### Virginia's Environmental Literacy Plan & Updates



### Virginia's Environmental Literacy Project

- Currently using the Business Plan for Environmental Education in the Commonwealth of Virginia (VBPEE) – developed and implemented in 2003
- Through the Virginia Resource Use Education Council (VRUEC), have identified a workgroup to evaluate the current plan and to assess the needs for the "next generation" Environmental Literacy Plan
  - The development timeline will be proposed by this group.



### Overall Implementation of the VBPEE

- The Virginia Department Conservation and Recreation (VDCR) Office of Environmental Education has been the coordinating agency for implementation of the VBPEE
- The designated principal providers for EE in VA are:
  - K-12 Schools (Virginia Department of Education)
  - Colleges and Universities (Virginia State Council of Higher Education)
  - Community-based Programs (Virginia Department of Conservation and Recreation)

### Overall Implementation of the VBPEE

 The Virginia Resource-Use Education Council (VRUEC) is the interagency group to support and implement the VBPEE.

#### VRUEC

- Celebrated 60 years of active service this year
- The membership includes:
  - Virginia's state and federal natural resource agencies
  - Virginia's education agencies
  - Virginia's colleges of education and resource management
  - Education and environmental NGOs

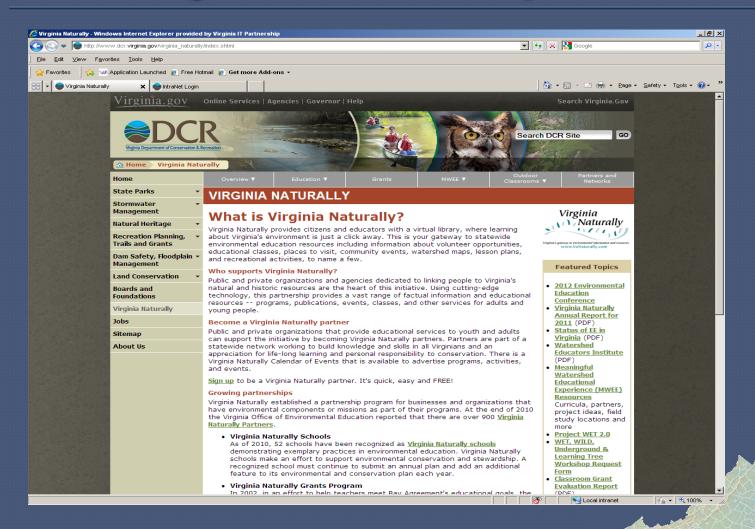
### Focus of Current VBPEE K-12

- Meaningful Watershed Education Experiences (MWEE)
  - Every student in Virginia will experience a minimum of one MWEE in elementary school, one in middle school, and one in high school.
  - Participation in MWEE is tracked by the VDOE annually through a survey.
- Outdoor classroom development and use
  - Supported by VRUEC member organizations, particularly the Virginia Department of Game and Inland Fisheries (VDGIF)

### Overall Implementation of the VBPEE

- Virginia Naturally Website
  - Clearinghouse for environmental education resources including information about:
    - volunteer opportunities
    - educational classes
    - places to visit
    - community events
    - watershed maps
    - · lesson plans
    - recreational activities
  - Maintained by the Virginia Office of Environmental Education

### Virginia Naturally Website



- Virginia's Standard of Learning (SOL)
  - Purposefully have environmental education content embedded from K-12
  - The SOL are build in Learning Progressions from K-12
  - The science SOL are assessed in
    - 3<sup>rd</sup> grade
    - 5<sup>th</sup> grade
    - 8th grade
    - End of Course for Earth Science, Biology, and Chemistry

- Virginia Naturally Schools
  - Annual application process
  - Schools apply to become a Virginia Naturally School
  - Recognition for school efforts in environmental education, and supporting environmental conservation and stewardship
  - Currently are 48 schools in Virginia who were recognized in 2011 (some have been recognized yearly for 12 years!)
  - 2012 schools will be named shortly

- Virginia Chesapeake Bay Academies
  - Made possible through a National Oceanic and Atmospheric Administration (NOAA) Bay Watershed Education and Training (B-WET) grant
  - Conducted by VRUEC partners
  - Six academies offered in the summer 2012 for 100 6-12 grade science teachers
  - All academies were close to or at capacity



- Virginia Science Standards Institutes (VSSI)
  - Sponsored through a VDOE Math Science
     Partnership grant with Longwood University
  - Two week-long summer institutes conducted for K-3 teachers and administrators school/division teams
  - Conducted by VRUEC partners
  - 57 participants



- The United States Department of Education Green Ribbon Schools Award Program (USED GRS)
  - Lead state agency is the VDOE in partnership with VRUEC
  - Participated in 2011-2012
    - Had 10 Virginia schools apply
    - Selected three schools to be submitted to the national competition
    - Had two Virginia schools selected as national awardees
  - Are participating in 2012-2013

- Proposed program with the Virginia Association of Elementary School Principals (VAESP)
  - Conduct a day-long conference session at the VAESP annual conference on MWEE, outdoor classrooms, and the cross-curricular connections with the SOL
  - Support the principals' schools during the 2013-14 school year to set up outdoor classrooms and conduct MWEE
  - Will be conducted by VRUEC partners

# Sampling of Current VBPEE College and University Programs

- Longwood University
  - Developed the Center for Excellence in Environmental Education (CE<sup>3</sup>) on their campus and at Hull Springs Farm located on the Chesapeake Bay
  - Will be used by Longwood for
    - student education
    - K-12 teachers and students
    - community action groups
  - VRUEC members part of the advisory group

# Sampling of Current VBPEE College and University Programs

- Mary Baldwin College
  - Environmental Studies for teachers
  - College is an active VRUEC partner
- Lynchburg College Claytor Nature Center
  - Offers environmental education courses and field study location for Lynchburg College students
  - Offers environmental education experiences for the local K-12 community
  - College is an active VRUEC partner

# Sampling of Current VBPEE College and University Programs

#### • University of Richmond

- The Sustainability and Nature Institute for Educators in the School of Professional and Continuing Studies
- Focuses on the development of outdoor classrooms and their use
- University has applied for membership in the VRUEC

#### Virginia Tech

- Multiple majors offered through the College of Natural Resources and Environment
- University is an active VRUEC member



# Sampling of Current VBPEE Community Programs

#### Watershed Education Institutes

- Funded by NOAA
- Nine one-day classes for non-formal educators
- At the completion of the institutes, participants receive certification
- Managed by VDEQ
- Conducted by VRUEC partners

#### Environmental Education Leadership Program

- Cultivate a corps of highly qualified non-formal environmental educators
- At the completion of each level, participants receive recognition certificate
- Managed by the Office of Environmental Education



### Status of implementation of the business plan

- Community-based Programs
  - Status:
    - VA Master Naturalists' program established
    - EE regional teams established and are functioning within their communities
    - Watershed education institutes
    - Community habitat program established



# Sampling of Current VBPEE Community Programs

- The 21st Century Community Learning Centers (Title IV, Part B) program
  - Opportunities for academic enrichment during non-school hours, particularly students who attend high-poverty and low-performing schools.
  - VRUEC presented one day of concurrent sessions at the annual conference, highlighting resources and partnerships available



### Strengths of Virginia's Environmental Education

- Alignment of programs to state goals
- Close partnerships between state agencies, private providers, colleges and universities, and Virginia's public education
- Have a strong Office of Environmental Education as a statewide clearinghouse



### Challenges for Virginia's Environmental Education

- Change (made by the Virginia General Assembly) of the location and leadership of the Office of Environmental Education
  - Formally housed and led by the Virginia
     Department of Environmental Quality (VDEQ)
  - As of July 1, 2012, the office and new leadership is part of the Virginia Department of Conservation and Recreation (VDCR)



### Challenges for Virginia's Environmental Education

- Access to funding to support local, regional, and state projects
- Assessment of Environmental Literacy
  - Environmental education SOL are assessed yearly, but the assessment is of content knowledge
  - Need to develop assessments of actual environmental literacy

### Challenges for Virginia's Environmental Education

- Development of a Virginia Environmental Literacy plan
  - Creation of the plan
  - Buy-in by education community before legislation
  - Implementation funds



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