



ENVIRONMENTAL LITERACY POLICY & METRICS, MAY 2022

Outcome: Each participating Bay jurisdiction should develop a comprehensive and systemic approach to environmental literacy for all students in the region that includes policies, practices and voluntary metrics that support the environmental literacy Goals and Outcomes of this Agreement.

Management Approach 1: Support school district efforts to embed locally appropriate environmental practices, content, and learning opportunities into curriculum and operations.

Management Approach 2: Ensure the strategic and equitable delivery of environmental literacy programming.

Management Approach 3: Ensure broad understanding at the state and regional level of the progress, gaps, and opportunities related to the Environmental Literacy Goal.

ABSTRACT: Coming out of COVID it is unclear what the status of the environmental literacy policy and metrics outcome is. Over the past two years, there has been considerable work done to create a solid foundation at each of the states to build and support a strong, intentional network and a set of materials and best practices that can aid school district efforts to create equitable, sustainable, and systemic environmental literacy programs. However, school districts have many competing priorities and this list has become considerably longer due to learning loss, food insecurity, and other issues related to the pandemic. Over the past two years, each state has put in place supports to advance this work, including new standards of learning, training programs, guidance documents, and related staffing. If we are motivated and strategic, this can provide a solid foundation for the next generation of this work.

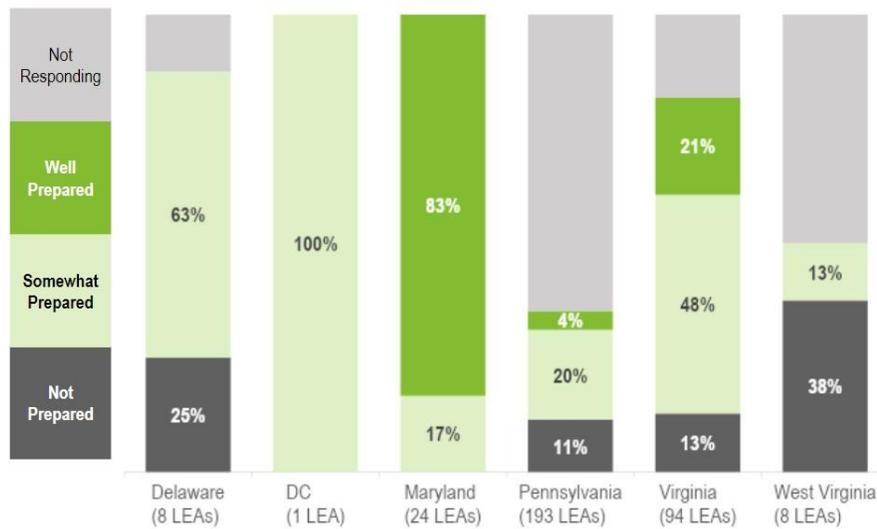
1. Are we, as a partnership, making progress at a rate that is necessary to achieve this outcome?

Our indicator for this outcome looks at school district preparedness to implement environmental literacy programs. As we are all aware, education was disrupted in unprecedented ways during the 2019-2020 and 2020-2021 school years. While the 2021-2022 school year has been more normal, some districts are experiencing ongoing challenges related to COVID, such as addressing student learning loss, providing safe learning environments during outbreaks, and helping to mitigate food insecurity. Coming out of COVID, it is our understanding that many of the structures that support environmental literacy generally stayed intact, including maintaining state working groups and the return to operations for most environmental education providers, however, at the district and school building level many programs were halted or disrupted. This was uneven across districts. While the hope was that there would be the opportunity for districts to focus on planning while schools were not in session,

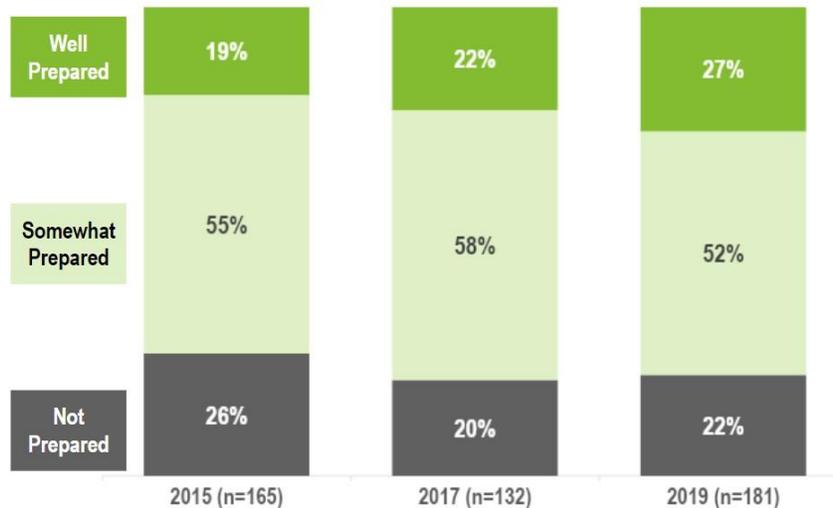
the reality was that COVID meant that administrators faced not only huge logistical challenges, but also burnout at all levels of the system.

It is unclear where we are with this outcome. Because of the enormous strain COVID placed on the educational system, the administration of the Environmental Literacy Indicator Tool (ELIT) survey was postponed from Summer 2021 until Summer 2022. The survey is being administered in partnership with the state departments of education from May-October 2022 with results expected this Winter. The last data collection and analysis was conducted in pre-COVID for the 2018-2019 school year.

Environmental Literacy Preparedness: By State of LEAs within Chesapeake Bay Watershed (2019)



Environmental Literacy Preparedness (2015 - 2019)



2. Looking back over the last two or more years, describe any scientific, fiscal, and policy-related developments that impacted your progress or may influence your work over the next two years. Have these resulted in revised needs (*e.g.*, less, more) to achieve the outcome?

Funding: NOAA B-WET is the largest funder for this work in the region. The program was included in the President's Budget in FY22 for the first time in the 20 year program history. The program also included a priority that supports school district efforts to build capacity to develop and implement environmental literacy programming, in addition to funding for program implementation. Having a reliable source of federal funding to support planning could encourage more school districts to work towards systemic and sustainable environmental literacy programming.

In addition, school districts received large grants to support COVID response. While this was initially seen as a huge opportunity to advance outdoor environmental education as a safe place to learn, it was largely unrealized except in some notable exceptions like [Queen Anne's county](#). In fact, based in part on the influx of funding that needed to be spent, partners have expressed that school districts were harder to recruit into environmental education grant programs, and many of these programs experienced a drop off in applications.

State Efforts: Because formal education is largely a state and local endeavor, tracking the enabling conditions at the state level is as important as tracking the regional and national conditions:

Delaware

Through a NOAA B-WET award, the Delaware Association for Environmental Education (DAEE) is working to localize the MWEE facilitator's guide for their state. The group will use this and other resources to pilot the development of school district literacy plans and EE lessons, and will then share this learning and process with other districts across the state. Delaware was also the first state to pilot NGSX: Oceans, Climate Science and Big Data, which focuses on watersheds and the ocean showing a strong commitment to climate education.

Delaware is a national leader in Career and Technology Education. To better connect this work to the environmental literacy effort in the state, partners are creating a community of practice committee that is composed of many businesses, government organizations, community stakeholders and nonprofit organizations. This committee is working towards building capacity and identifying the resources that can be made available for schools and communities in Delaware. This group will help create a shared understanding of the environmental literacy goals of the watershed agreement. They will help with networking, resources, and training with the piloting schools/districts.

Finally, showing their commitment to strong youth leaders, students from around the state participated and planned the third annual Delaware Youth Environmental Summit in April.

District of Columbia

The District of Columbia updated its state environmental literacy plan in 2020 and formed the Environmental Literacy Advisory Committee. Composed of representatives from eight District agencies, the committee meets monthly to discuss strategies to strengthen and amplify efforts and resources across the District so that students, schools, and families have access to opportunities that foster a thriving culture of health and environmental literacy. The DC Environmental Education Consortium,

the state network of community providers, is in a period of transition. The group hopes to reconvene in the near future.

Funding opportunities related to environmental literacy have included grants to facilitate environmental and watershed educational experiences on school grounds. Schools have also been encouraged to use recovery funding for facilities improvements to create outdoor learning and classroom spaces. To support state-level recognition of sustainable schools, the District piloted Capital LEAF (Leaders in Environmental Actions for our Future), a program to help schools monitor progress on their school-based sustainability initiatives and actions, and serves as a pathway for schools to become nominated for the US Department of Education's Green Ribbon School recognition.

The District began revising its social studies standards in 2021. The new standards will include knowledge framing around environmental literacy, to be woven into the study of history, economics, geography, and civics. The standards should ensure students develop skills to investigate the causes and consequences of society's impact on the environment and resolve challenges related to equitable access to natural resources. In early 2022, DC Public Schools began revising the scope and sequence for its high school environmental science course, to include local contexts of study, and plans to begin implementation next school year.

Maryland

In 2020 the State Board of Education approved and updated the Environmental Literacy COMAR. There are now 5 Standards that are independent of the Next Generation Science Standards (NGSS) that guide school district work. These standards are closely aligned with elements of the MWEE. An instructional framework is under development to support the Environmental Literacy Standards.

In addition, in 2019 the legislature passed the Maryland Green Schools Act. This program was established to increase the number of green schools in the State to 50%. Funding began July 2020 and has been used to support Professional Development, Transportation related to access to nature, and Green Schools programs at schools all with a strong emphasis on diversity, equity, and inclusion.

The state has also focused on higher education with Project Green Classrooms receiving a grant to support professional learning for university professors charged with teacher preparation to increase their environmental literacy knowledge, to then in turn develop programs and learning for preservice teachers in their courses.

Pennsylvania

The Pennsylvania Environmental Literacy Task Force (funded by NOAA B-WET) draws together key partners towards the environmental literacy goal of the watershed agreement, and has been hugely influential in providing an intentional support network, resources, and trainings to move this work forward. In addition, Pennsylvania completed the new Pennsylvania Integrated Standards for Science, Environment, Ecology, Technology and Engineering, which will influence the curriculum and programming developed by local school districts. These new standards included elements of the Meaningful Watershed Educational Experience and could serve to significantly shift the momentum in the state towards achieving the environmental literacy outcomes of the Agreement for the 500 districts in the Commonwealth. The Department of Environmental Protection grants saw an increase during the reporting period to \$632,897 and awarded funds to 63 projects, of which 92% are conducting work in environmental justice areas.

Virginia

Two new Environmental Literacy Coordinator positions are proposed in the state budget to work within the Department of Conservation and Recreation. These positions would lead the effort to create a state environmental literacy strategy that better connects formal and nonformal education which has remained a gap since the closing of the Environmental Education Office in 2015. In addition, for the first time ever, the Virginia Association of Environmental Education (VAEE) was able to hire a part-time Executive Director to oversee their work to meet their mission.

Virginia's two major state networks focused on environmental education, the VAEE and the Virginia Resource-Use Education Council (VRUEC), both underwent strategic planning processes over the past two years to refine both their missions and the strategies they use to advance their work. Both organizations are placing an emphasis on shared communication about the value of environmental literacy, advocating for environmental literacy, and developing and/or reinvigorating intra-state regional networks. In large part related to the Mid-Atlantic Environmental Education Network initiative, these state networks are identifying how they can work better together towards these mutual goals.

3. Based on the red/yellow/green analysis of the actions described in your logic and action plan, summarize what you have learned over the past two years of implementation.

What Worked:

- **Resources Tailored to State Priorities:** States have been working to create and disseminate similar sets of materials to support school district efforts to develop and implement K-12 environmental literacy programs with MWEEs and Sustainable Schools at their core. These resources include a state-specific template for district level environmental literacy plans (DC, PA, and VA) or the Facilitator's Guide for MWEE trainers (MD, PA, and VA).
- **Mid-Atlantic Environmental Education Network:** Through a project started with GIT funding with continued support from the Pisces Foundation NOAA B-WET, and the Chesapeake Bay Trust, the Education Workgroup has been working with Local Concepts to build a Mid-Atlantic Environmental Education Network that pulls in new voices and complements the work of the Chesapeake Bay Program. The biggest shift in this work from previous efforts has been the centering of the state networks as essential hubs with their own distinct priorities, partners, and conditions.
- **Outdoor Learning Network Initiative (OLNI):** Working with the Chesapeake Bay Foundation, the Pisces Foundation, Chesapeake Bay Trust, and NOAA have piloted an effort to develop local networks in underserved communities that include school district(s), environmental education providers, and local community groups. The first two areas were funded in the Lancaster area of Pennsylvania and the watershed portion of West Virginia. A new urban cohort just began in Hampton Roads Virginia and Baltimore City. Related, the partners are supporting a pilot training series with non-profit partners who serve as "network weavers" in the states to ground truth the early learning and create materials to share with the broader community.
- **Leadership Summit:** The biennial Chesapeake Bay Environmental Literacy Leadership Summit allows education leaders from around the watershed to share environmental literacy planning successes and challenges from their respective states. The 2021 Summit focused on the

dual themes of increasing climate education and ensuring equity in environmental education. At the conclusion of the Summit, states discussed the actions that they intended to take to advance this work, including participating in the Outdoor Learning Network Initiative for West Virginia, engaging Intermediate Units in the training for school districts in Pennsylvania, training preservice teachers in Maryland, and supporting teachers in using new and enhanced outdoor learning spaces during COVID. One key to success has been having a PSC-level state partner work with the Chesapeake Bay Program to host the event; this ensures alignment with state priorities.

What Didn't Work (yet!):

- **Figuring Out Sustainable Funding Model:** A big challenge for this effort is how to fund the ongoing implementation of the programs once they are established. One path forward involves attracting local funders who are interested in providing sustainable funding. To this end, the Education Workgroup worked with the Chesapeake Bay Funders Network to host a follow-up to the Leadership Summit specifically for funders, which was lightly attended. There is one funder from this group who is exploring providing sustainable funding, but this would need to be significantly ramped up to be a viable source of funding for districts.
 - **Collecting and Distributing Examples:** Providing a series of examples that draw from existing programs remains an identified gap. While several states and the regional group identified this as a need for the past two years, existing capacity went towards the establishments of templates and other resources.
4. Based on what you have learned through this process and any new developments or considerations described in response to question #2, how will your work change over the next two years? If we need to accelerate progress towards achieving our outcome, what steps are needed and, in particular, what specific actions or needs are beyond the ability of your group to meet and, therefore, you need the assistance of the Management Board to achieve?

How will our work change? In order to advance progress toward the Planning Outcome, our regional professional community needs to:

- Provide technical assistance and support to strengthen and diversify state environmental literacy networks to connect to related efforts and lift up new voices.
- Recognize and support promising state initiatives to accelerate the development of district level environmental literacy plans.
- Assess the impact of COVID-19 through the administration of the 2022 ELIT survey, and distribute the information to state partners.
- Engage state department of education leaders to encourage school districts to respond to the Environmental Literacy Indicator Tool (ELIT) survey in 2022.
- Determine the funding requirements for MWEE implementation in each state, and work with federal and state partners on a strategy to address the gap.
- Continue Leadership Summits and articulate specific followup actions to elevate environmental literacy and share best practices and lessons learned across jurisdictions.

What specific actions do we need from the Management Board? To advance progress toward

the Environmental Literacy Goal, Management Board and high level education leadership assistance is needed for the following:

Overarching Need: Establish environment-focused pathways in both Career Technical Education (CTE) and STEM for each state to produce workforce ready graduates.
Specific actions to address need:
<ol style="list-style-type: none">1. Management Board Members: If you choose, nominate staff from the jurisdiction you represent to participate in a conversation around diversifying the environmental workforce through youth programs (high school/first jobs/college), including exploring intentional pathways involving CTE/STEM. Send us names by May 26th.2. Management Board Members: Establish an Action Team at the Chesapeake Bay Program to focus on Workforce pathways (Education Workgroup, Diversity Workgroup, STAC, others).

Overarching Need: Sustainable funding to implement systemic environmental literacy programming in each school district.
Specific actions to address need:
Department of Education representatives/Management Board Members: We need to understand the cost required to implement and sustain systemic MWEEs in your state. CBP could assist by providing the sample survey we have prepared and/or hiring a contractor to interview district reps. Would like numbers by the end of the calendar year.
<ol style="list-style-type: none">1. By the next Management Board meeting, we are seeking a “yes” or “no” from each state as to whether they will provide a number by the end of the calendar year and what assistance they need.

Overarching Need: Up-to-date data and information from every school district in the watershed on their efforts to create and sustain EL programming.
Specific actions to address need:
<ol style="list-style-type: none">1. Department of Education representatives: Send the Environmental Literacy Indicator Tool (ELIT) survey to district superintendents and content supervisors for each of the school districts in your states.

Overarching Need: Maintain high level focus and coordination of state cabinet members and partners on Environmental Literacy Goal.
Specific actions to address need:
It is Maryland’s opportunity to host the 2023 Environmental Literacy Summit. PSC is the co-host of the event with Education Workgroup.

1. Seeking agreement from Maryland PSC representative to co-host, and staff level contact(s) to begin planning in Fall.

5. What steps are you taking, or do you recommend, to ensure your actions and work will be equitably distributed and focused in geographic areas and communities that have been underserved in the past?

We are working with the Chesapeake Bay Program data team to ensure an accurate and up-to-date set of information is available in the Chesapeake Bay Program Diversity Dashboard. We are then working with state and federal funding partners to encourage the use of this and other data-driven tools to identify priority geographies that have been underserved in the past, and are prioritizing the funding of these geographies through intentional language in our requests for proposals. As noted above, we are also expanding our understanding of promising practices to better serve underserved districts by supporting the Outdoor Learning Network Initiative (OLNI) and a related training program. Finally, through our network development work, we are working with state networks to identify and draw in new partners with more diverse representation and perspectives. This often involves the exploration of shared priorities to ensure that there is a value proposition for the new partner(s) that make them excited to participate.