**Virginia Environmental Literacy Update**

**June, 2019**

**State Working Group Update: Virginia Resource Use Education Council (VRUEC)**

VRUEC is a collaborative effort between state agencies with the goal of providing guidance and support for the instruction of environmental concepts. The council is currently revising their strategic plan with the goal of providing more extensive support for both formal and non-formal educators throughout the Commonwealth. Professional development will be provided to all non-formal educators by the Virginia Department of Education in collaboration with non-formal educators at the September VRUEC meeting.

**NAAEE Affiliate Update: Virginia Association for Environmental Education (VAEE)**

VAEE executive council continues to plan the 2020 VAEE Conference to be held Feb. 26-28 at Sweet Briar College. This conference provides formal and nonformal educators the opportunity to collaborate and attend professional learning opportunities to inform educators on best practices in environmental literacy education. As an NAAEE Affiliate members of the Board attended 4 day training in Asilomar, CA last year and will attend a 5 day training this year. These trainings focus on best practices in EE.

**Standards of Learning/Curriculum: 2018 Science Standards of Learning Curriculum Frameworks**

Environmental concepts are integrated at every grade level in the newly adopted 2018 Virginia Standards of Learning. The supporting Curriculum Framework includes student performance expectations, including classroom and field opportunities, to reflect mastery of environmental conceptual knowledge and Science and Engineering Practices.

**State Efforts to Support Environmental Literacy**

**I. Board of Education’s Seal for Excellence in Science and the Environment**

The Board of Education’s Seal for Excellence in Science and the Environment is awarded to students who enter the ninth grade for the first time in the 2018-2019 year and thereafter, and meet each of the following criteria:

* Earn either a Standard or Advanced Studies Diploma
* Complete at least three different first-level board-approved laboratory science courses and at least one rigorous advanced-level or postsecondary-level laboratory science course, each with a grade of “B” or higher
* Complete laboratory or field-science research and present that research in a formal, juried setting
* Complete at least 50 hours of voluntary participation in community service or extracurricular activities that involve the application of science such as environmental monitoring, protection, management, or restoration.

**II. Environmental Science Repository**

In order to support the implementation of the Environmental Science course and to provide resources to both formal and non-formal educators, VDOE has constructed an environmental science repository. We currently have 400 educators that have registered in the Environmental Science Repository.

**III. Environmental Science Professional Development**

**A. NOAA Bay Watershed Education & Training (B-WET) Grant**The NOAA funded Environmental Literacy Cohort is drawing to a close. The BWET professional development (PD) was designed to support teachers in the integration of field investigations and in building students’ environmental literacy. In addition, webinars have been offered to all participants in the BWET grant. Cohort members are expected to view a minimum of four of the seven provided webinars as part of the expectations of this sustained professional learning program. Webinar topics include:

* Designing and Implementing an Environmental Literacy Plan
* Introduction to MWEES
* The What and How of Action Projects
* Oyster Habitats
* Field Equipment on the Cheap
* Funding MWEEs: Grant Writing 101
* Conducting Macro-Invertebrate Studies

Once the cohort training is complete, these webinars will be made available to all teachers in the Commonwealth through the VDOE website and through the environmental science repository. A concluding PD opportunity will be held in Richmond at the Lewis Ginter Botanical Gardens on July 8 & 9, 2019.

**B. Environmental Science Course Support**

Professional learning opportunities will be provided to teachers and science leaders across the Commonwealth in order to support the high school Environmental Science course. Response to these opportunities has been high; five sessions are planned to include sessions in Hampton, Charles City, Martinsville, Charlottesville, and Fairfax. These sessions are being funded using federal funds for professional development.

**IV. State Programs**

1. **Virginia Naturally Schools Recognition Program** will be recognizing schools for its 20th year this fall. The program recognized 58 schools in the 2014-2015 school year and 68 in 2017-2018 school year.  The program is coordinated and sponsored by the Virginia Department of Game and Inland Fisheries*.*
2. **Project Learning Tree** currently has 163 schools in Virginia who have completed the requirements to become a certified PLT GreenSchool.
3. **Virginia Natural Resource Agencies** continue to provide science based professional development for teachers on natural resource concepts and management.  Professional development workshops include Backyard Classrooms, Project Learning Tree, Project WILD and Project WET.  Resource agencies interact with families, students and teachers throughout the year in a variety of events and programs.

**Current Challenges**

* Equity: How do we reach all teachers and students of environmental science to ensure they have a strong foundation in environmental literacy instruction as well as to prepare informed citizens?
* New Science Standards: How does Environmental Science instruction maintain a significant focus in divisions as other priorities, such as the revised science standards, exist?

**Goals and Opportunities**

* To provide more equitable teacher professional development on environmental science and conducting Meaning Watershed Experiences through using alternative methodologies when delivery training.
* To include an environmental focus through intentionally building environmental based lessons and activities to support the 2018 Science Standards.

For questions or concerns, please contact Anne Petersen (anne.petersen@doe.virginia.gov).