### UPPER GWYNEDD TOWNSHIP ENVIRONMENTAL ADVISORY COUNCIL

### **EAC MEETING MINUTES**

March 3, 2021, 6:00 pm

### 1. Call to Order

The meeting was called to order by Chairman, Jon West at 6:02 pm. The following were in attendance.

Jon West Chairman
Erica Antoine Member
Joanne Walker Member
Scott McCartney Member

Tom Alvarez Merck Representative
Sandra Zadell Township Manager
Denise Hull Commissioner
Martha Simelaro Commissioner

Deanna Logan Administrative Assistant

Jeff Zoll, a member of the public was present. He submitted a logo for the Board to consider.

Ross Snook was also present and will discuss his bmp program later in the agenda.

### 2. Minutes Approval February 3, 2021

Hearing no questions or comments, upon motion by Mrs. Walker and seconded by Mrs. Antoine the minutes of February 3, 2021 were unanimously approved.

### 3. Meet and Greet with Parks and Recreation Board

Mr. West welcomed members of the Parks and Recreation Advisory Board and introduced Sarah Prebis, Parks and Recreation Director. Rob Nagele was also present. Mr. West gave a brief overview of what the EAC does, including reviewing land development plans for environmental concerns, providing educational opportunities for members of the community, and increasing environmental awareness throughout the community. The EAC introduced themselves and gave their background information to the Park & Rec Board members and Mrs. Prebis and Mr. Nagele introduced themselves.

Mr. West said the EAC is interested in partnering with the Parks & Rec Board on Earth Day, Arbor Day and other similar events.

### 4. Plan Review

#### a. Roosevelt Court

Roosevelt Court is a 9-unit subdivision, near Whites Rd. Park. Mrs. Zadell said the plan may change to add sidewalks to the frontage, with possible removal of existing trees

This will be before the Planning Commission next week. Plans were reviewed by the EAC. Comments by the EAC include;

- Consider using a mix of native shrubs and plants (some drought-tolerant, some wet-loving) in the rain gardens. Consider having an area densely planted with native herb species, along with a native grass and wildflower seed mix. The dense plantings, along with the use of natural (dye-free) mulch in less densely planted areas, will help to avoid weed growth while reducing the need to apply herbicides, which should be avoided. Also consider planting small-to-medium-sized native trees along the edge of the rain garden to provide shade and additional habitat features.
- Try to maximize the number of no-mow zones of the rain gardens and vegetated bioswales, where practicable. If necessary, allow for signage to be used to discourage mowing in certain areas.
- Consider providing for electric heat (including stoves, etc.) for each of the units to avoid reliance on fossil fuels.
- Consider planting shade-tolerant understory native trees and shrubs along State Street and the project boundary, particularly where the existing mature pine trees are located to provide screening of the property as well as a layered vegetative area. Make sure not to impact the roots inside the drip line of existing mature trees.
- Consider permeable paving options for the residential driveways, sidewalks, patios, and other features to minimize the impervious footprint of each lot.

#### b. Merck WP 32

- The project narrative states that "the reduction in building coverage will allow Merck to add back in some pervious coverage and plantings where none currently exist."
   Consider making the best of this opportunity by moving away from typical landscaped lawn areas and designing a dynamic native plant garden that contains a mix of native grasses, herbs, wildflowers, shrubs, and trees. If shrub and tree plantings are deemed unfeasible for the project area, consider perhaps planting and seeding with native meadow species to allow for additional filtering and absorption of stormwater runoff.
- Consider incorporating green infrastructure BMPs in the new pervious area as well as
  the parking area. A rain garden featuring native plants could be incorporated where
  stormwater runoff is planned to be discharged from downspouts. Bioswales could be
  incorporated to create a filtration buffer for stormwater coming off the parking lot and
  building areas.
- Consider permeable paving options for the parking area of the new building.

Mrs. Zadell said review memos will be addressed to the applicant instead of the Planning Commission as the applicant will be the one considering the changes.

### 5. Old Business

- a. Initiatives
  - i. Environmental Education and Outreach
    - 1. Website/Newsletter
    - 2. EAC logo
      - Several logos were submitted for consideration

- Mrs. Zadell said the EAC should recommend a design to go to the BOC
- Designs will be put together and numbered for the EAC to consider
- Comments to be submitted by March 11, 2021 with a ZOOM at 6:00 pm to finalize

### ii. Tree City/Birdtown

- EAC is reviewing the qualifications for these certifications
- iii. Watershed Friendly Property Program
  - Township residents can make their property more ecological friendly
  - EAC is reviewing ways to help residents achieve this certification
  - Mrs. Antoine's property is the first in Upper Gwynedd to be certified as Watershed Friendly. Mrs. Antoine said the sign is \$30 including shipping and feels we do not need to subsidize the signs this year as the watershed program still has signs available at no cost
  - Wissahickon Trails can audit some Township property to enter into the Watershed Friendly Property Program and can train the EAC to be auditors themselves.
  - EAC & Wissahickon Trails can help residents evaluate their property to make them watershed friendly with a stream smart form.
  - Mrs. Zadell suggested the EAC get the word out about the program on the website and social media and to submit information to the Township

### iv. Renewable/Sustainable Energy

- Former member Heidi Lucas will supply a frequently asked questions sheet regarding the installation of home solar panels
- b. Comprehensive Plan
- c. Rain Barrell Workshop
  - This workshop will be held on June 14, 2021 with participation capped at 25 residents. This event will be subsidized by the EAC
- d. Arbor Day/Earth Day Project Discussions and Planning
  - Arbor Day Proclamation will be on the BOC agenda for an April approval
  - Mrs. Prebis said Parks & Rec are planting a Community Garden with vegetables and flowers for Earth Day and she is looking for suggestions on native plantings
  - Mrs. Prebis mentioned two areas in the park that need trees. She suggested planting at trees at Center Street as lighting will be installed in the spring. Mrs. Zadell suggested planting Eastern Red Buds
  - Suggestions for Arbor Day Give a history of the trees in UGT by presentation
  - Mrs. Prebis will contact her arborist to coordinate the presentation and planting with the EAC
  - Arbor Day event 9 am 12 pm on Saturday, May 1, 2021
  - Mrs. Zadell suggested deer protection for the tree plantings

- Mrs. Prebis will begin an email chain regarding Earth Day/Arbor Day
- e. Winter Salt Watch

### 6. New Business

a. Montco. Stormwater BMP Inventory and Mapping Program (see attached presentation)

Ross Snook, co-leader of the program was present to discuss the program launched by Penn State Extension in conjunction with Montgomery County Master Watershed Steward Program. This program is intended to create a first ever extensive inventory and functionality rating with GIS mapping of stormwater BMPs in Montgomery County to be placed on an interactive website. It is to be used for enhanced stormwater project planning This data is compiled, and a GIS map is created in which you can click on area and view all the information for that BMP. He said it is a simple, systemized format which includes an inspection form and spreadsheet. Mrs. Zadell said we have a spreadsheet of all our BMPs installed in the Township since 2005. Mr. Snook invited the EAC to his next presentation on March 11<sup>th</sup>

Mr. West said the EAC should get the BMP list from the Township to see if this program is doable.

### b. E-Waste Event (Merck)

Mr. Alvarez said Merck is budgeted for an e-waste event and is willing to open it up to Township residents. Mrs. Zadell said we should look into partnering with Merck on this event as a second event for the residents as UGT has one planned in the fall.

- c. April Creek Clean Up Events
  - April 9 and 10 Perkiomen Watershed clean-up event
  - April 24 Wissahickon Trails creek clean up event
- d. Upcoming training and workshops
  - Mrs. Antoine will upload the documents on the seminar she virtually attended on Meaningful Engagement and Local Government Decision Making
  - Planning Commission meeting on March 10<sup>th</sup>
  - Parks & Rec meeting on March 15<sup>th</sup>
  - Montgomery County Conservation District BMP maintenance on March 17th at 9 am
  - EAC conference on April 10<sup>th</sup> for \$25 pp Mrs. Walker suggested members take shifts for the conference and provide a summary

### 7. Adjournment

Mrs. Walker made a motion to adjourn meeting, which was seconded by Mr. McCartney. The meeting was adjourned at 8:00 pm.

Next Meeting on Wednesday, April 7, 2021 at 6:00 pm

# This webinar is made possible by an Oct. 2020 PSU Science to Practice (S2P) Grant project:

Stormwater Best Management Practices (BMP) Inventory & Mapping
- Montgomery County -

## Overall Purpose:

- Create first-ever comprehensive inventory, functionality rating and GIS map of stormwater BMP controls in Montgomery County on a web site
- Provide essential stormwater BMP information and education used by municipalities and various other entities for enhanced watershed planning & future projects

### Awarded to:

- Dr. Cibin Raj (Faculty Co-Leader):
   PhD. PSU, expertise: stormwater watershed modeling
- Sascha Meinrath, (Project Oversight):
   MA Social-Ecological Psychology, Palmer Chair in Telecommunications PSU
- Harry Crissy, (GIS database, Mapping and Website):
   MS, MS PSU Extension, LEED accredited
- William (Ross) Snook (Co-Leader):
   BS Earth Science PSU, Master Watershed Steward Montgomery County





# This is the 1<sup>st</sup> of 9 (30 - 60 minute) educational webinars provided to educate municipalities

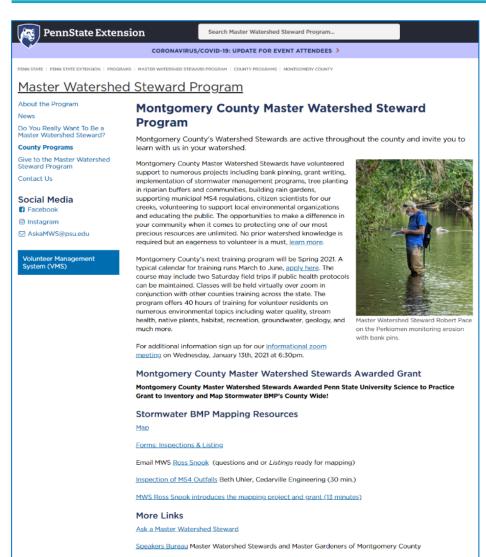
- → 1. How EABs/EACs Can Help Municipality's Inventory & Assess Stormwater BMPs (Ross Snook, PSU Master Watershed Steward, EAB and Supervisor)
  - 2. How to Use the Montgomery County Stormwater BMP Mapping Tool (Harry Crissy, (MS, MS PSU Extension, LEED accredited)
  - 3. How EABs/EACs Can Help Municipality's Preserve Water Resources (Ross Snook, PSU Master Watershed Steward, EAB and Supervisor)
  - 4. Introduction to Stormwater Management Plan Review in Pennsylvania (Eric Konzelmann, MCCD)
  - MS-4 Program (Krista Brown, PA DEP)
  - 6. Inspection of MS-4 Outfalls
    (Beth Uhler: Cedarville Engineering—also presented at PSATS & PADEP)
  - 7. Creating Rain Gardens, Rain Barrels & Growing Ambler Greener (Madge Monser, PSU Master Watershed Steward, Ambler EAC)
  - 8. Invasive Plant Management and Tree Planting as Part of SWM (Geoffrey Selling: PSU Master Watershed Steward)
  - **9.** Understand and Manage Private Wells in PA Presented by Ross Snook (Authored by Bryan Swistock, Penn State Extension, Water Resources Specialist)





## Stormwater BMP Education will be found here:

### >Montco Penn Extension Stormwater BMP Education & Mapping

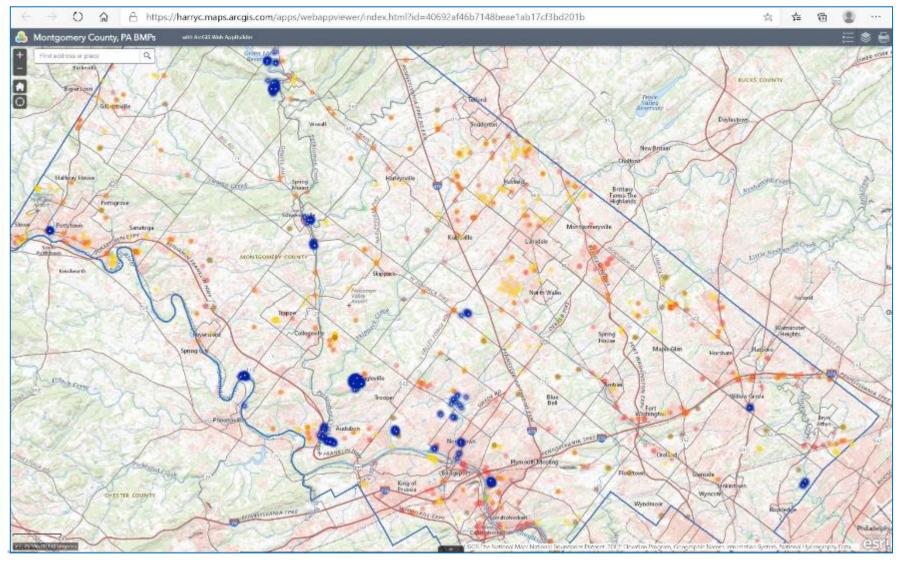


Extension Educator, Master Watershed Stewards/Master Gardener Coordinator (Montgomery

**Contact Information** 

Email: dms7301@psu.edu Phone: 610-489-4315 Educational webinars and forms are added to this page as they are completed.

# Montgomery County Stormwater BMP Mapping Website: <a href="http://bit.ly/MontgomeryBMPs">http://bit.ly/MontgomeryBMPs</a>

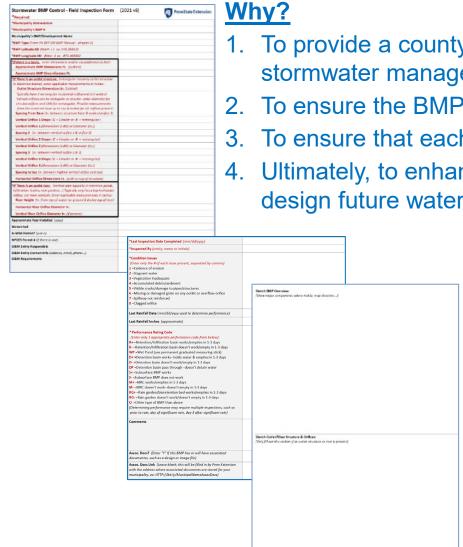






# Conduct an environmental field inspection of each stormwater BMP control in your municipality

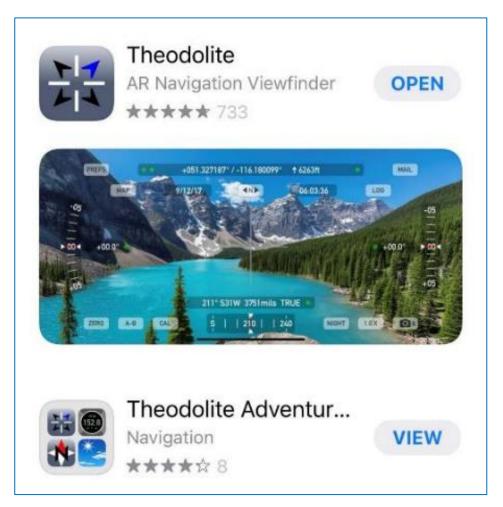
Download form here: >Penn Extension Stormwater Education & Resources



- 1. To provide a county-wide inventory to understand current stormwater management capacity, location and methods
- 2. To ensure the BMP control is properly maintained
- To ensure that each BMP control is performing as designed
- 4. Ultimately, to enhance PA's ability to manage, plan and design future watershed projects

Let's walk through the process...

# Use an App to find latitude and longitude



-Take pictures in immediate location of basin, to ensure accurate latitude & longitude

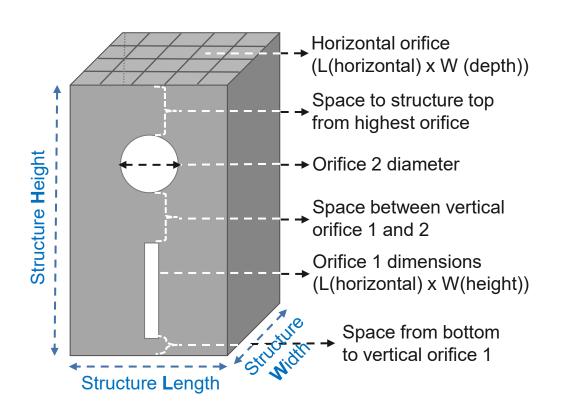


Photo: Lower Frederick Township, Montgomery County, PA

# It's important to understand key BMP control features and how to measure them (all in inches)

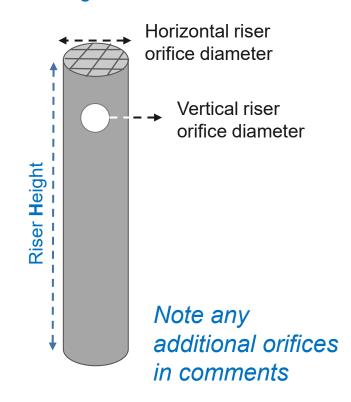
### **Outlet Structure:**

(In detention basins, sometimes rain gardens, etc.)
A large, rectangular, masonry cube with orifices to control stormwater outflow in stages.
Usually has 1-3 vertical Circular or Rectangular orifices and 1 horizontal Rectangular overflow orifice on top.
All orifices should have a grate to filter debris.



### Riser:

(Usually in wet ponds, retention & infiltration basins, rain gardens...)
A round plastic or metal vertical pipe with typically only 1 horizontal overflow orifice at the top. Should have a grate/cover to filter debris.



# Download the Excel template file as is, and name it

[Municipal Name]-Municipal BMP Control Listing-[YYYYMMDD]

Download this form from: >Penn Extension Stormwater Education & Resources

| ipai St     | ormwater BMP Con         | icioi inventory & A  | ssessm    | ent Listi  | ing (2021 Aa)          | (As of MM/                                | (ווווון/טטי  |   |                       |                                      |                        |                        |   |                       |   |  |  |  |   |   |  |                   |
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|             |                          |  |           |            | < *if a basin          | is present>                               | <  | *if there is an out   | let structure (a reta | angular masonry outle                | et structure in detent | on basins which typica | ılly have 1-3 verti   | tical orifices (circu | ılar or rectangular                                   | r) and a rectangular h   | orizontal orifice on top                               | )  | >   | < *if there is a riser (v   | ertical pipe in wet ponds, inj                             | nfiltration basin |
| data field  |                          |  |           |            | Enter either           | or both in feet:                          | Provide measurements from the structure base up to top in inches for all orifices present. Enter LXW for rectangular orifices or diameter for circular orifices: |   |                       |                                      |                        |                        |   |                       |   |  |  |  |   | Typically only a horizontal orifice. Enter all measurements in incl |  |                   |
| pal<br>*BMP | # BMP/Development Name   | *BMP Type<br>(from PADEP SW Manual Ch.<br>Structural BMPs) |           |            |                        | P *Approx. BMP<br>t. Circumference<br>Ft. | Outlet Structure<br>Dimensions In.<br>(LXWXH)  | Spacing From Base<br>(In. from structure base<br>to vertical orifice 1) |                       | Vertical Orifice<br>(Dimensions (LxW |                        | rtical (C = Circular   | Vertical<br>or (Dimension   |                       | Spacing 3<br>between vertical<br>ifice 2 & orifice 3) |  | Vertical Orifice 3                                     | Spacing To Top  (In. between highest vertical orifice & top) | Horizontal Orifice<br>Dimensions In.<br>(LxW on structure<br>top) | Riser Height In.  | Horizontal Riser Orifice<br>Diameter In.                   | Vertical F        |
| Dini        | W DIVIT/DEVELOPMENT NAME | Structural Divirsy   | 040.12    | 3430 07.   | 5.125450 (EXWAII)      | - "                                       | (EXVIXI)   | to vertical origine 17  | A - nectongular       | ) Diameter (m.),                     | onjace 1 de onj        | Le 27 N = rectoguic    | or y Diamet   | iter (m.))            | gice 2 di Origine Sy                                  | n - rectuguiary  | Diameter (m.y)   | vertical origine at topy                                     | ιορη  | ground to top of risely   | Dameter III.   | (9.6)             |
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|             |                          | >Link to:PADEP SW Manual                                   | Chanter 6 |            |                        |   |  |   |                       |                                      |                        |                        |   |                       |   |  |  |  |   |   |  | -                 |
|             |                          | PUNK TO: PAUEY SW Manual                                   | chapter o |            |                        |   |  |   |                       |                                      |                        |                        |   |                       |   |  |  | 1  |   |   |  |                   |
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|             |                          |  |           |            |                        |   |  |   |                       |                                      | Last Inspection        |                        |   | mm/dd/yyyy            | Approx.   |  |  |  |   | "Y" If this BMP has or by Power associated associated               | enn extension with the adar<br>clated documents are store: |                   |
|             |                          |  | YYYY      | MS4?       |                        | O&M Entity Contact                        |  |   | NPDES Permit #        |                                      |                        |                        | ndition Issues  | (to determine         | Last Rain   | *Performance   |  |  |   | nentss, such as a design mun  | icipality, ex:   |                   |
|             |                          |  | Installed | (y or n) R | Responsible O&M Entity | (Address, email, pho                      | ine) O&M   | 1 Requirements  | (if applicable)       | Watershed                            | mm/dd/yyyy (e          | ntity, initials)       | Present   | performance)          | Inches  | Rating Code Cor  | nments   |  | or ima  | ge file) HTT  | P://bit.ly/MunicipalNameAs                                 | issocDocs         |
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|             |                          |  |           |            |                        |   |  |   |                       |                                      |                        | 1-Evi                  | idence of erosion   |                       | v   | WP Wet Pond (use pe  | rmanent graduated me                                   | easuring stick)  |   |   |  |                   |
|             |                          |  |           |            |                        |   |  |   |                       |                                      |                        |                        | 2-Stagnant water 3-Vegetation inadequate 4-Accumulated debris/sediment 5-Visible cracks/damage to pipes/structures 6-Missiling/damaged grate on outlet orifice 7-Spillway not reinforce |                       |   | D+ Detention basin works—holds water and empties in 1-3 days D- Detention basin doesn't work—doesn't empty in 1-3 days |  |  |   |   |  |                   |
|             |                          |  |           |            |                        |   |  |   |                       |                                      | 1                      |                        |   |                       |   |  | ion basin pass-throughdoesn't detain water             |  |   |   |  |                   |
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|             |                          |  |           |            |                        |   |  |   |                       |                                      |                        |                        |   |                       |   | S- Subsurface BMP do   | es not work<br>Concept (MRC) works                     | -amnties in 1-2 days   |   |   |  |                   |
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\*Do not alter this spreadsheet format, as the county needs all data as exactly defined in this template