

# Maryland's Proposed Stormwater Management Regulations and Design Manual Updates

Advanced Notice of Proposed Rulemaking  
Listening Sessions  
October - November, 2025



**Maryland**  
Department of  
the Environment





# Agenda

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- Welcome and Housekeeping (5 minutes)
- Brief Overview of Advanced Notice of Proposed Rulemaking Process and Proposed Regulation Updates (20 minutes)
- Open Comments and Questions (90 minutes)
- Wrap Up (5 minutes)



# Housekeeping

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- Today's session is being recorded. The recording will be posted on MDE's website along with the slide presentation
- Microphones and cameras have been disabled due to the large number of attendees
- Please use the Q&A function to post comments or questions for MDE during this session. The chat function has been disabled
- If time allows there will be an opportunity to raise your hand and make a comment verbally at the end of the session.



# ANPRM Process

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- Advanced Notice of Proposed Rulemaking (ANPRM)
- 90 day public review and comment period: September 19 - December 19, 2025
- Submit Comments to:
  - [mde.swmregulations@maryland.gov](mailto:mde.swmregulations@maryland.gov)
- 3 Listening Sessions:
  - Virtual:
    - October 22, 2025 - 7:00pm - 9:00pm
    - October 28, 2025 - 2:00pm - 4:00pm
  - In-person:
    - November 13, 2025 - 10:00am - 12:00pm
      - Register on line by November 7, 2025



# ANPRM Process - MDE is Requesting Input On:

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- Whether the proposed design storms appropriately reflect regional differences in rainfall and storm intensity
- Whether the proposed design storms provide adequate protection while remaining feasible to implement
- Whether the combined proposed stormwater management criteria and BMP design requirements strike the right balance between water quality, recharge, channel protection, and flood management
- Effective date of new standards; transitioning of vested projects; timelines for local ordinance updates; required training; required additional state support



# Background

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*Environment Article §4-201*

*Code of Maryland Regulations (COMAR) Title 26.17.02*

**Purpose:** Manage runoff from land development activities to control surface water pollution and reduce flood risk by:

- Reducing stream channel erosion
- Minimizing pollution in stormwater runoff
- Minimizing flood risk from increases in runoff rates and volumes

The regulations require approving authorities to:

- enforce standards for stormwater practice design and construction
- implement programs for inspection, operation, and maintenance



# Updating the Stormwater Regulations

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- Outdated regulations and Design Manual: Last major update in 2009 - more than a decade ago
- Climate drivers: Increased frequency and intensity of rainfall events; outdated precipitation data no longer protective
- Equity & Consistency:
  - Clearer criteria and standards for Environmental Site Design (ESD) to the Maximum Extent Practicable (MEP)
  - Statewide consistency in flood protection



# Stakeholder Engagement Process

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- Over three years of engagement with local governments, developers, academics, and environmental groups
- Multiple meetings and technical work sessions - recorded and available for public viewing
- Four proposals on regulation updates
- This ANPRM presents the fourth iteration of regulation updates and the first draft of SWM Design Manual updates

[Advancing Stormwater Resiliency in Maryland](https://sb-227-maryland.hub.arcgis.com)

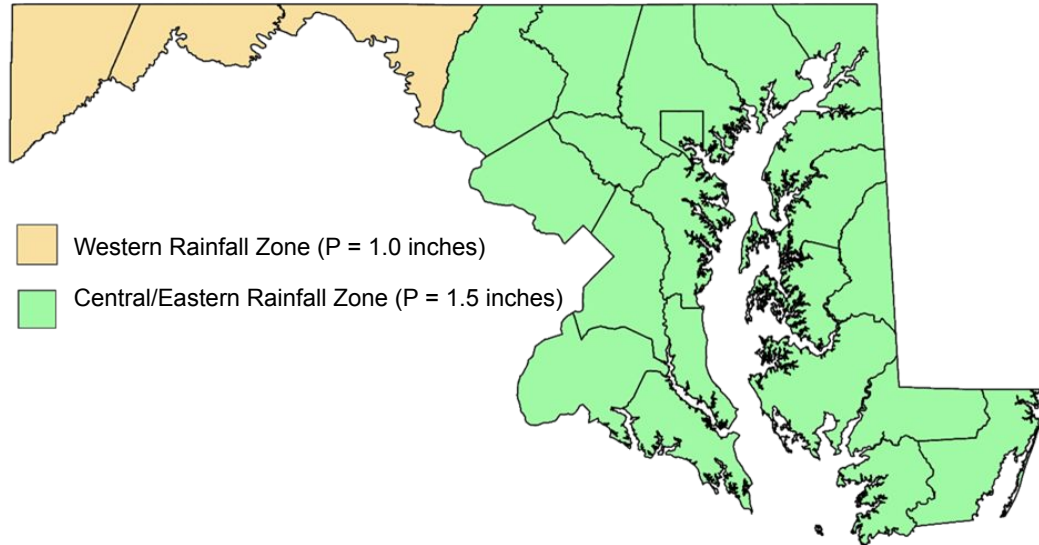
<https://sb-227-maryland.hub.arcgis.com>



# 5 Key Elements of the Proposed Regulation Updates

## 1. Updated precipitation data and design storms

- $WQ_v$  based on updated 90% average annual rainfall (1.0 inch for Garrett, Allegany, and Washington Counties; 1.5 inches for the remainder of the State)





# 5 Key Elements of the Proposed Regulation Updates

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## 1. Updated precipitation data and design storms

- Channel protection criteria ( $Cp_v$ ) based on 1-year, 24-hour design storm using Atlas 14 county average value (+) climate change factor
- Overbank flood protection criteria ( $q_{p10}$ ) based on 10-year, 24-hour design storm using Atlas 14 county average (+) climate change factor
- Extreme flood protection criteria ( $q_{p100}$ ) for interjurisdictional watersheds based on 100-year, 24-hour design storm using Atlas 14 county average (+) climate change factor

MARISA IDF data: <https://midatlantic-idf.rcc-acis.org/>



## 5 Key Elements of the Proposed Regulation Updates

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2. Standardized flood control statewide: 10-year quantity management using updated design storms and future climate change predictions
  - $qp_{10}$  = peak discharge rate for post development conditions based on future climate change projections using a climate change factor managed to pre development conditions determined without a climate change factor
  
3. Clarified Environmental Site Design (ESD) to the Maximum Extent Practicable (MEP) as
  - i. Full water quality treatment shall be in an ESD practice
  - ii.  $Cp_v$  shall be managed based on the discharge point from the development site:
    1. If required  $Cp_v \leq 8,000 \text{ ft}^3$  (4,000  $\text{ft}^3$  in Use Class III/IV watersheds), use an ESD practice
    2. If required  $Cp_v > 8,000 \text{ ft}^3$  (4,000  $\text{ft}^3$  in Use Class III/IV watersheds), use a structural practice



## 5 Key Elements of the Proposed Regulation Updates

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4. More water quality treatment in Environmental Site Design (ESD) practices in portions of the State
5. Ensure that SWM practices are resilient to climate change by requiring larger more resilient practices to manage large, intense storms



# Key Elements of Design Manual Updates

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- Ensuring consistency with the updated regulations
- Removing obsolete or outdated criteria including criteria referenced from other state agencies
- Combining all BMPs into 1 chapter
- Consolidating duplicative practices
- Updating BMP figures
- Updating design examples
- Moving construction, construction inspection, and maintenance criteria to an Appendix



# Still Under Development

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- Design Manual:
  - Updating Appendices - Landscaping, Designing Infiltration Structures, Eastern Shore Dimensionless Hydrograph, Critical Erosive Velocity for Grass and Soil, Documentation of BMP Ability to Meet 90% TSS Requirement, Geotechnical Testing for Karst, Testing Requirements for Bioretention and Infiltration, Construction and Inspection
  - Updating BMP Figures
  - Updating Design Examples
- Post Regulation Adoption:
  - Updating Model Ordinance
  - Updating Standard Plans
  - Creating Additional Technical Guidance and Training



# SWM Regulations Update - Next Steps

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- Review ANPRM process comments and update proposed regulations and Design Manual
- Publish the Proposed Rulemaking: Estimated Timeline - Early Summer 2026
- Proposed Rulemaking includes a 30 day formal comment period
- Notice of Final Rulemaking - Early Fall 2026



# Open Comments and Questions

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- This is a listening session primarily to get input from you that MDE will consider as we refine the proposed regulations and Design Manual
- MDE would like to hear from you. Use this time to make comments and ask questions
- Please place your comments and questions in the Q&A function. We will read each question or comment out loud in the order that it was received
- If time allows there will be an opportunity to raise your hand and make a comment verbally at the end of the session.
- To ensure we have a full record of your question or comment, we suggest you follow up with a written submission, emailed to [mde.swmregulations@maryland.gov](mailto:mde.swmregulations@maryland.gov)

# Thank You!

**Jennifer M. Smith**  
**Water and Science Administration**  
**Stormwater, Dam Safety, and Flood Management Program**

**Send comments to:**  
[mde.swmregulations@maryland.gov](mailto:mde.swmregulations@maryland.gov)

**Recording and presentation slides will be posted to:**

<https://mde.maryland.gov/programs/Water/StormwaterManagementProgram/Pages/index.aspx>

**Additional information on the development of the proposed updates can be found here:**  
<https://sb-227-maryland.hub.arcgis.com>