

Water Quality BMP Reporting Transparency

Watershed Technical Workgroup

August 3, 2023

Olivia Devereux



2 0 1 4

As amended, October 5, 2022

GOALS & OUTCOMES

WATER QUALITY

Restoring the Bay's waters is critical to overall watershed restoration because clean water is the foundation for healthy fisheries, habitats and communities across the region. However excess amounts of nitrogen, phosphorus and sediment in the Bay and its tributaries have caused many sections of the Bay to be listed as "impaired" under the Clean Water Act. The Chesapeake Bay Total Maximum Daily Load (TMDL) is driving nutrient and sediment reductions as described in the Watershed Implementation Plans (WIPs), adopted by the states and the District of Columbia, and establishes the foundation for water quality improvements embodied in this Agreement. These plans set nutrient and sediment reduction targets for various sources—stormwater, agriculture, air deposition, wastewater and septic systems.



GOAL: Reduce pollutants to achieve the water quality necessary to support the aquatic living resources of the Bay and its tributaries and protect human health.

2017 Watershed Implementation Plans (WIP) Outcome



By 2017, have practices and controls in place that are expected to achieve 60 percent of the nutrient and sediment pollution load reductions necessary to achieve applicable water quality standards compared to 2009 levels.

2025 WIP Outcome



By 2025, have all practices and controls installed to achieve the Bay's dissolved oxygen, water clarity/submerged aquatic vegetation and chlorophyll *a* standards as articulated in the Chesapeake Bay TMDL document.

Water Quality Standards Attainment and Monitoring Outcome



Continually improve the capacity to monitor and assess the effects of management actions being undertaken to implement the Bay TMDL and improve water quality. Use the monitoring results to report annually to the public on progress made in attaining established Bay water quality standards and trends in reducing nutrients and sediment in the watershed.

AFFIRMATION

As Chesapeake Bay Program Partners, we recognize the need to accelerate implementation of actions necessary to achieve the Goals and Outcomes outlined herein and realize our shared Vision of a healthy and vibrant Chesapeake Bay watershed.

As Chesapeake Bay Program Partners, we acknowledge that this Agreement is voluntary and subject to the availability of appropriated funds. This Agreement is not a contract or an assistance agreement. We also understand that this Agreement does not pre-empt, supersede or override any other law or regulation applicable to each signatory.

We, the undersigned members of the Chesapeake Executive Council, re-affirm our commitment to support the Goals of this Agreement and to work cooperatively in its implementation. We agree to work both independently and collaboratively toward the Goals and Outcomes of this Agreement and to implement specific Management Strategies to achieve them. Everyone in this great watershed is invited to join with the Partnership, uniting as a region and embracing the actions that will lead to success.

For the Chesapeake Bay Commission



Ronald E. Miller

For the State of Delaware



Jeff Mahoney

For the District of Columbia



Walter C. Gray

For the State of Maryland



Arthur A. Paro

For the Commonwealth of Pennsylvania



Tom Corbett

For the State of New York



Andrew Cuomo

For the Commonwealth of Virginia



Lee R. Hefner

For the State of West Virginia



Earl Ray Tomblin

For the United States of America



John F. Kennedy

on behalf of the Federal Government and the
Federal Leadership Committee for the Chesapeake Bay
U.S. Environmental Protection Agency
U.S. Department of Agriculture
U.S. Department of Commerce
U.S. Department of Defense
U.S. Department of Homeland Security
U.S. Department of the Interior
U.S. Department of Transportation



Chesapeake Bay Program
Science, Restoration, Partnership.

Water Quality Goal Implementation Team Request for Better Transparency in BMP Reports

- Current
 - NEIEN and CAST Success Error Reports
 - CAST BMP Submitted vs. Credited
 - CAST BMP Input Files
- Proposed
 - Simplified NEIEN CAST Success/Error Reports
- Any row with an error cannot go through NEIEN and/or CAST and show up in the BMP submitted vs. credited report

Water Quality BMP Reporting Transparency

Current Report

- ReadMe
- Error Summary
- CAST Land BMP Errors
- CAST Animals BMP Errors
- CAST Manure Transport Errors
- NEIEN BMP Errors
- NEIEN Event Status Errors
- NEIEN BMP Successes
- NEIEN Event Status Successes

Proposed Report

- Read Me
- Error Summary
- Report

Enhanced Error Codes

Worksheet to list and explain error messages

Can also include details for each message to list possible causes and possible solutions

NEIEN BMP
Errors

Possible Causes

Possible Solutions

Error 1

Error 2

Error 3

Error 4

Error 5



Chesapeake Assessment Scenario Tool

➔ LOG IN

HOME NEWS PUBLIC REPORTS LEARNING ABOUT CONTACT US

Search Cast... 🔍

Ecosystem Benefits Browser

RESOURCES

DEVELOP A PLAN

Get answers to your questions about how to use **CAST** to develop a plan.

Develop A Plan

SOURCE DATA

Download data tables including information on load sources and agencies, **BMPs**, animals, geographic references and delivery factors.

View Source Data

BMPS

View information on best management practices (**BMPs**) including calculations, a quick reference guide, and protocol and expert panel reports.

Learn More

MONITORING

View maps and graphs of monitored water quality data.

Learn More

MAPPING TOOLS

View geographical information and shapefiles.

Learn More

COSTS

Download **BMP** costs data and view cost profiles for each state and Chesapeake Bay Watershed.

Learn More

TRACK PROGRESS

View helpful information on verification, river trends, how to submit progress data via **NEIEN**, and modeling Federal facilities.

Track Progress

ECOSYSTEM BENEFITS

Get information about the complementary benefits to **BMP** implementation.

Learn More





Tracking TMDL Progress



The following information is available below:

- [Phase 3 WIP BMP Information](#)
- [Trends Over Time](#)
 - BMPs implemented
 - Loads delivered to the streams and Bay
 - Wastewater
 - Nutrients applied to the land
 - Animal numbers
 - Septic systems
 - Manure Transport
 - Tidal Water Quality Trends
- [Tributary Summaries](#)
- [SAV Reports](#)
- [River Trends](#)
- [Progress Reporting](#)
 - Phase 6 NEIEN Appendix
 - Codes List and Tables
 - NEIEN Submission Instructions
 - Document Exchange Template
 - NEIEN Schema
 - CAST data update frequency
- [Verification](#)
 - Chesapeake Bay Basinwide BMP Verification Framework
 - Jurisdictions' BMP tracking and reporting leads
 - Chesapeake Bay Program Grant Guidance
 - Jurisdictional Quality Assurance Project Plans (QAPPs)
- [Federal Agencies](#)
 - Federal Facility User Guide for Frequently Asked Questions
 - Annual Progress Reporting Templates
 - Milestones



Progress Reporting

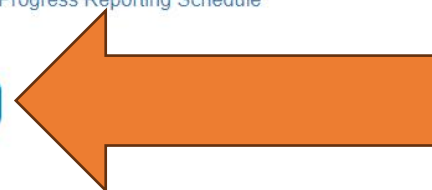
As of December 2010, all BMP information submitted to the Chesapeake Bay Program Office must be in a format compatible with the National Environmental Information Exchange Network (NEIEN) protocols that dictate the use of BMP-specific fields and units. Such information is utilized by CAST for the estimation of nutrient and sediment loads generated by different source areas within the Chesapeake Bay watershed.

National Environmental Information Exchange Network (NEIEN)

BMP information is submitted by the major jurisdictions to the Chesapeake Bay Program Office using NEIEN. NEIEN protocols dictate the use of BMP-specific fields and units. Such information is utilized by CAST for the estimation of nutrient and sediment loads generated by different source areas within the Chesapeake Bay watershed.

- [Phase 6 NEIEN Appendix](#) (includes BMP credit duration)
- [USDA Practices, NEIEN, and CAST BMPs](#)
- [Codes List Tables](#)
- [NEIEN Submission Instructions](#)
- [Document Exchange Template](#)
- [NEIEN Schema](#)
- [CAST Data Update Frequency](#)
- [2023 Progress Reporting Schedule](#)

TMDL Tracking Reports





Chesapeake Assessment Scenario Tool

➔ LOG IN

[HOME](#) [NEWS](#) [PUBLIC REPORTS](#) [LEARNING](#) [ABOUT](#) [CONTACT US](#)

Search Cast... 🔍

Annual Progress Report Submitted Data

Each of the seven major jurisdictions in the Chesapeake Bay submit BMP data to NEIEN using the protocols above. Reports showing the successes and errors of each submission are available for download. These reports include a summary of the number of records that were successful and those with errors. The type of error is listed. Some BMPs require inspection to continue to receive credit toward Bay TMDL load reductions. The reports show which records included valid inspection dates within the required time period and the status of the inspection (pass/fail). The reports also show the amount of BMPs that would be credited if all of the BMP inspections were within the required time period and valid. Data that is marked as an error is not included in CAST. To view the most raw form of the BMP data in the annual progress scenarios, download the BMP Input Files from CAST.

- [Delaware](#)
- [District of Columbia](#)
- [Maryland](#)
- [New York](#)
- [Pennsylvania](#)
- [Virginia](#)
- [West Virginia](#)

Questions

- Other reports?
 - GRTS?

