



**Chesapeake Bay Program**  
**SCIENTIFIC AND TECHNICAL ADVISORY COMMITTEE**  
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May 26, 2015

RE: Stream Restoration Workshop Report

Nicholas DiPasquale, Chair, Chesapeake Bay Program Management Board  
U.S. Environmental Protection Agency  
410 Severn Avenue, Suite 109  
Annapolis, MD 21403

Cc: Management Board; Habitat Goal Implementation Team; Stream Health Workgroup; Urban Stormwater Workgroup.

Dear Mr. DiPasquale,

Please see the attached STAC workshop report entitled, “Designing Sustainable Stream Restoration Projects within the Chesapeake Bay Watershed.” This report provides a summary of the May 6-7, 2014 workshop recommendations for the development of a function-based process to implement sustainable stream restoration projects. The workshop brought together researchers, federal, state, and local agency representatives, non-governmental organization staff, and practitioners to identify a standard process that can be used by designers, managers, scientists, and permitting agencies to assure stream restoration projects are implemented in a way to add functional lift to the elements of the stream ecosystem. The specific recommendations identified by workshop attendees are listed below.

- Participants stressed the need for stream restoration projects to be part of an overall watershed strategy for the Chesapeake Bay.
- A group, such as the CBP’s Stream Health Workgroup, should adopt the proposed Function-based Stream Restoration Project Process outlined in this report as a starting point to develop a unified process and work with the Partnership to facilitate development of the proposed guidance.
- Participants agreed that a science-based, methodological process is needed to clearly define project goals and objectives that lead to the identification of measurement parameters to evaluate the restoration of stream functions.
- Participants identified areas for which monitoring efforts may enhance stream restoration science and implementation. For example, there is a need to develop a baseline list of critical stream functions and assessment parameters to monitor the effectiveness of

stream restoration to support the programmatic goal of the Chesapeake Bay TMDL, which is the driver for many stream restoration projects in the watershed.

- Participants recommended developing a monitoring consortium or framework that would pool monitoring resources and address key research issues such as critical stream functions, intermediate functional standards, continuum of risk, and at-risk or non-functioning performance standards, among others.
- Monitoring data generated from stream restoration projects should provide the potential to demonstrate restored stream functions. Participants agreed that the existing monitoring needs required by permits were not necessarily sufficiently robust to assess the full breadth of stream functions. It was also acknowledged that permit monitoring requirements are prescribed based on the presence/absence of aquatic resource tradeoffs and may not require monitoring data beyond stream stability. Pooled monitoring to address specific research questions should be pursued.
- It is recommended that the Urban Stormwater Workgroup and Stream Health Workgroup coordinate efforts to develop guidance (e.g., via an expert panel) to align how the restoration/enhancement of stream functions translates to nitrogen, phosphorus, and sediment 'credit'.

Recommendations from the workshop will help generate an understanding and agreement on the major elements of stream functions that will allow stream restoration practitioners, researchers, and the regulatory community to implement sustainable stream restoration projects.

We hope the Management Board, the Goal Implementation Teams and various workgroups find the recommendations of the workshop to be useful, and STAC looks forward to your feedback. STAC respectfully requests a written response to the workshop findings and recommendations from the CBP Management Board Chair by Monday August 26, 2015.

Please direct any questions you may have about this report and its recommendations to Natalie Gardner, the Chesapeake Bay Program's Scientific and Technical Advisory Committee Coordinator, and lead report author Neely Law of the Center for Watershed Protection.

On behalf of the entire STAC, thank you again for considering these recommended next steps, and we look forward to working with you closely on this in the future.

Sincerely,

A handwritten signature in black ink, appearing to read "Kirk Havens", with a long horizontal line extending to the right.

Kirk Havens  
Chair, Chesapeake Bay Program's Scientific and Technical Advisory Committee