

# ADVANCING ENVIRONMENTAL LITERACY

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## WHY IT MATTERS

Virginia's environmental challenges require future generations to be knowledgeable about conservation strategies and environmental issues. According to the Virginia Department of Education's (VDOE) website, "Environmental Literacy is having the knowledge, skills, and dispositions to solve problems and resolve issues individually and collectively that sustain ecological, economic, and social stability." Environmental literacy is more than simply understanding our natural environment; it is a necessary structure for a healthy community.<sup>1</sup>

Environmental education plays a crucial role in student achievement across the curriculum. Studies show that students benefit in critical and creative thinking, collaboration, communication, and citizenship. VDOE's website states, "Environmental Education allows students to strengthen their critical thinking and creative thinking skills as they work to solve environmental problems. They achieve positive environmental changes through collaboration and communication within their communities, all of which strengthens a student's sense of citizenship."

## CURRENT LANDSCAPE

Virginia's environmental literacy is primarily advanced through the Virginia Standards of Learning concepts and community partnerships with the schools. VDOE mandates that schools include environmental education through the science standards and encourages interdisciplinary approaches to environmental education. There are some state initiatives, such as the Virginia Naturally Schools program, which recognizes schools that are implementing environmental education programs. The Virginia Environmental Literacy Plan (VELP) is a cornerstone document. It provides a framework for integrating environmental education into the K-12 curriculum, emphasizing hands-on, outdoor learning experiences.

However, many school districts in Virginia lack access to necessary curriculum resources, funding, and professional development opportunities. Under-resourced schools often struggle to provide students with effective environmental education programs, including meaningful watershed education experiences (MWEEs), which allow students to gain a deeper understanding of the challenges facing their local watersheds.<sup>2</sup>

Funding for these initiatives comes from a mix of private, state, and federal sources. The Department of Conservation and Recreation (DCR) manages the Virginia Watershed Educational Program grant fund. For FY25, this fund awarded \$250,000 to 12 schools, school divisions, and community partner groups. This fund is woefully inadequate to support the needs of Virginia; DCR reported receiving over \$1M in funding requests. Other sources of funding come from federal government grant programs, such as the U.S. EPA Environmental Education Local Grants Program and NOAA B-WET grants. VDOE also facilitates a support fund that pays for approved professional development activities for teachers.

Despite these efforts, several barriers impede the full realization of environmental literacy in Virginia. Limited funding and resources at the local school level can restrict the implementation of comprehensive environmental education programs. Additionally, variability in teacher training and preparedness to deliver environmental education content can affect program effectiveness. Logistical challenges, such as arranging outdoor learning experiences and field trips, further complicate environmental education integration. Lastly, competing educational priorities and standardized testing pressures can limit the time and attention devoted to environmental literacy.

## OPPORTUNITIES

Increasing access to funding and training can lead to a more engaged and environmentally literate community, contributing to the well-being of Virginia's natural resources and residents. Increased and sustained funding is crucial to supporting environmental literacy programs.

Through the Chesapeake Bay Agreement, Virginia has committed to providing students across Virginia a MWEE three times during their schooling. It costs roughly \$50/student to provide this quality educational program. The total state funding directly allocated to MWEEs is currently at \$250,000 per year, which is far below nearby states, such as Maryland, Pennsylvania, and Delaware. Virginia should allocate at least \$2M for this effort (\$1M in each year of the biennium). This long-term strategy is necessary to remain competitive and provide Virginians with a high-quality education.

To increase funding and the resources that are needed to ensure all students have an opportunity to experience hands-on learning through MWEEs and other environmental education programs, we recommend that Virginia:

- Increase the DCR Virginia Watershed Education Program Fund from \$250K to \$1M annually
- Expand the scope of the DCR Virginia Watershed Education Program Fund to be statewide, and include additional allowable environmental education activities beyond MWEEs.
- Support a full-time coordinator for the Virginia Environmental Literacy Network to ensure state agency collaboration with community partners and schools.

## TOP TAKEAWAYS

Environmental Education allows students to strengthen their critical thinking, creative thinking, communication, and collaboration skills as they work to solve environmental problems – all of which strengthen a student's sense of citizenship.

Virginia's students need to be prepared to tackle the environmental challenges that lie ahead of them.

Additional funding will increase the quality and quantity of environmental education programming, creating a more environmentally literate community.