350 MoCo Chapter ♦ ACQ (Ask the Climate Question) ♦ Anacostia Riverkeeper ♦ Bethesda Green ♦ Biodiversity for a Livable Climate ♦ Cedar Lane Universalist Unitarian Church, Environmental Justice Ministry ♦ Chesapeake Bay Foundation ♦ Chesapeake Climate Action Network ♦ Defensores De La Cuenca ♦ Elders Climate ♦ Friends of Sligo

Creek ♦ Friends of Ten Mile Creek ♦ Glen Echo Heights Mobilization ♦ Little Falls Watershed Alliance ♦ Montgomery Countryside Alliance ♦ Montgomery County Faith Alliance for Climate Solutions ♦ Nature Forward ♦ Neighbors of the Northwest Branch ♦ One Montgomery Green ♦ Rock Creek Conservancy ♦ Safe Healthy Playing

Fields Coalition ♦ Sugarloaf Citizens Association ♦ Takoma Park Mobilization Environmental Committee ♦ The Climate Mobilization Montgomery County Chapter ♦ The Nature Conservancy of Maryland ♦ Transit Alternatives to Mid-County Highway Extended/M-83 (TAME) ♦ Unitarian-Universalist Church of Silver Spring, Green Sanctuary Committee ♦ West Montgomery County Citizens Association

Proposed Stormwater Management Regulatory Requirements for New Development and Redevelopment in Maryland

D. Lee Currey, Director, Water and Science Administration Maryland Department of the Environment

Raymond Bahr, Deputy Program Manager, Stormwater, Dam Safety, and Floodplain Management Maryland Department of the Environment

August 25, 2023

Dear Mr. Currey and Mr. Bahr,

Thank you for the opportunity to comment on the revised A-StoRM proposal forwarded July 26, 2023. In general, we think that it is much improved and makes a serious effort to address climate change while working within practical technical and regulatory constraints.

We preface our comment by unequivocally stating that Governor Moore must immediately provide the necessary resources to adopt, develop, and implement these revisions. It is fair to say that climate change is already presenting itself to Maryland communities in the form of extreme heat waves, intense rainfall, and stronger storms. Local jurisdictions – indeed the State itself – are spending millions to recover from impacts, and loss of life is heartbreaking and irrecoverable. These regulations present us with an opportunity to reduce economic and public health impacts and are well worth the investment to reshape our communities and restructure how we live on the land under the new climate regime. We urge Governor Moore to increase staff and financial resources to expeditiously finalize and implement these revisions.

In particular, we are aware of state and local challenges with applying for the many grants available from the federal government, and in this case especially FEMA. It is penny wise and pound foolish to fail to provide maximum staffing levels to get this done. It is reckless to skimp on State resources that would enable the Maryland Department of the Environment (MDE) to expedite this rulemaking and squanders this historic opportunity to bring in significant amounts of funding to Maryland.

Similarly, we are aware that a State Resilience Officer position was created in May 2022 but as far as we know that position has yet to be filled. It is urgent that hiring be expedited – this role is critical to figuring out how to build resilience to the ever-increasing threats of flooding. To do so requires comprehensive, interdisciplinary, and interjurisdictional coordination of plans and programs. Otherwise, effectuating the Maryland Climate Change Commission's (MCCC) goals for adaptation and resilience are likely to be not just delayed but undermined if half measures are taken, with potentially unintended consequences.

As is typical, but not unique to Maryland, various functions of managing water and land are located in department and programmatic silos. If Maryland is to comprehensively address water quality, water quantity (and availability), and flooding, an integrated state initiative is needed. We strongly urge the governor, the legislature, state departmental officials, and the MCCC to expeditiously work towards this capability.

MDE's proposal is an important step forward on the path to resilience. We offer our strong, yet qualified, support for this proposal, and we offer several additional recommendations to strengthen certain elements. We look forward to the formal public review process.

## **Table of Contents**

PRIOR INPUT COMPARED	3
GENERAL COMMENTS	5
DETAILED COMMENTS	5
SECTION 2: PROPOSED SWM REQUIREMENTS	5
SECTION 3 - NEW DEVELOPMENT	9
SECTION 4 - REDEVELOPMENT	10
SECTION 5 - TRANSITION PERIOD	11
RECOMMENDED NEW SECTION 6	11
OLD SECTION 6 – CONCLUSION	12

# PRIOR INPUT COMPARED

The Stormwater Partners Network (SWPN), the Climate Coalition Montgomery County (formerly the Climate Action Plan Coalition), Chesapeake Bay Foundation, the Nature Conservancy, and our 33 member organizations submitted several recommendations on your initial proposal (Feb. 15, 2023). MDE's current proposal is much improved, but we still recommend consideration of some of our original recommendations.

Comparison: SWPN/Climate Coalition Recommendations 02/15/2023 vs. MDE Proposal 07/26/2023			
Green = Responsive to our Comments. Yellow = Qualified Improvement. Red = Not Responsive			
SWPN/Climate Coalition	MDE Proposed Revision July	Comment	
Recommendation Feb. 2023	26, 2023		
Require that local jurisdictions design to the 2-year storm vs. the current typical practice of local jurisdictions using the 1-year storm.	Retains the 1-year, 24-hour storm requirement	This is acceptable in context of new provisions for mutually exclusive controls of pervious and impervious area, and other provisions noted below. If these controls are not adopted in final regulation, then MDE should consider raising the storm frequency as a hedge against more intense and more frequent storms.	
Require use of the 2-year storm data to be provided by NOAA in Atlas 14, <i>Volume 13</i> as soon as it is available in 2025, but in no case can the design standard be downgraded from the current values in the Maryland Unified Sizing Criteria.	Silent on the NA14 Volume 13 update	This is a critical issue that needs to be added	
MDE should plan revisions to criteria every 3 years, including a revision to be applied pending the release of Atlas 15.	Silent on NA15 Silent on frequency of updating	This is a critical issue that needs to be added	
Examine methods for incorporating nonstationarity of factors influencing precipitation intensity for future use. <sup>1</sup>	Silent	This would be ok if the proposal will proactively address future updates based on updated NOAA Atlases (NA14 v13, and NA15)	
Add at least a 15% multiplier on top of the most recent Atlas 14, 2-year, 24- hour storm, currently yielding 3.7 inches.	Retains the 13% multiplier	This is acceptable in context of new provisions for considering the RCP 8.5 climate projects, adding mutually exclusive	

<sup>&</sup>lt;sup>1</sup> Scientists have demonstrated that for every 1 degree C of temperature increase, the atmosphere holds 7% more moisture that, in turn, falls as more intense precipitation. <u>https://climate.nasa.gov/ask-nasa-climate/3143/steamy-relationships-how-atmospheric-water-vapor-amplifies-earths-greenhouse-effect/</u>. also, <u>https://www.nature.com/articles/s41467-020-18876-w</u>

		controls of pervious and impervious area, and other positive provisions noted in our comments below
Require a Water Quality Volume minimum based on 95%.	Raises the Water Quality Volume minimum to 95%	95% complies with federal law
Undertake redesign of the Design Manual immediately.	Identifies areas in the Design Manual to be revised. Model ordinance and updated Design Manual developed 2024-2025 (inferred)	Given the urgency of climate change, we hope this will be done very early in the process to help local jurisdictions develop their ordinances.
Evaluate a systematic and whole- watershed approach to stormwater management, including application of updated methods for areas undergoing redevelopment.	Provides provisions for redevelopment; new development add special provisions for historically underserved communities.	While the proposal does not discuss a whole watershed approach, certain provisions can only be adjusted where there is a watershed plan. Proposal does address controls for the entire area of disturbance.
Address the issue of granting waivers, especially in areas undergoing redevelopment with increasing impervious cover	Silent on waivers	This is a critical issue that needs to be addressed. This could be addressed in the context of the requirements for "the remaining ESDv for the pervious area"
Review individual sizing criteria and conveyance criteria as soon as possible, including requirements to the MS4 design manual and to other infrastructure, e.g., culverts and dams.	Incorporates requirements for conveyance	This is a significant improvement in the proposal
Study the effectiveness of existing design storms in light of our changing local rainfall patterns, and initiate study and discussion of whether to use shorter duration rainfall periods in creating design storms.	Mentions idea of collecting more local data for future consideration of short duration rainfalls	Would like to see a more specific plan
Continue to study downstream and overland flooding.	Incorporates water quantity and channel protection controls; includes provisions to protect neighboring properties	This is a significant improvement in the proposal
Undertake rehabilitation of legacy land use problems, such as the box culverts under Rock Creek Woods apartment complex that have caused	Silent on rehabilitation but adds more stringent requirements for redevelopment in underserved communities	Please incorporate revisions to comport with state definitions of disadvantaged and underserved community, as commented below.

repeated flooding of low-income and		
vulnerable tenants. <sup>2</sup>		
Address the issue concerning	Silent on tidal waters and sea	Recommend responding to
conveyance of stormwater directly to	level rise	stakeholder group member's
tidal waters subject to sea level rise		prior discussion (this issue is not
that would exacerbate tidal flooding		addressed in this MoCo letter).
via the storm drainage system		

# GENERAL COMMENTS

- We understand that the proposed changes are meant to cumulatively and more effectively control greater amounts of runoff than do the current requirements. It would help the reader if you would provide a chart showing the existing requirements in contrast with the proposed methods to provide a bird's eye view of the changes.
- 2. Please also provide a chart or descriptive summary of how the various elements in this document work together to build resilience, showing the amount of runoff intended to be controlled, taken together. If necessary, provide example scenarios showing former runoff results vs. runoff results from the new requirements.
- 3. The use of "must," "will," "shall," "should," and "if" are used in various places such that it is unclear what you intend as a requirement versus a recommendation for a best practice. This is especially confusing on pages 6-7, Section 2, subsections e, f, and notably g.
- 4. We note that there is no discussion of tidal areas, which was raised by some stakeholders during the workgroup process last year.

# DETAILED COMMENTS

## SECTION 2: PROPOSED SWM REQUIREMENTS - pages 3-8

## Subsection a, Page 4: Use of NOAA Precipitation Statistics

While it is important that no local government in Maryland reference TP40, and while it is imperative that, at a minimum, the Maryland Design Manual require that all local regulations must reference NOAA Atlas 14 (NA14) (2006 update), it is true that some counties are already referencing NA14 and yet are still experiencing flooding. NA14 methods as discussed in our previous comments are based on historical values that no longer reflect current trends toward more intense, short duration rainfalls (e.g., 3-hour, 6-hour, 12-hour, 24-hour, etc.) across the temporal spectrum (e.g., annual, 2-year, 25-year, 100-year rainfall, etc.). We understand that, taken together with other proposed changes resilience may be improved using these values. However, our main critique of the current proposal is as follows:

• We are particularly disturbed that there is no reference to adopting future changes in the NOAA precipitation frequency data server (PFDS). Specifically, Congress has mandated NOAA to revise

<sup>&</sup>lt;sup>2</sup> Rock Creek Woods Apartment Complex <u>Flooding</u>, mold, rats: <u>Disaster strikes again at Rockville apartments</u> (<u>bethesdamagazine.com</u>).

these statistics *at least* every ten years. In fact, we know that NA15<sup>3</sup> will be coming out in in 2026 in two volumes:

**Volume 1** will account for temporal trends in historical observations, and **Volume 2** will use future climate model projections to generate adjustment factors for Volume 1. To account for a changing climate, NOAA worked with the Federal Highway Administration (FHWA) and the academic community to develop a new methodology for Atlas 15, which has undergone broad review by stakeholders and Federal partners over the past year, leveraging state of the art research in extreme value theory and climate model outputs and projections. The Atlas 15 estimates will provide critical information to support the design of state and local infrastructure nationwide under a changing climate.

#### **NOAA Atlas 15**



It is essential that MDE incorporate an automatic adoption of the most current NOAA atlas and in this case a prospective requirement to adopt NA15. This is especially important given the long lag times from federal standards to state statutory authorization, to state agency regulatory development, to county amendments of local ordinances, to industry adoption of new practices, to implementation. Failing to include this automatic requirement builds in unnecessary lag times in an already long, drawn out process.

Less critical but still worth considering is the assumption that Maryland will continue to base
requirements on the average annual 24-hour storm. NOAA provides max, min, and average
values; rain is falling in more intense short duration storms; and some jurisdictions nationwide
reference the 2-year storm for their stormwater system design rather than the 1-year. We would
like to see a discussion of why, as stated as a matter of fact rather than as a matter for
consideration: "Maryland uses average rainfall depths associated with a 24-hour duration storm
event as the basis for stormwater management requirements and best management practice
design." Given the progressively increasing intensity of rainfall, we believe that MDE should
consider referencing NOAA's max rainfall depth and/or the 2-day duration storm.

<sup>&</sup>lt;sup>3</sup> NOAA Atlas 15 https://www.weather.gov/media/owp/hdsc documents/NOAA Atlas 15 Flyer.pdf

• We request that MDE institute and fund a robust plan to gather local rainfall records for the 12hour, 6-hour, and 3-hour durations to inform future regulatory and best practice advice on improving resilience throughout the state.

#### Subsections b, c, and d, pages 4-6 – Design Storms and Runoff

These sections address design storms for water quality protection, channel protection, and ESDv nonstructural practices that control small-storm runoff. We find that the proposed changes taken together will go a long distance to improving resilience of our communities, protecting taxpayer investments, protecting health and welfare, and preserving county residents' investments in their own properties. We acknowledge that these changes are significant, and that governments, private sector, and individuals will need to adjust. Climate change demands such investments, and we give kudos to MDE for their thoughtful and thorough approach. We urge you to stand behind these changes as you move through the public comment process.

- Thank you for acknowledging in subsection b that the water quality treatment BMP to capture and treat requirement should be at least 95% (vs. MDE's current 90%). We support this change. We further support adding the 13% MARISA projections to NOA14's 1-year, 24-hour storm rainfall, resulting in 2-inch value for water quality protection, and 3-inch capture and treat for Environmental Site Design requirements channel protection. However, we only support these in the context of the additional changes described in the following bullets.
- As a preamble to **subsections c, d, and e,** we agree with the statement in subsection b(iii) acknowledging that "predicted changes to the design storms used for water quality treatment and channel protection result in the need to modify the required ESDv."
- The discussion in **subsection c** of the loss of hydrologic function due to soil compaction is excellent and comports with our observations when land is excavated, filled, and compacted when new houses are being constructed, as well as the resulting increase in runoff affecting downstream properties. We support the requirement to consider "all disturbed soils as having the properties and characteristics of hydrologic soil group D."
- We agree with the discussion in **Subsection d** that "ESD practices no longer provide channel protection due to high intensity storms" and we support the requirement that ESD practices must "remain as offline practices." This requirement will help protect ESDs from damage during high intensity storms. We further support adoption of the "24-hour extended detention of the 1-year storm event method." This change will help to protect streambeds from erosion.

#### Subsections e, f and g, pages 6-7 - Conveyance

We acknowledge the statement in **subsection e** that "ESD practices...are not appropriate for managing peak discharge rates for extreme events," and acknowledge that we need to protect water quality, channel protection <u>and</u> flood control. With regard to **subsection e as preamble to subsections f and g**, we agree that Maryland needs to revise regulations that address a wider spectrum of rainfall events.

• Subsection f acknowledges that, to date, Maryland's design standards have not included conveyance standards. We agree that "outflow or bypassed runoff must be conveyed in a safe and non-erosive manner to downstream practices, storm drain systems, or other acceptable outfalls."

 We wonder if there could be unintended consequences of relegating vegetation- and infiltrationbased practices (ESDs) to "offline" and to ESDs not being eligible to "manage peak discharge rates for extreme events?" For conveyance to a stream (not in the stream channel itself), a practice that is both infiltration, and conveyance is variously called "<u>Regenerative Stormwater</u> <u>Conveyance</u>," "Coastal Plain Outfalls," and "Stepped Terraces" (others call it "Step Pools" but it's not supposed to create standing water, so calling it "Pools" isn't accurate). This is a successful practice where it's been heavily used in Anne Arundel and Prince George's counties. These Stepped Terraces are said to be able to convey and partly infiltrate the runoff from a 100-year storm / hurricanes. So, if all of the ESDs are relegated to "offline" status, does that obviate the expanded use of the Stepped Terrace approach? We pose this as a question for your consideration.

This consideration is a way to avoid traditional piping that can flood and increase streambank erosion. This question goes beyond the eligibility of the specific practice of Stepped Terraces. Runoff from a parking lot or apartment building roof could be directed into a rock swale that then goes into a wooded wetland (a stand of water-loving trees in an extended bioretention facility) that then infiltrates in small storms and dry weather into the ground, and in heavy storms it overflows over vegetated berms acting as level-spreaders (not pipes) into another stand of trees.

- We also recommend addressing the issue of waivers that are often granted by local governments when new development is designed such that there is little room for installing the required ESDs. Granting of stormwater waivers in densifying and urbanizing areas has contributed to flooding of older properties in the sub-watershed and stormwater-shed. We can imagine situations where waivers may be sought for the proposed conveyance requirements. We request that MDE address the conditions under which a waiver can even be considered for regarding conveyance, installation of ESDs and CPVs, and other potential provisions where waivers may be sought. We also suggest that MDE include specific guidance on waivers in model ordinances to narrowly address redevelopment and densification scenarios.
- **Subsection g** is a significant and welcome revision to the Maryland stormwater regulation. It is essential that permit authorities ensure that the capacity and stability of the conveyance system remains effective. Therefore, we support that "any change in design storm runoff rate, velocity, or location...from pre-development conditions shall require a downstream offsite drainage easement to be recorded in the land records of the proper local jurisdiction."
- Our second main concern beyond the one described earlier (referencing NA15 and future updates) is the use of the term "should" in the third paragraph of subsection g that contradicts what we understand of your proposed new requirements described in subsection f. Up to this point in the proposal, MDE uses the terms "will" and "must" and "require" and yet the use of "should" and "if" confuses your intention. Shall we assume you mean that the local jurisdiction must at a minimum adopt the 1-year, 24-hour design storm for water quality? You then go on to say <u>if</u> the local authority requires quantity management, then the local authority "shall" adopt the 1-year, 24-hour storm, the quantity management storm, and the 100-year, 24-hour storm (in

absence of a watershed-based alternative). Also, the ensuing paragraph says: "In addition to these requirements...." It is difficult to comment on this entire document without understanding this paragraph and we request clarification in writing.

• The last paragraph of **subsection g, pages 7-8**, states continuation of the requirement that "the developer obtain from adjacent property owners any easements...concerning flowage of water." To date, this has been ineffective in neighborhoods undergoing redevelopment that are flooding due to increased impervious areas. This paragraph must be set into a larger context of requirements and explained specifically how it leverages the rest of the new requirements for improved effectiveness and resilience. Please provide clarification on this issue.

### Subsection h, page 8 - Historically Overburdened and Underserved Communities

We support without reservation the proposed language to address historically overburdened and underserved communities. It is a priority to redress past wrongs; the proposal to require redevelopment in these areas to conform with new development requirements upgrades treatment of land use to restore equity at least in the stormwater dimension. There is no question that this provision must be adopted to improve public health and safety and build resilience for the most vulnerable. However, we note below the need to somewhat amend the threshold that you suggest for defining historically overburdened and underserved communities. That said, we urge you to solicit input from the affected community on this revision.

## SECTION 3 - NEW DEVELOPMENT – pages 8-10

We support the following requirements:

- New development must manage both the ESDv for water quality and the CPv channel protection for the entire disturbed area
- The impervious area must be managed in an ESD practice
- The pervious area must be managed to the MEP in an ESD practice
- Areas not managed in an ESD practice must be managed on-site within a water quality BMP.

We especially support:

- CPv requires extended detention for the entire area disturbed.
- ESDv and CPv are to be calculated separately and provided in mutually exclusive volumes
- Over-management of the CPv is not allowed

We support:

- The design storm runoff must be adequately conveyed to the intended stormwater management practice
- The ESDv runoff from impervious and pervious areas in the area of disturbance must be conveyed to the intended ESD practice.
- If not all of the 3 inches is contained, the remaining ESDv runoff must be conveyed to a water quality BMP.
- The full CPv storm runoff must be conveyed to a structural practice providing extended detention.

Note that we only support the following when adopted in context of other provisions in the proposal:

- The 3-inch value (vs. our earlier 3.7-inch recommendation)
- Using the 24-hour, annual storm as a basis of calculation (vs. our 2-year storm recommendation)
- Revising Table 2.2. in the Design Manual to add the 13% factor to Atlas 14 (vs. our 15% recommendation)

### Subsection a - Calculating ESDv and Subsection b - Calculating CPv, pages 9-10

- These subsections are very difficult to follow. Please spell out RCN and explain in simple terms what it is. Please also insert a reference to the existing manual in section Chapter 5 section 5.2.2 to make it easier for people to review.
- For ESDv, there is no explanation of the relationship of 3 inches to an RCN. The reader would benefit from a chart or a simpler explanation of how the numbers are derived. Please explain an RCN of 98 and 80; how those result in 2.77 and 1.25 inches (based on a 3-inch rainfall); and please explain how they relate to the 95% required control referenced earlier.

Pending explanation of these values (in the context of other proposed controls) we support:

- Requiring the ESDv for water quality for new development to control the runoff from 3-inch rainfall for both pervious and impervious area.
- The ESD practice must only manage the required area draining to it and all other runoff must bypass the ESD.
- The runoff control provided by each ESD practice must add up to equal the total required ESDv for the site's area of disturbance.

We note the proposed requirement that the CPv must be held and discharged over 36 hours (or 24 hours for cold water watersheds), centering on the 24-hour centroid. The main change seems to be the switch from the 24-hour to the 36-hr storm, and It appears that the calculation for CPv for channel erosion control would not be changed, relying instead on existing Design Manual methods.

- We are unsure how this works without updating the methodology.
- It is not clear what this change means in reality (and what is different than current practice). Does it mean that water must be held for 36 (or 24) hours after the 12-hour mark for the initial inflow? Or the end of the inflow? Please explain scenarios.
- We would like an explanation of the rationale for a shorter retention time for coldwater resource watersheds.

## SECTION 4 - REDEVELOPMENT - Pages 10-11

We understand that the requirements in this section are less than for newly developed area. This is meant to provide incentives to counties to redevelop old and aging areas. We also understand that some counties don't need such incentives and therefore they currently require redeveloped areas to conform with requirements for new development. We anticipate that this will remain the case.

That said, we support the new requirement that half of the runoff from *existing* impervious area must be treat with an ESD, and an additional half of the runoff from *existing* area must be reduced (or a

combination of the two), based on a runoff factor of 98. On the face of it, this seems reasonable. (Again, please provide the reader the reference to that section (5.2.2) and explain how the 98 RCN yields 2.77 inches of runoff based on 3 inches of rain.)

We strongly support excluding disadvantaged and underserved from this section, thereby requiring redevelopment to conform with new development standards in order to increase resilience of these vulnerable areas. We examined MD EJ Screen and found that for 3 of the 4 categories, Maryland in fact uses 75% as the threshold for 1) pollution burden exposure, 2) pollution burden environmental effects, and 3) sensitive populations.

However, the fourth category, socioeconomic/demographic Indicators, is different. Maryland uses the definition of an underserved community that is defined as "any census tract in which, according to the most recent U.S. census bureau survey:

- at least 25% of the residents qualify as low-income;
- at least 50% of the residents identify as nonwhite; or
- at least 15% of the residents have limited English proficiency.

It adds that this fourth category is an "or" definition, so if one or more of the indicators in this category meets the threshold, then the census tract is automatically classified as underserved.

- We therefore strongly recommend that these regulations comport with MD EJ Screens four categories of thresholds, including socioeconomic/demographic indicators for underserved communities.
- However, it is essential that you confer with the referenced communities and get their input on this section. In addition, MDE must ensure there is frequent, early, and multilanguage engagement with EJ communities in all processes.

#### SECTION 5 - TRANSITION PERIOD – page 11

It is shocking that, in a time of emergency, it will take almost four years before these provisions would go into effect<sup>4</sup>. It is further disturbing that new development already in the approval process as of January 1, 2027 (after the local ordinances are approved under the proposed schedule) and under construction by 2035 could still be built under the existing regulations projects, provided they conform with the listed schedule.<sup>5</sup> Given the increasing threat of intense storms, this is not a prudent pathway to resilience.

• We highly recommend that Maryland declare climate change to be an emergency and justify expediting this regulation under public exigency.

<sup>&</sup>lt;sup>4</sup> Stated implementation schedule: Dec. 2023 (Jan. 2024) – MDE issues proposed regulation; 2024-2025 (inferred) – MDE develops Model Ordinance and updated Design Manual; Jan. 1, 2026 – proposed local ordinances approved by MDE; Jan. 1, 2027 – local ordinances approved by local governing bodies

<sup>&</sup>lt;sup>5</sup> Stated schedule for construction in the approval process: Concept Plans must be approved by June 30, 2028; Site Development Plans must be approved by June 30, 2029; Final Plans must be approved by June 30, 2030; Construction under the Final Plans must be started by June 30, 2032; and Construction under the Final Plans must be substantially completed by June 30, 2035.

- It is urgent that MDE implement these revisions with all deliberate speed: advance the schedule at least a year if not more by providing the model ordinance no later than September 2024, with similar advance of the rest of the schedule.
- Provide incentives for counties to develop their ordinances sooner rather than waiting for a model ordinance. In this case, MDE would approve the local ordinance within six months of submission and would require the local governing body to approve the ordinance within an additional six months.
- We strongly urge MDE to also adopt a more aggressive schedule for projects already in the approval process, starting with projects in the approval process no later than Dec. 2024, advancing the schedule by a full 2 years (those would still be substantially constructed in 10 years, by 2033!) Any extension of this schedule should only be allowed with a special exception under specified circumstances.

### RECOMMENDED NEW SECTION 6 – page 11

Given that the NOAA Atlas 14, volume 13 will be out in 2025, and NOAA Atlas 15 with climate projections will be out in 2026, we strongly urge MDE to incorporate these provisions within six months of availability of revised statistics, including advisory guidance on use climate projections that may go beyond what is incorporated into requirements. This would help inform those localities needing to build in extra margins of safety and for critical facilities.

- We urge MDE to add a provision 'by reference' that incorporates statistics in NA14 volume 13 when available, likely in 2025.
- We strongly urge MDE to add a provision to adopt NA15 statistics within six months of availability, and in force by 2028, with a 'development in process' grace period of two years.

### OLD SECTION 6 – CONCLUSION – pages 11-12

We appreciate the discussion of future plans. We strongly support:

- MDE taking immediate action by proposing these regulations.
- MDE proposing additional quantity management regulations soon
- MDE investing in watershed studies to model flood risk based on existing and future development scenarios.

We support MDE collaborating to expand what it means to comprehensively manage watersheds for flooding, including with stormwater, floodplains, coastal areas, land use, agriculture, emergency management, and community stakeholders. In particular, it is of great importance that MDE and its partners to not only model flood risk but to also promote watershed-specific quantity management practices for new development, redevelopment, and capital improvement projects. Furthermore, we would like to see a game plan for moving towards such watershed-based quantity management.

To facilitate collaboration, we urge MDE to appoint the authorized Chief Resilience Officer and reevaluate inter-departmental structures (not just collaborate) to break down silos and create integrated regulatory and policy pathways to advance resilience.

Again, we thank you for this opportunity to comment on your proposal and we truly appreciate you incorporating much of our previous input. While many members of the public may not fully understand the technical nature of these changes, we do believe they will all care about MDE's efforts to reduce flooding and improve water quality resulting from both impervious cover and the progressively more intense rain events that we are all experiencing.

#### STAKEHOLDER ADVISORY GROUP MEMBERS

Jeanne Braha, Co-chair, Montgomery County Stormwater Partners Network (SWPN) Executive Director, Rock Creek Conservancy

Karen Metchis, Member, Coordinating Committee Climate Coalition Montgomery County

#### ADDITIONAL ORGANIZATIONAL SIGNATORIES

350 MoCo Chapter (CC-MOCO) ACQ (Ask Climate Question) (CC-MOCO) Anacostia Riverkeeper (SWPN) Bethesda Green (CC-MOCO) Biodiversity for a Livable Climate (CC-MOCO) Cedar Lane Universalist Unitarian Church, Environmental Justice Ministry (SWPN, CC-MOCO) Chesapeake Climate Action Network (CC-MOCO) Defensores De La Cuenca (SWPN) Elders Climate (CC-MOCO) Friends of Sligo Creek (SWPN, CC-MOCO) Friends of Ten Mile Creek (SWPN) Glen Echo Heights Mobilization (CC-MOCO) Little Falls Watershed Alliance (SWPN) Montgomery Countryside Alliance (SWPN) Montgomery County Faith Alliance for Climate Solutions (MCFACS) (CC-MOCO)

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Neighbors of the Northwest Branch (SWPN) One Montgomery Green (SWPN, CC-MOCO) Rock Creek Conservancy (SWPN) Safe Healthy Playing Fields Coalition (SWPN, CC-MOCO) Sugarloaf Citizens Association (SWPN, CC-MOCO) Takoma Park Mobilization Environmental Committee (SWPN, CC-MOCO) The Climate Mobilization Montgomery County Chapter (CC-MOCO) Transit Alternatives to Mid-County Highway Extended/M-83 (TAME) (CC-MOCO) Unitarian-Universalist Church of Silver Spring, Green Sanctuary Committee (CC-MOCO) West Montgomery County Citizens Association (SWPN)