



July 12, 2024

Mr. Stewart Comstock
Maryland Department of the Environment, Water and Science Administration
1800 Washington Boulevard
Baltimore, MD 21230
Via email to: Stewart.Comstock@Maryland.gov

Re: Maryland Sierra Club comments on MS4 stormwater permit 24-DP-3313

Dear Mr. Comstock:

Thank you for this opportunity to comment on the proposed new general stormwater permit [24-DP-3313](#), which will be granted to the Maryland State Highway Administration.

This one permit will cover a vast area, including 15,000 lane miles of highway and 2,600 bridges. It thus provides a crucial opportunity to improve stormwater management practices across the state. Runoff from impervious surfaces is now the fastest growing source of water pollution in Maryland.

We appreciate the advances that the proposed permit is intended to make. However, for this general permit to be effective in mitigating environmental damage, it should be strengthened in several critical ways.

1) Climate change is making storms much more intense, and we can expect this trend to continue. Permit requirements should reflect the most current climate change projections. MDE is currently basing its regulations on data from NOAA's Atlas 14, published in 2006, and based on the data available in 2000. We know that rainfall is increasing. We understand that NOAA is developing updated precipitation estimates and climate forecast adjustment factors based in part on funding from MDOT and the Bipartisan Infrastructure Law. We encourage MDE to reflect the updated estimates and climate forecast adjustment factors in its permitting decisions as soon as practical.

2) MDE permitting should require a range of Best Management Practices, and a shift in priorities to reduce reliance on in-stream restoration projects. Historically, most of the work funded by the MS4 permit system has addressed the symptoms, not the cause. In 2023, over 4,700 acres were treated by doing stream

restoration projects, a far larger area than was treated in any other way. These projects often involve disruption of riparian ecosystems, and their long-term effectiveness has been questioned in a number of expert studies. We need greater reliance on green infrastructure, infiltration projects, riparian plantings, and the removal of unused impervious surfaces. We are encouraged by language in the draft permit calling on the SHA to make progress in using green infrastructure, but we urge MDE to provide more specific requirements.

3) MDE should expand monitoring requirements to include changes in water temperature and impacts on native ecosystems and wildlife habitat, both from polluted runoff and from stream restorations. Stream restorations typically involve the removal of hundreds of trees and all vegetation down to the microorganisms in the soil. This leaves a void that greatly accelerates the spread of invasive species, which are already a huge problem in Maryland. Streams are left to bake in the sun without the shade needed for aquatic life. A study led by Robert Hildebrand in 2020 for the Chesapeake Bay Trust found that such projects usually result in a loss, not a gain, of species diversity. Earlier studies by Pederson, Palmer, Jepsen and Laub also found evidence of declines in native species or on soil health. Monitoring impacts on native ecosystems and wildlife habitat is consistent with the Whole Watersheds Bill signed into law in May 2025 by Governor Moore (see pages 48-50 of the Whole Watersheds Act, [SB 969](#)).

4) MDE should develop plans to monitor and address important additional classes of pollutants that threaten human and ecosystem health, such as persistent “forever chemicals” like polyfluoroalkyl substances (PFAS).

5) MDE should require that mitigation measures take place in the same watershed as the one which is impacted by construction, and if possible, in the same sub-watershed. It is best to do mitigations as close to the site of disturbance as possible. If the SHA is allowed to ignore these impacts and do a stream restoration in a completely different area, the stream which is targeted may be less degraded and may not require this intervention. This is not true mitigation, and may compound the damage done.

We hope you will give these recommendations careful consideration, and that this general permit will set a precedent for more effective stormwater control and pollution reduction requirements, not only for our transportation system but for all kinds of development in Maryland.

Sincerely,

Shruti Bhatnagar, Conservation Chair, Sierra Club Maryland Chapter

Marion Edey, Volunteer, Sierra Club Maryland Chapter