Nick DiPasquale, Chair
Chesapeake Bay Program Management Board
U.S. Environmental Protection Agency
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Annapolis, Maryland 21403
Sent via e-mail to: agreement@chesapeakebay.net

Dear Mr. DiPasquale:

The Education work plans, under the Engaged Communities goal, represent important opportunities to restore and eventually maintain the health of the Bay system. The Virginia No Child Left Inside (VNCLI) Coalition applauds the work done to coordinate and to increase Environmental Literacy in the following three outcomes: Students, Sustainable Schools and Environmental Literacy Planning.

Unfortunately, many of the Education work plans are not comprehensive. This may stem from the approach of mostly listing those actions that are already being undertaken and thus already have resources committed. In order to achieve increased citizen engagement and pollution reduction, new actions and more actions will need to be undertaken. The collective outcome of the work plan does not appear to get us closer to a stable system. This may be in large part due to the fact that the goals are stated in language that does not provide clear objectives (e.g. “continually increase”) and that the two-year and long term targets have not been identified. Strong two year and long term targets should be established that will ultimately lead to accomplishing the goals.

To make these goals reality, the strategies need to include the efforts of non-governmental organizations and institutions of higher learning to show broad support for, current efforts in, and aspirational efforts for new environmental literacy initiatives. This can encourage broader engagement and inclusion in the process to ultimately meet the goals of the Bay Agreement.

The goals need clear objectives with strong two year and long-term targets. “Continuing” and “maintaining” current programs will not get Virginia environmental education to where it needs to be. VNCLI celebrates the Department of Education’s new programs and activities proposed (and instated), but hopes that these do not get lost in the weeds of “as time and funding allow.”

For these goals to be effective, language encouraging student stewardship needs to be explicit in the Virginia Standards of Learning.
In light of this crucial moment of opportunity, the VNCLI Coalition offers the following recommendations to the Chesapeake Bay Program, Goal Implementation Team 5 to make the work plans stronger and to ultimately ensure the success of these goals throughout the state.

The following recommendations speak to one specific management approach within the three outcomes, and are organized by outcome and approach.

**Students Outcome**

Management Approach 1: Virginia should identify particular subjects/courses where students will receive MWEEs or require LEA’s to identify those courses and grade levels at each grade band and report them to the Virginia Department of Education. If LEAs need further assistance in planning, training or implementation in order to carry this out, this should be identified as well.

Management Approach 1: Virginia should provide requirements/incentives for selected in-service teachers to participate in professional development in environmental literacy.

Management Approach 1: Revise teacher education **recertification** programs to include outdoor field experience competency for all elementary, middle, and high school science teachers.

Management Approach 1&2: CBP should produce guidelines of what constitutes effective/comprehensive teacher professional learning in delivering MWEEs.

Management Approach 2: Chesapeake Bay Foundation and The Blandy Experimental Farm and State Arboretum will provide administrator training in VA

Management Approach 2: Examples of a MWEE and all of its components (preparation, action, reflection) should be provided to teachers, administrators and LEA’s.

Management Approach 2: Virginia's Department of Environmental Quality has offered to connect schools looking for field-based learning experiences for students with state agencies and local non-formal providers, as time allows, but the logistics of this implementation should be more clearly defined. This is an example of where a cohesive statewide plan will create much benefit. Many organizations offer field-based learning experiences, and many organizations have some resources available. There should be one central source for ALL such resources. There are some pieces of this on Virginia's Department of Conservation and Recreation’s Office of Environmental Education’s Virginia Naturally website, but VNCLI recommends that it be more comprehensive and easier to navigate.

Management Approach 3: Virginia should identify an environmental literacy point of contact from each LEA.

Management Approach 4: The annual Environmental Educator conference should include targeted PD for EE certification.

Management Approach 5: The Virginia Department of Education should identify/assign a full time environmental literacy coordinator to liaison with LEA’s and natural resource agencies and other stakeholders.

Management Approach 5: Virginia Science Education Leadership Association (VSELA) should be included in the statewide organizations offering feedback to potentially revise the Science SOL’s.
Management Approach 5: Virginia Department of Conservation and Recreation’s (VDCR’s) VA Natural Resources Guide is currently being updated and should be included with “Your Backyard Classroom” curriculum (also meets ELP1)

Management Approach 5: Conservation Challenge investigations are SOL aligned.

Management Approach 5: Developing a series of 5E system science (The 5Es represent five stages of a sequence for teaching and learning: Engage, Explore, Explain, Extend (or Elaborate), and Evaluate) modules to support the teaching of middle school STEM standards and should focus on watershed SYSTEM science and the connections among the 4 earth systems (biosphere, hydrosphere, geosphere atmosphere) and the interactions within the context of a watershed.

Management Approach 5: Convene a regional conversation about alignment of MWEEs and all state’s standards – NGSS or individual state’s standards.

Management Approach 5: CBF and other members of the VNCLI Coalition including the The Blandy Experimental Farm and State Arboretum and Mary Baldwin College can assist with the integration of MWEES with state standards through the provision of models and guidance documents.

Management Approach 6: This should include many more programs, such as 4-H programs and 21st Century Community Learning Centers.

Sustainable Schools Outcome

Management Approach 1: Virginia Department of Education should issue an annual report of sustainable schools by district.

Management Approach 1: List the agency responsible for updating the Guidelines for School Facilities to incorporate sustainable building practices

Management Approach 1: Schoolyard Habitat Improvement may better fit under Virginia Department of Conservation and Recreation’s Natural Heritage Program, rather than Virginia Department of Game and Inland Fisheries.

Management Approach 1: Virginia Superintendent should recognize all schools that achieve sustainable schools status on an annual basis.

Management Approach 1: Coordinate all sustainable school certification programs across the state.

Management Approach 2: List the agency responsible for gathering resources from successful school district experts, stakeholders and state/federal agencies to disseminate to other schools/districts.

Management Approach 2: List the agency responsible for maintaining Virginia Sustainable School Webpage.

Management Approach 3: Virginia should build a network of community partners to support the achievement of sustainable school status similar to MAEOE Green Centers in Maryland.

Management Approach 3: Virginia should build a strategy/capacity to engage PTAs and school building level administrators.
Management Approach 5: Disseminate models for utilizing Federal Education funds to support Environmental Education (MSP/ESSA “well-rounded education”).

**Environmental Literacy Planning Outcome**

Management Approach 1: Virginia's Department of Education should identify/assign a full time environmental literacy coordinator to liaison with LEA’s and natural resource agencies and other stakeholders.

Management Approach 1: List the agency responsible for coordinating nongovernmental organization contribution to meeting the goal of student Environmental Literacy.

Management Approach 1: CBP should disseminate successful environmental literacy integration models regionally.

Management Approach 1: Virginia's Department of Education should regularly require that all districts submit an environmental literacy plan/report.

Management Approach 1: Virginia should publish basic guidelines and models for school system (LEA) level environmental literacy plans.

Management Approach 2: Revise SOL’s to include Environmental Literacy language specifically in the subjects of science, social studies, health and physical education.

Management Approach 3: Develop ELIT performance standards and anticipated outcomes to assess progress toward student Environmental Literacy.

Management Approach 4: Utilize various non-governmental organizations with a statewide membership.

Management Approach 5: Disseminate models for utilizing Federal Education funds to support EE (MSP/ESSA well-rounded education).

VNCLI members stand ready to work with state partners to ensure that these work plans are the recipe for an engaged community, an Environmentally Literate citizenry, and a restored Bay. Thank you for considering these suggestions. Please contact Elysa Mills at emills@cbf.org with any questions.

Sincerely,

Members of the Virginia No Child Left Inside Coalition and Partners

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cc: The Honorable Molly Ward, Virginia Secretary of Natural Resources
Dr. Steven R. Staples, Superintendent of Public Instruction