

May 18, 2021

Via email

Stephanie Moura
Director, Division of Wetlands and Waterways
Massachusetts Department of Environmental Protection
One Winter Street
Boston, MA 02108

Re: Proposed Updates to MassDEP Stormwater Handbook

Dear Director Moura,

Charles River Watershed Association (“CRWA”) submits the following comments on MassDEP’s proposed updates to the Stormwater Handbook. These comments are based on the information provided to date through the Advisory Committee process. We look forward to providing detailed comments on the draft Stormwater Handbook following its release for public comment.

As one of the country’s oldest watershed organizations, CRWA protects, preserves, and enhances the Charles River and its watershed through science, advocacy, and the law. Our initiatives over the last five decades have dramatically improved the quality of water in the watershed, fundamentally changed approaches to water resource management, and protected the Charles River as a public resource for current and future generations. Stormwater pollution is one of the most significant threats facing the Charles River today, and we are keenly interested in seeing an updated Stormwater Handbook that protects the Commonwealth’s valuable freshwater resources from stormwater pollution today and as our climate changes.

Precipitation

For new development projects, peak runoff calculations should use “existing” rainfall (Atlas14 or TP40) for calculating the pre-development runoff rates and should use “future” rainfall consistent with the RMA2 approach for calculating the post development runoff rates. Failure to utilize that approach will underestimate the increase in future flooding over existing conditions.

We strongly support the 1-inch rule, but note that capturing the first inch of rainfall alone is unlikely to do much to reduce flooding. Additional flooding control measures should be required—for example, Cambridge is requiring control up to a certain storm size based on their climate projections, and then recovery from larger storms.

For redevelopment projects, the goal should be to reduce peak runoff rates in the direction of rates typical of an undeveloped site to the maximum extent practicable. On already-developed properties, reducing runoff rates from existing private impervious is critical to protecting streams and minimizing the impact of increasing rainfall. Failure to do this will exacerbate flooding impacts over time and may have impacts on downstream and neighboring communities that have no role in upstream developments and rely on the state to set protective standards.

The Handbook should include a procedure for updating design storm estimates (or estimated increases on design storm values) when new data becomes available in the future.

Consistency with the MS4 Permit

We are glad that MassDEP is undertaking this effort to bring the Stormwater Handbook in line with the requirements of the MS4 permit. Many communities are currently struggling to reconcile the differing requirements under the state and federal stormwater management frameworks; these updates will hopefully improve consistency and clarity. For this reason, it is important to finalize the Stormwater Handbook updates as soon as possible and provide a handbook that is consistent with the MS4 permit. This process has already been underway for over a year, and while some delay has been unavoidable due to the pandemic, communities will benefit greatly if the remaining process is completed in a timely and efficient manner.

We are pleased to see that the proposal for Standard 3 and Standard 4 presented in the October 2020 Stormwater Advisory Committee Meeting attempts to meet the recharge and pollutant reduction requirements for both TSS and phosphorus of the MS4 permit MCM 5; however, there are still some conflicts and inconsistencies with requirements of the MS4 permit in these proposed standards as noted by various other commenters. We look forward to seeing how these provisions are more fully explained in the draft Handbook update and intend to comment on them following release of the draft.

With respect to offsite mitigation, we encourage MassDEP to allow offsite mitigation in the same subwatershed, as this may contribute to overall improvement in a basin.

Definitions for new development, redevelopment, and impervious area should be consistent between the MS4 permit and the Stormwater Handbook. We urge MassDEP to carefully consider the impacts of allowing inconsistencies and the subsequent impacts on implementation of the many regulatory mechanisms that govern stormwater-related projects.

The Handbook must meet the MS4 permit requirement that “Low Impact Development (LID) site planning and design strategies *must* be implemented unless infeasible in order to reduce the discharge of stormwater from development sites.” (emphasis added)

The new Handbook should be consistent with the MS4 permit’s impaired water and TMDL requirements. For example, the MS4 permit contains specific requirements for communities in the Charles River watershed to reduce phosphorus loading in stormwater discharges—many of the same approaches that reduce phosphorus, including LID and green infrastructure, also serve the purposes of the Stormwater Handbook.

Cost Concerns

There have been numerous concerns raised about the cost of compliance with the updated Stormwater Handbook. However, because the current state stormwater standards are so outdated and are not even effectively managing current conditions, most of the cost associated with compliance with the updated Handbook will reflect what developers/redevelopers should have been paying anyway to protect local waterways and public health. Therefore, to date, stormwater

management costs have been representative of inadequate investment and should not be considered the standard for comparison. Further, it is much more cost-effective to reduce runoff from re/development projects now rather than to retrofit later—the costs of waiting would be even higher. Due to the potentially devastating impacts of climate change, the cost of managing stormwater can no longer be passed along to the public.

Natural Features and LID

Overall, the Handbook should contain more emphasis on trees and natural vegetation. Specifically, there should be disincentives for removal of trees and natural vegetation—it is not sufficient to clear forested and vegetated areas and replace these areas with stormwater BMPs, especially when taking into account climate mitigation and resilience.

In particular, the Stormwater Handbook should regulate tree protection. MassDEP should consider how landscapes and developments are able to withstand the significantly more intense precipitation that we are already experiencing, as well as more frequent periods of drought. The Handbook should include credits for protecting open space and maintaining tree canopy, and also expand available LID credits.

Groundwater Recharge

We support the proposed changes to Standard 3 to require 1-inch of recharge across soil types (with some exceptions for Class D soils), especially in light of increasing droughts and water supply challenges. While the MS4 permit is focused specifically on water quality, it makes sense for MassDEP to also focus on groundwater recharge.

Discharges to Impaired Waters

We strongly support a new standard targeting compliance with Total Maximum Daily Loads (TMDLs)—proposed Standard 11—as this will require project proponents to address known water quality issues. However, we urge MassDEP to include all impaired waterbodies (not just those with approved TMDLs), and require projects to acknowledge their point of discharge and mitigate discharge of pollutants of concern listed on the 303(d) list in accordance with the most updated approved Final Integrated List of Waters for Massachusetts. MassDEP could consider calling this new standard “Discharges to Impaired Waters With or Without a TMDL.” This new standard should also be consistent with the MS4 permit’s TMDL and impaired water requirements included in Appendices F and H of the MS4 permit.

Sincerely,



Janet Moonan, PE
Stormwater Program Director



Heather Miller, Esq.
General Counsel & Policy Director