



**Chesapeake Bay Program**  
**SCIENTIFIC AND TECHNICAL ADVISORY COMMITTEE**  
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July 6, 2017

RE: STAC Integrating Monitoring Networks 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; Scientific Technical Assessment and Reporting (STAR); Integrated Monitoring Networks Workgroup; Citizens Advisory Committee

Dear Director DiPasquale,

Please see the attached STAC workshop report entitled, “*Integrating and Leveraging Monitoring Networks to Support the Assessment of Outcomes in the Chesapeake Bay Watershed Agreement*”. This report outlines specific recommendations identified by participants at STAC’s April 12-13, 2016 workshop with a summary of the workshop’s proceedings.

The 2014 Chesapeake Bay Watershed Agreement (the ‘Bay Agreement’) contains 10 goals and 31 outcomes that work to expand the work of the Chesapeake Bay Program partnership beyond the Total Maximum Daily Load (TMDL). In order to track our progress and accountability towards achieving Bay Agreement goals and outcomes, the CBP requires diverse and effective monitoring support of relevant indicators. As a result, the main goal of this workshop was to explore the potential opportunities for integrating and leveraging existing monitoring networks to provide consistent data sources. For this workshop, participants focused on a single watershed (the Choptank River, MD) and a subset of 7 of the 31 Agreement outcomes (i.e., oysters, fish habitat, forage fish, submerged aquatic vegetation (SAV), water quality (both in the watershed and tidal waters), stream health, and toxic contaminants). This approach served as a case study to develop strategies that could be applied to other watersheds, and eventually scaled up to the entire Bay.

Workshop participants agreed that creating an integrated network would ideally 1) allow for a compilation of existing monitoring efforts, 2) evaluate opportunities for collaboration among regional partners, and 3) optimize limited resources. Participants also advocated that promoting integrated monitoring networks would help strengthen support for adaptive management (including the use of models and indicators), promote diverse monitoring programs by aligning common objectives, and lead to an assessment of sampling and analytical compatibility between programs collecting data on the same parameters.

Throughout the workshop, participants reached consensus on the following:

- Integrated monitoring strategies that address diverse but interrelated assessments at restoration sites (e.g., Harris Creek Oyster Restoration site) are key to filling gaps in monitoring that support mutually beneficial information needs.
- Several barriers exist that can potentially limit monitoring program integration. The top three barriers recognized by the workshop participants were: 1) misaligned objectives between programs, 2) communication gaps regarding existing work among many regional partners, and 3) limited funding resources.
- Additional capacities identified to support gap filling monitoring needs include federal labs and citizen monitoring.
- Creating successful ‘networks of networks’ hinges on a variety of strategies, including: 1) minimizing differences in monitoring protocols, and 2) identifying time frames needed for trend detection, and spatial scales required.

Overall, the report acknowledges that there is vast potential to expand networks by collaborating with a wide variety of monitoring efforts currently underway across the Chesapeake Bay watershed. Further, the CBP should continue to address barriers to data integration to effectively monitor multiple Bay Agreement outcomes. Participants identified a set of 5 major recommendations for next steps, summarized broadly below:

- 1) Align objectives through a common vision. Prioritize the specific elements important for understanding restoration progress and effectively targeting limited monitoring and management resources.
- 2) Organize strategic consortia to pool and prioritize monitoring funding based on this common vision.
- 3) Synthesize and communicate monitoring results to diverse stakeholders to overcome communication gaps.
- 4) Use existing active monitoring efforts at the tributary and regional scale and support coordination, collaboration, and data sharing among partners. Notably, continue to foster the integration of citizen science and other nontraditional partner data collection activities.
- 5) CBP Workgroups should consider an extended planning horizon when dealing with network integration efforts, starting with meetings of small groups focusing on specific collaborations, then build towards a regional scale collaborative workshop.

We hope the Management Board, Goal Implementation Teams, and various workgroups find these recommendations to be useful, and we look forward to your feedback. STAC respectfully requests a written response to the workshop findings and recommendations from the CBP Management Board Chair by October 6, 2017.

Please direct any questions you may have about this report and its recommendations to Rachel Dixon, Coordinator of the CBP’s Scientific and Technical Advisory Committee, and Peter Tango (USGS), workshop chair and coordinator of STAR.

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 'L. Wainger', with a long horizontal flourish extending to the right.

Lisa Wainger  
Chair, Chesapeake Bay Program's Scientific and Technical Advisory Committee