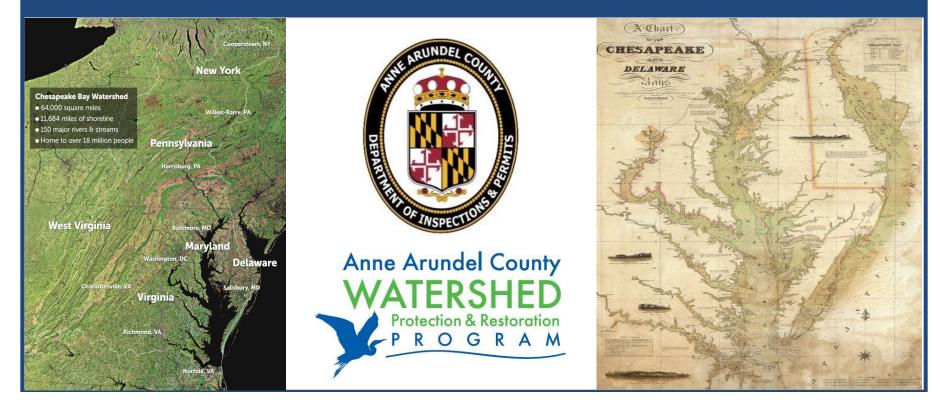
Inspection & Permits, WPRP Division: Triennial Stormwater Inspections, & Your Role in BMP Maintenance



Anne Arundel County Department of Inspections & Permits

The WPRP Team

WPRP Environmental Control Inspections Supervisor:

- Bradlee Burnham
 - o (410)-222-7767 (O)
 - o (443)-795-8217 (M)
 - ipburn22@aacounty.org
 - o Ramapo College of New Jersey (Mahwah, NJ), Class of 2011
 - B.S. Environmental Science
 - Minor in Public Policy
 - 14+ years of experience in stormwater related fields

WPRP Environmental Control Inspectors:

- Andrew Fertig
- Mary Ford
- Andrew Hein
- Michael McNeill
- Joseph Wells







Presentation Overview

- What is a BMP?
- Importance of BMP Maintenance
- Residential BMPs
- Triennial Inspections
- Residential BMP Inspections
- Inspection Results, Correction Notices, & Follow-Ups
- What is your role if you have a BMP on your property?
- Benefits of having BMPs and maintaining them
- What is the County doing to improve residential BMPs?
- If I have a drainage, runoff or stormwater related concern, who do I call?





What is a Stormwater BMP?

- A "Best Management Practice" designed to receive and manage runoff created from adding impervious surfaces to previously pervious / undeveloped land. AKA, "slowing it down, spreading it out, soaking it in."
 - Impervious surfaces may include roads, sidewalks, parking lots, driveways, porches/decks/patios, and rooftops.
- Required as part of Grading Permits.
- Purpose: Reduce pollution to the Chesapeake Bay by improving, preserving, and protecting the water quality of its watershed and tributaries.

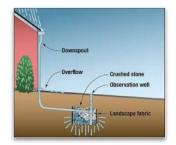














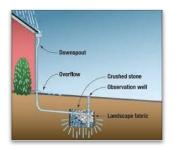




Why Is Maintenance Important?

- Routine, preventive maintenance is critical to optimal BMP function and performance.
- Importance to Stakeholders:
 - May help avoid costly repairs ("an ounce of prevention is worth a pound of cure").
 - Preserve aesthetic value.
- Importance to Stakeholders and Regulating Authorities:
 - Maintenance, as well as inspection, is legally required under federal, state, and local codes and regulations.
 - May minimize the need for corrective or enforcement actions post-inspection.



















Why Is Maintenance Important? (Tips)

- Self-Inspection:
 - Inspect after every rain event.
 - Identifies maintenance concerns and assesses BMP performance.
 - Identify minor issues before they become major concerns.
 - Prevent health/safety hazards.
 - Plan for costly repairs/upgrades.
- Two Dedicated Funds:
 - o Routine: Annual maintenance.
 - Non-Routine: ≈ ½ of annual costs for structural/emergency repairs.



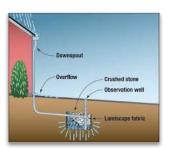
















BMPs Often Maintained by HOAs, Property Managers, or Private Residences (ESD or Micro Facilities)



Submerged Gravel Wetlands



Landscaped Infiltration Garden



Raingarden



Micro-Bioretention



Planter Box



Drywell





BMPs Often Maintained by HOAs, Property Managers, or Private Residences (ESD or Micro Facilities)



Bio-Swales & Wet Swales



Grass Swales or Dry Swales



Rain Barrels



Cisterns



Permeable Asphalt



Permeable Concrete



Permeable Pavers



Residential BMP Inspections: How can you tell if there is a BMP on a residential property?



Raingarden



Rain Barrels



Cisterns



Plastic cap sticking out of the ground, not related to water or sewer



Planter Box



Permeable Asphalt



Permeable Pavers



Downspout Connection to Underground Pipe



Who Is Responsible for BMP Maintenance? What are Inspection & Maintenance Agreements?

INSPECTION AND MAINTENANCE AGREEMENT

AGREEMENT NUMBER
PERMIT NUMBER
G0201

THIS INSPECTION AND MAINTENANCE AGREEMENT made this ___day of, ____ 201__ by and between _____(Hereinafter called Owner) and ANNE ARUNDEL COUNTY,

MARYLAND, a body corporate and politic of the State of Maryland (hereinafter called County).

WHEREAS, Owner has requested that the County issue a grading permit for property which Owner either owns or uses private storm water management; and

WHEREAS, the private stormwater management is located in the subdivision known as __the plat for which is recorded among the Land Records of Anne Arundel County in Plat Book __ page ___ and

WHEREAS, the property is known as _____and is more particularly described in a deed from _____to and recorded among the land records of Anne Arundel County in Liber ____ Folio __ and;

WHEREAS, it is a requirement of Article 16, Section 4-401(a), Anne Arundel County Code, that the Owner o the subject property shall execute an Inspection and Maintenance Agreement with the County pertaining to private stormwater management; and

WHEREAS, in furtherance of Owners desire to comply with the aforementioned provision of the Anne Arundel County Code, Owner is now entering into this Inspection and Maintenance Agreement.

NOW, THEREFORE, WITNESSETH: That for and in consideration of the mutual covenants and promises herein contained and in order to fulfill the requirements of the Anne Arundel County Code, the parties do hereby serves as follows:

1. Owner shall institl or be responsible for the institlation of the private stormwater amanagement as more particularly described in the Stormwater Management Plan which is part of Owners Grading and Sectiment Control Plan kept on permanent file in the Anne Armold County Department of Inspections and Permits (Department) maccordance with all confidence and provisions of the Anne Armold County stormwater management lows in full force and effect at the time of the execution of this Agreement or as may be required by a behinding permit or a grading

permit which may be issued. This plan shall be maintained by the Department at a location designated by the Director and shall be available for public inspection during regular business hours.

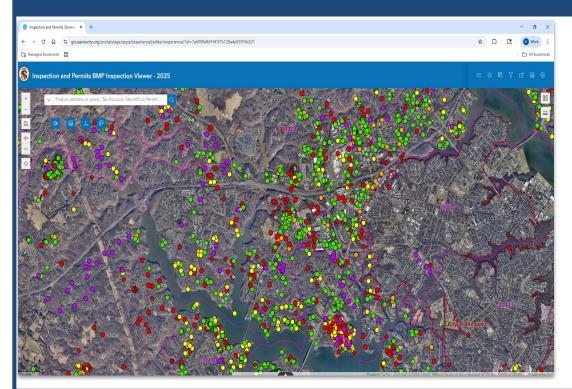
- The Owner shall maintain inspection records for the private stormwater management and supply them to the Department across those (3) were or upon request.
- Owner is hereby prohibited from altering the private stormwater management without prior approval from the Department.
- Owner shall provide access to the private stormwater management at all reasonable times for inspection by Countries its agents or contrasters.
- 5. Owner shall by covenant or other valid legal mechanism approved by the County Office of Law, provide the uniform regular or special successment of all prospectly covenes affected by the private storemarker management to insere that the private storemarker management is provely maintained in accordance with its design studenth and the provisions of the Anne Arméd County storemarker management lows in effect at the time of this Agreement or as for the Anne Arméd County storemarker management lows in effect at the time of this Agreement or as for the Anne Arméd County storemarker management lows in effect at the time of this Agreement or as
- 6. If the Owner or the Owners successors or any other party subject to this Agreement, after reasonable notice by the Department, fails to correct a violation of the Anne Annuled County Stern Water Management Laws at or near the private storementer management, the Department may perfirm or cause to be performed, necessary work to correct the violation and orders the private storementer management to a proper working condition.
- 7. It is specifically understood and agreed that all costs of performing work set forth in paragraph 6 shall be levied and collected from the Owner of all properties subject to this Agreement in accordance with the provisions of Article 16, Section 4-401(b)(7) of the Anne Arundel County Code, or as from time-to-time amended.
- This Agreement shall survive the execution of any deed, contract or agreement by Owner or any other party
 with an interest in the subject property and the conveyance of any interest therefrom shall not merse therein.
- 9. This Agreement shall bind upon and run with the land subject to this Agreement as a covenant.
- 10. This Agreement shall inure to the benefit of the parties hereto, their heirs, personal representatives, legal representatives, successors and assigns, as appropriate.
- 11. This Agreement shall be construed in accordance with the laws of the State of Maryland and any action brought hereunder shall be brought in the courts of this State, with venue solely in Anne Arundel County.

- Private Inspection & Maintenance Agreements (i.e. I&Ms or SWMAs)
- Legally binding documents made by and between a permittee and the County as part of the Grading permit application process.
- Recorded at Maryland Land Records.
- I&Ms establish that:
 - The property owner is responsible for maintaining the BMPs on their property.
 - Their BMPs may not be altered without prior approval.
 - Their BMPs must be made accessible for inspection upon the County's request.
 - The I&M will "bind and run with the land as a covenant" once they have been recorded. I.e., it will be inherited by each subsequent owner in perpetuity.





Triennial SWM Maintenance Inspections

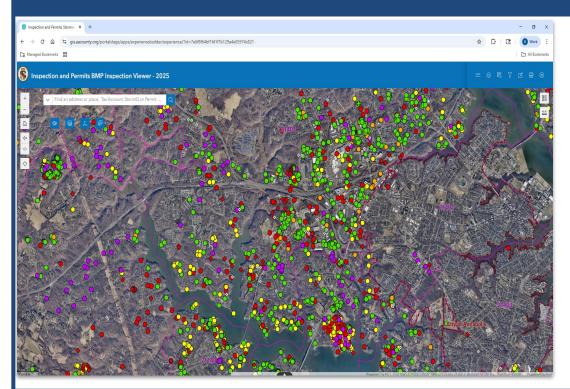


- Maintenance inspections that are performed to ensure that required, permanent BMPs are still in place, that they are being well maintained, and that they are still performing as designed.
- Every BMP in AACo needs to be inspected at least once every 3 years.
- Required to do them under our MS4 Permit (11/05/2021 to 11/04/2026).
- I&P-WPRP is responsible for inspecting approximately 23,000+ BMPs, within a 3 year cycle, as of 7/1/2025 (i.e. FY2026).





Triennial SWM Maintenance Inspections

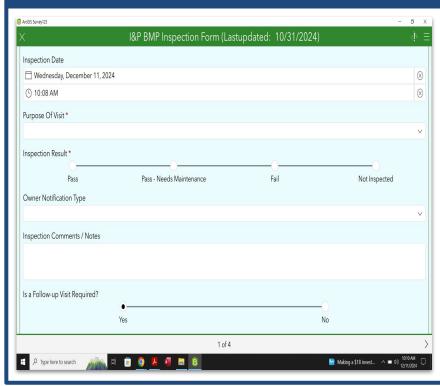


- Conducted in accordance with: County Code; §s 16-4-303 & 16-4-401; and the corresponding I&M.
- Private: Residential, Community, Institutional, Retail, Commercial, and Industrial Properties.
- AACPS, Libraries, Fire and Police Stations, Parks and other Recreational Facilities, Pump Stations, Water Towers, etc.
- From as large as ponds, constructed wetlands, or underground detention; to as small as raingardens, planter boxes, drywells and rain barrels.





Possible Inspection Results



Pass

- No Issues Found
- May inform a stakeholder of something they need to monitor.
- Pass, Needs Maintenance
 - o In need of general upkeep (i.e. tlc)
 - Minor functional issues that general maintenance may resolve.
- Fail
 - Major issues requiring structural repairs
 - Cannot be resolved with just general maintenance.





Examples: Pass, Needs Maintenance



Standing Water (Silted in)



Overgrown with weeds or volunteers/invasives.



Standing Water (Blocked Underdrain)



No Plants or Too Few



Incorrect Mulch



Blocked Underdrain, Cleanout, Observation Well





Examples: Pass, Needs Maintenance



Broken, Buried, or Missing Cleanout/Observation Well Caps



Clogged Downspouts, Disconnection from Ground Connector



Disconnected Roof Gutter



Broken, Cracked, or Removed Rain Barrels, etc.



Silted In Pavers or Pervious Pavements



Use a proper sweeper/vacuum, NOT a pressure washer or compressed air unit





Examples: Compliance *Landscaping*



Micro-Bioretention 85% Coverage at Mature Growth



Micro-Bioretention with Correct Mulch



Raingarden 85% Coverage at Mature Growth



Micro-Bioretention
Planting Plan Installed



Non-Dyed, Double Shredded Hardwood Mulch



Micro-Bioretention Planting Plan Installed





Examples: Fail



Holding Water Longer than 72
Hours



Encroached or Removed



Filled In or Removed





Residential BMP Inspections



As part of Anne Arundel County's responsibilities to meet federal and state regulations regarding stormwater pollution, we recently conducted an inspection of the stormwater management device located on your property. Contemporary stormwater best management practices, or BMPs, reduce pollutants that would otherwise be washed directly into streams during rain

Their purpose is to help control stormwater runoff and improve water quality in the communities they serve and, ultimately, the Chesapeake Bay. Regular inspection and maintenance is essential to assure that each facility continues to perform according to its design and that it remains safe to the surrounding communities. They are vital infrastructure in the urban environment for stormwater management.

During our inspection, we looked for potential issues that may impact the functionality of your

- Obstructions of the inlet or outlet - Excessive erosion or sedimentation
- Stability of side slopes
- Upstream and downstream channel conditions
- Deterioration of pipes



For more information and to learn how to reduce your stormwater pollution, visit

- Currently, WPRP does not schedule residential inspections, unless a homeowner reaches out to us first.
- Inspections are conducted at random.
- Inspectors knock on front doors to announce their presence and request access to your BMPs.
 - You can inform the inspector that it is not a convenient time, and ask them to return at a later date and time.
- Inspectors **DO NOT** need access to the inside of the home, nor do they need access to the rooftop. They only need access to the front and back yards at ground level.





Residential BMP Inspections



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During our inspection, we looked for potential issues that may impact the functionality of your BMP, such as:

- Obstructions of the inlet or outlet - Excessive erosion or sedimentation
- Stability of side slopes
- Upstream and downstream channel conditions
- Deterioration of pipes



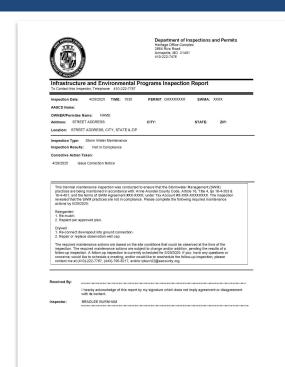
For more information and to learn how to reduce your stormwater pollution, visit

- When they have completed an inspection, Inspectors can either:
 - Notify you the inspection was completed; Or
 - Leave you a Notice of Inspection door hanger to advise that the inspection was completed.
- If no one answered the door for the Inspector, they may leave a door hanger requesting they be contacted. Or, they will send a notification through first class mail.
 - PLEASE CONTACT THE INSPECTOR PROMPTLY! A RESPONSE IS BETTER THAN NO RESPONSE!





Triennial Inspections, Correction Notices (Phase 1 Enforcement)

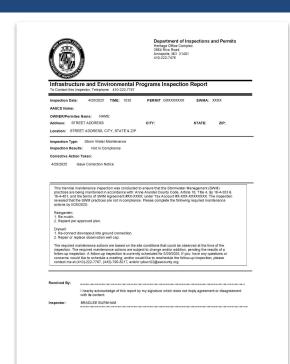


- The Inspector will issue a Correction Notice if the triennial (i.e. initial) inspection results in either:
 - Pass, Needs Maintenance
 - o Fail
- Correction Notices will be issued for:
 - The initial inspection
 - Up to, usually, at least the next 2 follow-up inspections.
 - At least 30 days (from the day that it was submitted into First Class Mail, or e-mailed) to respond for each one.
- A RESPONSE IS BETTER THAN NO RESPONSE!





Who Receives the Correction Notices?

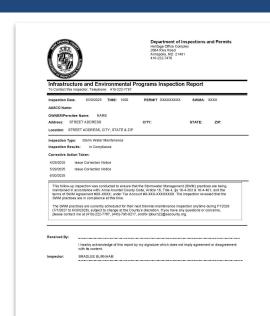


- Institutional, Retail, Commercial, and Industrial Properties:
 Landowners and/or property managers.
- Community-Owned Properties: HOAs and/or property managers.
- Individual, private, residential lots or tax parcels: Homeowners and/or residents.
 - Some HOAs are responsible for BMPs on individual lots based on Declarations, Covenants, & Restrictions
 - This is different from Condominium Associations who, generally speaking, are already responsible for all of their community's BMPs.
 - Homeowners will still receive the notices. However, they can coordinate and collaborate with their HOAs in such instances, if they wish to do so.
 - WPRP Inspectors will take this into consideration when setting expected completion dates.





What Happens Next?



- Stakeholder (e.g. a homeowner) and/or a contractor may contact Inspector to setup a "pre-work meeting."
- Stakeholder should address the items in the Correction Notice, or hire a contractor to address them.
- Inspector will come out to conduct meetings and follow-up inspections, and issue subsequent Correction Notices, as needed.
- Once all items have been addressed, stakeholder and/or contractor should contact Inspector for a final follow-up inspection.
- Inspector conducts a final follow-up inspection and issues an In Compliance Notice.
- SEE YOU AGAIN IN 2 TO 3 YEARS!





What is your role if you have BMPs on your property?

- Must keep them in place.
- Perform preventive, routine maintenance to ensure optimal performance.
- Regularly monitor and inspect your BMPs to make sure they are functioning well.
- DO NOT alter, encroach, modify, relocate, or remove without prior approval.
- Be prepared to grant an inspector access to your BMPs for inspection. If an inspector arrives at your property at an inconvenient time, we will accommodate requests to return at a later date and time.
- If an inspection reveals any issues, address them as promptly as possible.
- Contact I&P-WPRP or a stormwater professional if you need assistance or more information!













Want to Know More About BMP Maintenance, and How You Can Benefit from Your BMPs?

- Learn about the different types of BMPs and what maintenance they need.
 - BMP Maintenance Guidance
- Learn about the <u>WPRF</u> and potential tax credits.
 - WPRF Credit
 - Stormwater Property Tax Credit

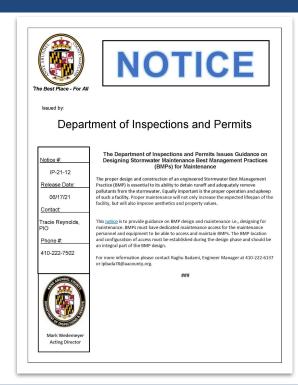
Recommended timeframes for routine maintenance													
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
Remove sediment, leaves and debris		•			•			•			•		
Remove trash	•	•	•	•	•	•	•	•	•	•	•	•	
Weeding					•	•	•	•	•	•			
Pruning		•							•	•	•		
Mulching	— As needed —-												
Watering, replanting, erosion control		— As needed —											







What is the County Doing Moving Forward?



- Blue Notices Related to HOA-Owned BMPs
 - IP-21-17 (BMP Handoff Meetings)
 - <u>IP-22-01</u> (Stormwater Warranties)
 - o <u>IP-25-02</u> (HOA Documents)
 - Supersedes and replaces Green Notice OPZ-24-01
- Other Blue Notices for SWM
 - IP-20-10 (SWM Data Form)
 - <u>IP-21-02</u> (Vegetation Guidance)
 - IP-21-12 (Designing for Maintenance)
 - o <u>IP-22-04</u> (Planter Boxes)
 - <u>IP-24-01</u> (As-Built Checklist)
 - o <u>IP-24-03</u> (Bioswales)





What is the County Doing Moving Forward - Postcards









Drainage, Runoff, and Stormwater Complaints and Concerns: Who is assigned to what?

Code Compliance Division

- Unpermitted or unapproved activity.
- Activities approved or permitted under Standard Grading Plans, including for Standard Grading Plans for Building Permits
- o (410)-222-7790 or (410)-222-7780
- codecompliance@aacounty.org

Grading Division (including SWM Construction)

- Activity covered by a <u>Grading Permit.</u>
- o (410)-222-7790
- grading@aacounty.org

WPRP Division

- Issues with private-owned BMPs post-construction.
- o (410)-222-7790 or (410)-222-7171
- swinspections@aacounty.org

Strike Team Division

- Concerns not covered above, not including issues with storm drains in public Right-of-Ways.
- o (410)-222-7790 or (410)-222-7171
- swinspections@aacounty.org











Drainage, Runoff, and Stormwater Complaints and Concerns: Public Roads & Storm Drains

- DPW > Bureau of Highways > Road Operations
 - Issues with public storm drains inside the County Right-of-Way.
 - Road Maintenance Districts Map
 - Call (410)-222-7321, After Hours Emergency (410)-222-8400
 - hwyscustomercare@aacounty.org
 - Storm Drain Cleaning
- DPW > Bureau of Watershed Protection & Restoration > Stormwater Infrastructure Programs
 - Issues with SWM BMPs receiving runoff from the County Right-of-Way.
 - Call (410)-222-4240 and ask to speak with SIP.
 - May receive forwarded concerns from Road Operations when issues with public storm drains are:
 - Outside, or too far outside, the County Right-of-Way.
 - Issues with public drainage systems that are beyond Road Operations' capabilities.









Drainage, Runoff, and Stormwater Issues Between Neighbors: A Civil Issue

- To be able to take enforcement action, there must be a code violation taking place.
- Examples of a code violation can include:
 - Disconnecting a downspout from a required BMP.
 - Draining a sump-pump into a required BMP (connecting it into its own french drain is fine)
 - Discharging sump pumps or "regular" downspouts within 5 feet of the nearest adjoining property line.
- Recommendations:
 - Whenever possible, keep discharge points 10 feet, or further, away from the nearest adjoining property line.
 - Self-install a BMP. It may be eligible for 1 or more credits!











Drainage, Runoff, and Stormwater Issues Between Neighbors: You Are Always Welcome to Call Us







Call 311

Call I&P Customer Service: (410)-222-7790

Call Environmental Hotline: (410)-222-7171

Email: ipmailbox@aacounty.org





Drainage Issues: Site Visits and Residential Site Assessments

- If you are looking for assistance in improving stormwater management on your own property, or in your neighborhood's community-owned space:
 - Please call Sally Albright, Education and Outreach Coordinator with BWPR, at (410)-222-0136, or email her at pwalbr00@aacounty.org, to schedule a site visit.
 - Or, you could schedule a Residential Site
 Assessment with a Watershed Steward from the
 Anne Arundel Watershed Stewards Academy by
 visiting <u>aawsa.org/rsarequest</u>.







Take Home Points

- Stormwater BMPs are facilities, devices, or practices designed to receive and manage runoff from newly added impervious surfaces from development projects.
 - AKA "slow it down, spread it out, soak it in".
- BMPs are vital to improving, protecting, and preserving the water quality of the Chesapeake Bay, and its watershed and tributaries.
 - Routine, preventive maintenance is key to ensuring optimal BMP performance.
- I&Ms make current property owners responsible for keeping, maintaining, repairing, and, if necessary, restoring or re-installing, BMPs on their property.
- Anne Arundel County is required to conduct triennial maintenance inspections on all BMPs in the County.
- I&P-WPRP inspects all private-owned BMPs, including residential-owned AND community-owned BMPs.





Take Home Points

- Triennial inspections that reveal issues may result in WPRP issuing a Correction Notice to the property owner. A RESPONSE IS BETTER THAN NO RESPONSE!
- The County is taking steps to ensure BMP access, maintenance, and upkeep is more effective and practical, particularly for homeowners, residents, and HOAs.
- The County is looking to raise more awareness about triennial inspections, particularly for residential properties.
- If you have a runoff or stormwater management concern, your assistance in identifying the cause may help us address the issue as promptly as possible.
- Your role as a resident if you have BMPs is to keep and maintain them, and make them accessible for inspection upon request. Do not be afraid to contact us for assistance.
- If you observe a drainage, runoff, or stormwater issue, PLEASE REPORT IT! (See Something, Say Something)





Additional Resources

- To contact SWM Maintenance Inspections, please call (410)-222-7171, or email <u>SWInspections@aacounty.org</u>.
- Stormwater Management Maintenance Inspections
- To request approved plans/As-Builts, I&Ms, and/or other related documents from the appropriate permit file, submit a PIA:
 - https://www.aacounty.org/pia?requestType=IAP
 - https://www.aacounty.org/pia
- Bureau of Watershed Protection & Restoration
 - BMP Maintenance
- Watershed/BMP Viewer
- <u>Utility Viewer</u>





Additional Resources

- Chesapeake Conservation Landscape Council
 - Chesapeake Bay Landscape Professionals
 - Find a Certified, Chesapeake Bay Landscape Professional
- Anne Arundel Watershed Stewards Academy
 - Contact a Steward
 - Residential Site Assessment
 - Contractors
 - Vendors
 - Stormwater Success
 - Community Association Summit Presentation
 - For HOA and residential-owned BMPs.





Questions

