



STUDENT OUTCOME [STEWARDSHIP GIT/EDUCATION WORKGROUP]

2014 WATERSHED AGREEMENT: GOAL & OUTCOME LANGUAGE

STUDENT OUTCOME: Continually increase students' age-appropriate understanding of the watershed through participation in teacher-supported, meaningful watershed educational experiences (MWEEs) and rigorous, inquiry-based instruction, with a target of at least one meaningful watershed educational experience in elementary, middle and high school depending on available resources.

ENVIRONMENTAL LITERACY GOAL: Enable every student in the region to graduate with the knowledge and skills to act responsibly to protect and restore their local watershed.

OUTCOME DISPOSITION ADVICE TO MANAGEMENT BOARD:

UPDATE

Recommendation:

Update to ensure that the outcome is SMART and reflects the current needs and priorities of state and federal agencies and other formal and nonformal education partners in the region. Specific recommendations for this outcome are as follows:

1. Identify and track inquiry-based environmental education experiences in addition to MWEEs to better understand and build upon their valuable contributions to environmental literacy.
2. Create a new indicator to track the percentage of the student population who are receiving MWEEs during the K-12 experience to better align the indicator with the outcome.
3. Identify measurable and realistic targets based on review of Environmental Literacy Indicator Tool (ELIT) data from 2015-2024 and conversations with state leaders.

Draft outcome language recommended by the Education Workgroup is as follows:

Continually increase the number of students who are participating in inquiry-based environmental literacy instruction. By 2035, XX% of the student population will be enrolled in a school district that offers a curriculum-embedded MWEE, with a target of at least one MWEE each in elementary, middle, and high school.

Environmentally Literate Population is Essential to Meet Clean Water and Living Resource Goals

Ensuring that all students across the watershed receive high-quality environmental education and meaningful outdoor experiences is crucial to fostering environmentally literate future generations. These individuals will develop the knowledge and skills necessary to think critically and act responsibly to protect and restore their local watershed. Environmental education underlies all outcomes of the 2014 Watershed Agreement and future agreement.

Regional support for environmental education through the Student Outcome is key to achieving the Chesapeake Executive Council's goal of **engaging all communities** as active stewards of a healthy and resilient Chesapeake Bay. Continuing to work with schools, teachers, and local partners around inquiry-based education supports Recommendation 2 from the People Small Group, "Ensure the priorities of the Chesapeake Bay Program (CBP) partnership reflect the needs of people and the impacts of a changing environment at the most local level." Environmental education, environmental literacy, and workforce development are spheres of work that help the Bay Program tangibly engage and serve the public while creating co-benefits with water quality, living resources, and other critical goals.

Bay Program Adds Significant Value to Environmental Literacy Efforts Across Jurisdictions

The MWEE has existed since 1998 and has a strong network of support throughout the region. Under NOAA's leadership and with significant investment from the Chesapeake Bay Trust, the Education Workgroup facilitates regional coordination, state network support, and knowledge-sharing, which has

accelerated progress toward improving environmental literacy through collaboration and cross-boundary information sharing among state leaders. In addition, the NOAA Bay Watershed Education & Training (B-WET) Program provides critical support for environmental literacy efforts in the region, specific to MWEEs. Recognizing the value of the MWEE, State partners provide critical funding and have recently increased state and local capacity building efforts to help achieve the Student Outcome:

- [Maryland Department of Natural Resources](#) grants use Chesapeake Bay Implementation Grant (CBIG) and Aquatic Resources Education (ARE) funds to support MWEEs and other inquiry based learning about the environment. The Chesapeake Bay Trust also supports Maryland school districts through its [Environmental Education Grant Program](#).
- In Pennsylvania, five percent of all pollution fines and penalties collected annually by the Department of Environmental Protection are set aside for the [Pennsylvania Environmental Education Grants Program](#), which supports MWEEs.
- Virginia Department of Conservation's [Virginia Watershed Educational Programs Project](#) uses state appropriated dollars to support MWEE and related environmental education grants for schools and their partners.
- The [West Virginia Chesapeake Bay Tributary Team](#) uses CBIG grant funds to support MWEEs in the eight county school systems in the watershed.

High Level of Support for Updated Outcomes Across the Agreement's Jurisdictions

In the summer of 2024, the Education Workgroup held twelve listening sessions with a total of 156 participants and distributed an asynchronous feedback form, which received 56 responses, to collect community input on progress toward the Environmental Literacy Goal, and community aspirations for the future of environmental literacy in the region. In addition, in December 2024 the Workgroup received 35 responses to Outcome Assessment questions asked by the Stewardship Goal Team. These findings were discussed with state agency representatives from DC, DE, MD, PA, and VA as well as the Mid-Atlantic Environmental Literacy Network Advisory Team (NAT), to ensure that the proposed outcome revisions aligned with state priorities. The community engagement process revealed broad support for keeping the Student Outcome with SMART revisions, and highlighted the following:

- The need for numerical targets to assess progress towards the Student Outcome.
- There are substantial state-led efforts to advance MWEEs that point to the Student Outcome as inspiration.
- The need for better recognition and measurement of environmental education experiences that have value for students but do not meet the high bar of expectations outlined in the framework for a complete Meaningful Watershed Educational Experience (MWEE).
- Funding and capacity remain key challenges for environmental education.

Continued Focus on Student Outcome is Needed to Maintain State and Local Momentum

The education community was significantly impacted by the COVID-19 pandemic, as reflected in our 2022 ELIT data. These findings led the Education Workgroup to designate the Student Outcome as "off track" during the 2022 indicator assessment (see [Chesapeake Progress](#)). However, preliminary results from the 2024 ELIT data show progress is back on track, with promising upward trends in school districts that have paired year-to-year data. Additionally, the Regional Outdoor Learning Network is gaining momentum, offering timely support for accelerating progress. Pennsylvania has the greatest potential to expedite progress towards the Student Outcome in particular as the state's [STEELS Standards](#) are fully implemented in 2026.

References:

- Maryland Department of Natural Resources – [Environmental Education Funding](#)
- Chesapeake Bay Trust – [Environmental Education Grant Program](#)
- Pennsylvania Department of Environmental Protection – [Environmental Education Grants](#)
- Virginia Department of Conservation and Recreation – Environmental Education Funding Opportunities – [Virginia Watershed Educational Programs Project](#)
- West Virginia Department of Environmental Protection – [West Virginia Chesapeake Bay Tributary Team](#)
- Chesapeake Progress – Engaged Communities, Environmental Literacy, [Student Outcome](#)
- Pennsylvania’s Science, Technology & Engineering, Environmental Literacy & Sustainability [\(STEELS\) Standards](#)