

Advanced Notice of Proposed Rulemaking (ANPRM)

Updates to Maryland's Stormwater Management Regulations and Design Manual

The Maryland Department of the Environment (MDE) is considering revisions to regulations in **COMAR 26.17.02**, with a focus on updating stormwater management requirements and the design manual to reflect modern rainfall data, climate-driven flood risks, and statewide consistency.

Background and Authority

Maryland law, beginning in 2021, requires MDE to review precipitation data and update stormwater regulations at least once every five years. The last major update occurred in 2010, prior to this new statutory requirement. Since then, rainfall patterns, storm intensity, and flood risks have shifted significantly. MDE has completed a multi-year effort that included conducting broad-scoping research, collecting flooding data, engaging with outside experts, and collaborating with key stakeholders. MDE has drafted regulatory and design manual updates that reflect this multi-year collaborative effort. MDE is initiating early public engagement through a process known as an Advanced Notice of Proposed Rulemaking (ANPRM).

Stakeholder Engagement Process

The draft updated regulations and design manual released with this ANPRM are the product of a two-year collaborative process under the Advancing Stormwater Resiliency in Maryland (A-StoRM) stakeholder workgroup (2023–2025). This group included representatives from local governments, state and federal agencies, engineers, developers, environmental organizations, and academic experts. The workgroup's charge was to:

- Review technical standards and precipitation data
- Assess climate and flood resiliency needs
- Evaluate redevelopment and equity considerations
- Recommend practical and defensible revisions

Consensus was achieved on many technical standards, such as adoption of updated rainfall data, while balanced middle-ground approaches were developed for more complex issues like peak-flow management. The outcomes of the stakeholder workgroup provide the foundation for these draft materials. Through this ANPRM, MDE is seeking broader public input to strengthen that foundation, address any remaining considerations, and ensure the final regulations are both technically sound and responsive to communities statewide.

How to Use This Notice

This ANPRM is an early opportunity for stakeholders and the public to provide input on potential updates to Maryland's stormwater management regulations and design manual. It is not a formal rulemaking. Feedback received at this stage will guide MDE in shaping the draft regulations before they are formally proposed for adoption in the Code of Maryland Regulations (COMAR). At that point, the proposed regulations will also be published in the Maryland Register and subject to public comment.

Supporting materials, including the draft updated regulations and design manual, are available on MDE's Stormwater Management Updates webpage. Stakeholders are encouraged to review these materials together with this notice and provide comments on both the specific language and broader policy questions.

Goals of the Revisions

Since the last major stormwater regulation update in 2010, Maryland has faced new and evolving challenges that make revisions necessary. These proposed updates to COMAR 26.17.02 and the design manual are both timely and essential. The goals are to:

- **Address Climate Change and Flood Risk**
Maryland is experiencing more intense short-duration storms, higher total annual rainfall, and increased localized flooding, particularly in urban areas. Outdated design rainfall values do not adequately capture these risks, leaving communities more vulnerable. Updated rainfall data and design standards are needed to strengthen resiliency.
- **Overcome Performance Limitations of Current Practices**
Smaller Environmental Site Design (ESD) practices are frequently overwhelmed during larger storm events. Minimum design criteria require recalibration to balance water quality protection, groundwater recharge, and flood management. Revised standards will ensure practices are effective under today's storm conditions.
- **Ensure Consistency Across Jurisdictional Boundaries**
Inconsistent local application of standards has created uncertainty for developers, regulators, and communities. Clearer, updated statewide standards will provide a predictable, enforceable framework for project design and approval, improving efficiency and equity.
- **Meet Statutory Mandates and Advance the A-StoRM Initiative**
The updates will fulfill the requirements of SB227 (2021), which directs MDE to periodically review precipitation data and update stormwater standards, and implement outcomes from the A-StoRM stakeholder workgroup.

Major Topics for Review

MDE is seeking input on the following draft updates to Maryland's stormwater management regulations and design manual. These topics represent areas where stakeholder feedback is especially important to ensure the regulations are practical, science-based, and effective in protecting communities and waterways:

- **Update Rainfall Data**

Stakeholders are invited to comment on replacing outdated design storm values (TP-40) with modern NOAA Atlas 14 data, and on the proposed region-specific rainfall capture amounts for water quality treatment:

- Western Maryland: capture/treat 1.0 inch of rain
 - Central, Eastern, Southern Maryland: capture/treat 1.5 inches of rain
- MDE seeks input on whether these capture values appropriately reflect regional differences in rainfall and storm intensity.

- **Improve Stream and Flood Protection**

MDE seeks comment on requiring management of the 1-year storm with a climate change adjustment to reduce streambank erosion, and on requiring 10-year storm peak flow management statewide (with climate adjustments) to reduce local flooding risks. Feedback is requested on whether these measures will provide adequate protection while remaining feasible to implement.

- **Balanced Approach for Using Stormwater Practices**

MDE proposes to clarify the roles of different practices and seeks stakeholder feedback on:

- Requiring the use of ESD practices to provide stormwater quality treatment and groundwater recharge.
- Requiring the use of ESD practices to provide channel protection for small runoff volumes.
- Requiring the use of larger structural practices to provide channel protection for larger volumes and for flood control.

Input is requested on whether these requirements strike the right balance between water quality, recharge, channel protection, and flood management.

- **Implementation and Transition**

To ensure effective implementation, MDE is specifically requesting input on:

- **Effective Date of New Standards:** Are the proposed 6- and 18-month compliance deadlines for local approval authorities reasonable?

- **Transitioning of Vested Projects:** What thresholds (e.g., plan approval or design completion percentages) should define a vested project, and what transition timelines are most appropriate?
- **Local Ordinance and Manual Updates:** What are realistic timelines for local governments to align ordinances and technical manuals, and would a state-developed model ordinance be helpful?
- **Training and Certification:** What training formats (online, in-person, exams) and target audiences will best ensure designers, reviewers, and inspectors are prepared?
- **State Support and Technical Assistance:** What additional tools (e.g., checklists, templates, guidance documents) should MDE provide to support consistent implementation statewide?

Who Are Affected by the Regulations?

The draft stormwater regulations and design manual will apply to both private and public land development projects across the state. This includes:

- Residential subdivisions and redevelopment projects
- Commercial and industrial facilities
- Institutional projects such as schools and hospitals
- Public infrastructure projects, including transportation and utility facilities

Consideration will also be given to vested projects that have already reached certain milestones in the design or approval process. These projects will be allowed to proceed under the prior standards. MDE seeks input on how vested projects should be defined and treated during the transition.

Comment Period

MDE invites written comments on this ANPRM through **December 19, 2025**. Please include your name/organization and, where possible, cite specific sections of the draft regulations or design manual your comments address.

How to submit:

Email: mde.swmregulations@maryland.gov

Mail: Stormwater, Dam Safety, and Flood Management Program, Maryland Department of the Environment, 1800 Washington Boulevard, Baltimore, MD 21230

Attachments and supporting analyses are welcome. All comments received during the comment period will inform the development of the formal, proposed regulations.

Listening Sessions

To ensure broad participation, MDE will host three listening sessions at different times and in different formats. These sessions provide an opportunity to ask questions and share feedback directly with MDE staff.

- **October 22, 2025** – Virtual Session, 7:00–9:00 PM
- **October 28, 2025** – Virtual Session, 2:00–4:00 PM
- **November 13, 2025** – In-person Session at MDE Headquarters (1800 Washington Boulevard, Baltimore, MD), 10:00 AM.

Registration details, access links, and instructions for participation are posted on the **Stormwater Management Updates** webpage. All sessions will include time for public comment, and written feedback is welcome in addition to oral remarks shared during the sessions.

Schedule

MDE anticipates the following timeline for the regulatory update process:

- **ANPRM Public Comment Period:** September 19 – December 19, 2025. Stakeholder input during this period will guide revisions to the draft regulations and design manual.
- **Proposed Regulations:** Spring 2026. A formal proposal will be published in the Maryland Register, reflecting public and stakeholder feedback from the ANPRM stage.
- **Final Regulations:** Fall 2026. Following formal notice, comment, and review, MDE expects to adopt final regulations and publish the updated design manual.

Supporting Materials

To support stakeholder review and comment, MDE has prepared the following draft materials:

- **Draft Regulations (PDF):** Early draft text illustrating proposed revisions to COMAR 26.17.02.
- **Draft Updated Design Manual (PDF):** Proposed updates to technical standards and design requirements.

In addition, supporting visual aids (such as figures, diagrams, and appendices) will be finalized and added after the comment period to ensure alignment with the adopted text.