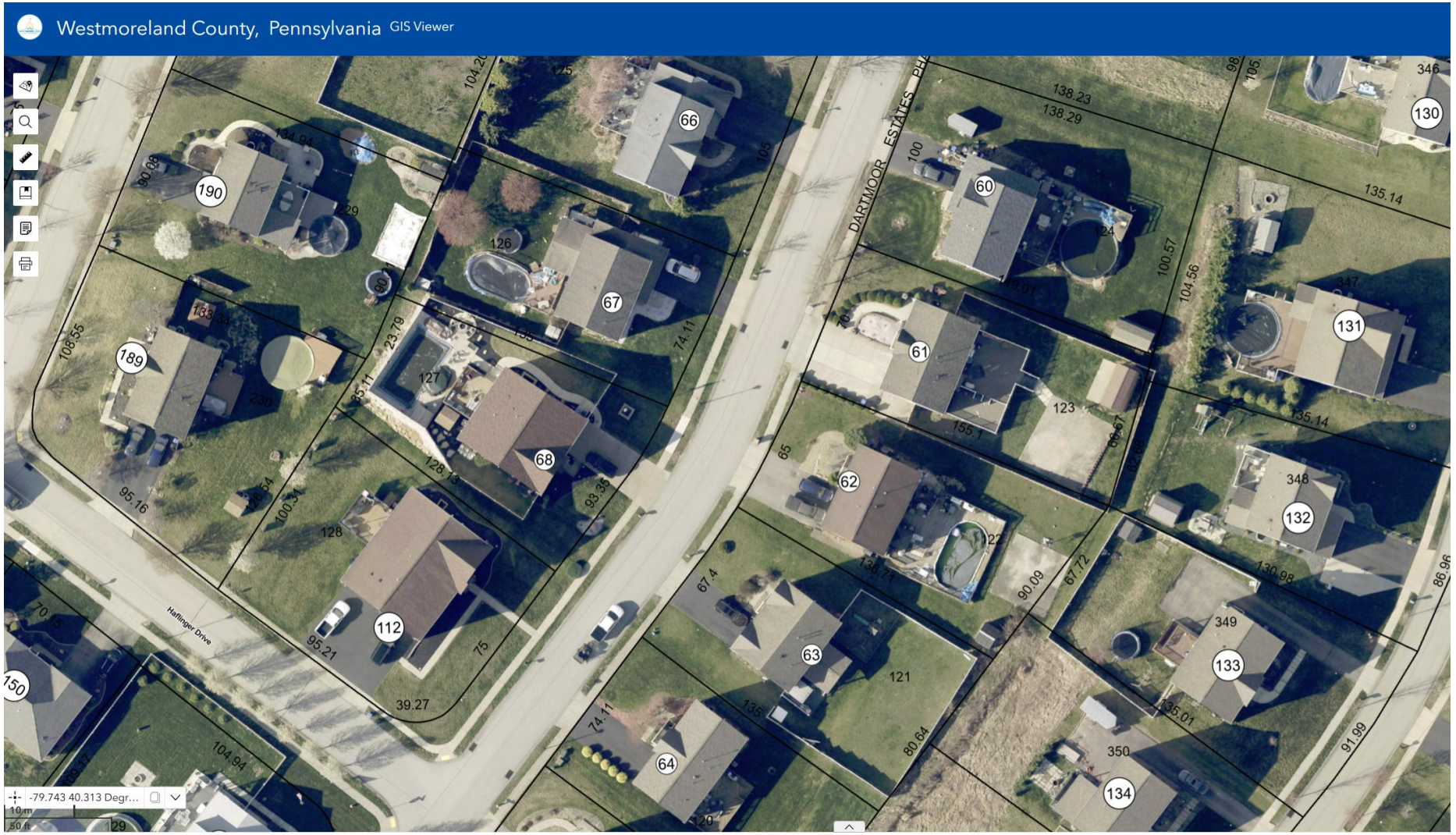
Impervious Surfaces (Multi-Lot Development Only)							
Tax Parcel / Lot ID No.	SCM ID(s) Used to Treat Lot Stormwater		Lot Area (SF)	Planned Impervious (SF)[1]	Maximum Allowable Impervious, As Designed (SF)[2]	Maximum Allowable Impervious, Per Ordinance (SF)[3]	Objective Met?[4]
	Rate	Volume / WQ					
							☐
							☐
							☐

- Applies mainly to residential developments
- Must communicate with the developer and the municipality
- Designed to address “creeping imperviousness” on a site

“Creeping imperviousness” on a site in our county



Module 2…

Is your friend!

Westmoreland Conservation District

www.westmorelandconservation.org