# **SUMMIT SUMMARY**



#### **Overview of the 2015 Summit**

The ninth biennial Mid-Atlantic Environmental Literacy Summit was convened by the NOAA Chesapeake Bay Office and the Chesapeake Bay Trust to support the work of the Chesapeake Bay Program Education Workgroup. The Environmental Literacy Summit provides federal, state, and regional partners with a forum for policy-level discussions and strategic planning to support efforts to ensure that elementary and secondary students in the region graduate with the knowledge and skills to make informed environmental decisions. The focus of the 2015 summit was on "Creating Sustainable Schools" by showcasing innovative approaches to reduce the operational costs and environmental impacts of schools. The theme of this summit was drawn from 2014 Chesapeake Bay Watershed Agreement which committed watershed states along with federal government partners to: "Continually increase the number of schools in the region that reduce the impact of their buildings and grounds on their local watershed, environment, and human health through best practices, including student-led protection and restoration projects." A day-long work session took place the following day with a sub-set of Summit attendees. The purpose of this meeting was to refine Chesapeake Bay Program Sustainable Schools work plan and discuss capacity building project using recommendations from Environmental Literacy Summit

<u>Please refer to webinar recording and presentations available on the education workgroup webpage for more detailed information on Day One presentations</u>

## **9:00 OPENING SESSION** (webinar time)

- Peyton Robertson, NOAA Chesapeake Bay Office (0:08)
- Jeff Corbin, U.S. Environmental Protection Agency (0:22)
- Jennifer Seydel, Green Schools National Network (0:40)

In his opening remarks, Peyton Robertson discussed the overarching purpose of the Workgroup convening Summits, the goal of the 2015 summit, and how the Chesapeake Bay Program defines a sustainable school. Peyton then introduced the two other opening session speakers, Jeff Corbin and Jennifer Seydel. Jeff Corbin spoke to the importance of sustainable schools in solving the plight of the Chesapeake Bay. Jennifer Seydel focused her remarks on the needs and challenges in reaching the goal of sustainable schools. She talked about how we will need to teach children how to live in a world with a changing climate, and create effective learning environments that take into account the health and wellbeing of students. She emphasized that we must also teach students to embrace their role as members of the whole earth community.

#### 10:00 BREAK

#### 10:30 PANEL: Best Management Practices (webinar time)

- Water Quality: Ellen Schultz, Philadelphia Water Department (Pennsylvania) (1:16)
  A video of the revitalized schoolyard at Albert Greenfield Elementary School was presented as a case study for managing stormwater on an urban school sites. Other examples of Philadelphia schools which turned paved playgrounds into green and sustainable play areas in school yards were given, followed by a description of the Fairmount Water Works efforts in classrooms as a part of their Understanding the Urban Watershed Curriculum.
- Energy: Vicki Fenwick-Judy, Wyoming County Public Schools (West Virginia) (1:41)
   West Virginia Sustainable Schools is a program of the West Virginia Department of the Environment with a focus on energy upgrades and behavioral changes. Participating Schools in Wyoming County have more

than 40% low income students located in the southern coalfields or West Virginia. Since 2004 Wyoming County Schools have conserved 94,358 metric tons of  $CO_2$  and \$3,300,000 in energy cost, through lighting upgrades, energy upgrades and behavioral changes, and teacher NEED training. Eight schools out of 14 schools in Wyoming County achieved Energy Star recognition.

- Waste: Maggie Dangerfield, Charleston County Public Schools (South Carolina) (1:58)
  Charleston County Public Schools set out to develop a recycling program that made economic and educational sense through right sizing, and redirecting their cash flow. The program was successful due to the partnership built between teachers, students, and cafeteria staff. The food waste diversion program was largely Student driven, with student taking responsibility with sorting and collected data on food waste. The project resulted in move the 2.4 million pounds of food waste diversion to date The data collected by students is also used in the classroom to meet state and common core standards.
- Schoolyard Habitat: Marya Fowler, Austin Independent School District (Texas) (2:19)

  Austin Independent School District is the 35<sup>th</sup> largest school district in the U.S., comprised of 86,000 students, of which 74% are minorities and 61% are economically disadvantaged. The school district was experiencing low science academic achievement, and decided to tackle this issue by institutionalizing outdoor learning and making learning relevant and meaningful to student lives. Students were taught science concepts through school yard habitat projects, which led to better student behavior management and provided opportunities to practice collaborative learning.

#### **LUNCH**

#### 1:00 AFTERNOON SESSION (Auditorium)

**REFLECTIONS FROM U.S. GREEN RIBBON SCHOOLS PROGRAM**, Andrea Falken, U.S. Department of Education Andrea Falken addressed the group and vocalized the importance of sustainable schools and the great work being done in the Mid-Atlantic.

# **PANEL: Putting the Pieces Together (webinar time)**

Representatives from high performing school districts, including U.S. Department of Education Green Ribbon Schools District Sustainability awardees, shared programmatic highlights, cost savings, and lessons learned.

- Tim Cole, Virginia Beach City Public Schools Virginia (2:56)

  Virginia Beach City Public Schools is composed of 69,000 students, and manages 10.6 million square feet of building space in the 36<sup>th</sup> largest metropolitan area in the country. VBCPS has three goals related to sustainability; develop a sustainable building infrastructure, integrate sustainable practices throughout the school division, and educate the public about the importance of sustainability. Through the combined efforts of a sustainable schools committee (comprised of representatives from departments throughout the division including school Plant, custodial, purchasing, technology, transportation, and smart growth and building staff) VBCPS has created 1.6 million square feet of LEED building space, implemented an Emission Reduction Plan Policy 3-67, created 62 outdoor teaching gardens, 63 environmental clubs, and has received 37 regional and national awards.
- Sean Gallagher, Montgomery County Public Schools (Maryland) (3:13)

  Montgomery County Public Schools is composed of 156,455 students and growing at a rate of 2,500 per year. MCPS developed an Environmental Sustainability Management Plan that focuses on 6 different sustainability areas: Education and Awareness, Resource Conservation/Utilities, Solid Waste and Recycling, Construction and Land Use, Transportation, Technology. To achieve the goals set forth in the Plan, MCPS partnered with Education and Awareness organizations, Maryland Association of Environmental and Outdoor Education (MAEOE), and Outdoor Environmental Education Programs (OEEP). Some of the outcomes of these partnerships included edible and perennial gardens, reforestation projects, MCPS environmental literacy plan, conservation classroom activities, and professional development. MCPS also

developed a School Energy and Recycling Team Program (SERT), implemented Energy Retrofit initiatives, installed Smart Meters and solar roofing.

• Ghita Carroll, Boulder Valley School District (Colorado) (3:26)

Boulder Valley School District is comprised of 55 schools and 4.1 million square feet of operation. BVSD is committed to becoming a leader in environmental sustainability by creating healthy learning environments while providing students with the skills to address the systemic challenges faced by the world in this century. To reach this goal BVSD implemented a Sustainability Management System (SMS) to coordinate sustainability efforts district wide. The SMS focuses on four main areas Buildings (new constructions and renovations), Materials (sustainable purchasing), Transportation (buses and community transportation), and Education (green teams, education standard, health) using this plan SMS was able to significantly reduce its energy use intensity, meeting their 5 year target early. Working towards this goal was a system wide effort including custodial, educational, and food services staff as well as students.

#### **2:30 LISTENING SESSIONS** (no webinar recording)

Listening sessions were held to solicit recommendations from attendees for strategies and actions that CBP partners can take to increase and advance sustainable school efforts. These sessions were organized in a "world café" style with multiple tables and 5-6 people at each. Individuals moved to other tables after 15 minutes of discussion, with one facilitator remaining to share results of the prior group with newcomers. The guiding questions and key takeaways are below.

## For full flip chart notes

Student Engagement (Instructional Room West 161)

Facilitator: Eric Rhoades, Virginia Department of Education Guiding questions:

- 1. What were the take aways from today's presenters and what other questions do you have?
- 2. What does meaningful student engagement in sustainable schools efforts look like and how is that impact measured?
- 3. How do you know when student engagement is successful? What is needed to increase the likelihood of more/continued success?
- 4. How could state/federal agencies assist with the needs/recommendations that surfaced from the discussion of the previous questions?

Take aways from discussion:

- Keep Solutions Local Different things could be good for one district and not another ex. rural, suburban, and urban; student involvement/learning
- Keep Teacher Resources Accessible Online toolkit
- Necessary to have top level support- Have data to sell it and tie to things like new curricula
- Know the Stakeholders that you Need in the Room Know their characteristics not just affiliations, we want people with good perspectives and attitude and a broad reach
- Culture Change- Can't just be projects
- Increase Diversity- Include the whole community
- Partnerships
- Leverage the Savings from efficiency- means that it doesn't take a lot of money
- Facilities Management (Instructional Room West 160)

Facilitator: Kim Martinez, National Wildlife Federation

#### **Guiding Questions**

- 1. What were the take aways from today's presenters and what other questions do you have?
- 2. What are some examples of highly effective partnerships supporting sustainable schools (students and/or buildings, and/or environment)?
- 3. What does successful implementation of sustainable practices look like, and what's needed to achieve success?
- 4. How could state/federal agencies assist with the needs/recommendations that surfaced from the discussion of the previous questions?

## Take aways from discussion:

- Constant Change- Lots of changes constantly underway across school systems work with the system on sustainability changes/actions
- Focus on building the right team, even if it starts with one bold person!
- Gather data and metrics to measure impact
- Ownership- Everyone within the system (students to admin) need to own the effort
- Package & Provide Resources Have existing resourced been packaged as a "kit" that could be provided to schools to enable their sustainability actions?
- Environmental Management (Instructional Room West 158)

Facilitator: Karen Mullin, Maryland Association for Environmental and Outdoor Education Guiding Questions

- 1. What were the take away's from today's presenters and what other questions do you have?
- 2. What do successful best management practices at schools look like? How do you know when environmental management is successful?
- 3. What is needed to increase the likelihood of more/continued success?
- 4. How could state/federal agencies assist with the needs/recommendations that surfaced from the discussion of the previous questions?

Take aways from discussion

- Funding for coordinators- some sustainability coordinators have to self fund their positions
- Reach Non-traditional Audiences- need to reach the outside of the choir and communicate with them in a non-threatening way
- Bring all the players to the table as equals- all facets of school sustainability- Facilities, curriculum, students, nutrition, parents and administration should be at the same table with the same voice in regards to school sustainability
- More communication and outreach on Cost Savings- Cost savings is impressive, why aren't more schools doing this?

# 4:30 DISCUSSION SESSION (Auditorium)

The group convened and shared major takeways

5:00 ADJOURN

# Chesapeake Bay Program A Watershed Partnership

# **WORK SESSION\***

November 10, 2015

National Conservation Training Center, Shepherdstown, WV

**Purpose:** Refine Chesapeake Bay Program Sustainable Schools work plan and discuss capacity building project using recommendations from Environmental Literacy Summit

**8:30 WELCOME** (Instructional Room West 161)

## 8:45 REGIONAL SCHOOL GROUNDS FOR LEARNING PROJECT, Laura Collard, MAEOE

School Grounds for Learning is an initiative funded by NOAA-BWET and supported by a partnership between the U.S. Fish & Wildlife Service and MAEOE, in cooperation with MSDE and MD DNR, with the support of national and regional partner organizations and topical experts. This project will provide professional development opportunities and comprehensive online instructional resources to enable students, teachers, administrators & school facilities personnel to effectively plan, utilize, and sustain a variety of environmental projects on school grounds: Projects includeingprovide habitat for wildlife, supporting a healthy school environment, reducing environmental impact and cost, improving water quality, incorporating natural elements to encourage outdoor learning and discovery, and whole site planning.

## 9:00 REPORT FROM CHESAPEAKE BAY PROGRAM EDUCATION WORKGROUP

- Review of Management Strategy and Work Plans, Shannon Sprague, NOAA
- Preliminary Results from Environmental Literacy Indicator Tool, Jamie Baxter, Chesapeake Bay Trust

The group reviewed the finalized the <u>management strategy</u> and draft <u>sustainable schools workplan</u>. Then the group discussed preliminary results from the ELIT indicator tool data and its future uses.

#### 9:30 WHAT WE HEARD DURING LISTENING SESSIONS

Facilitators: Eric Rhoades, Virginia Department of Education; Kim Martinez, National Wildlife Federation; Karen Kelly Mullin, MAEOE

An in depth discussion of previous day's session was held. For full flip chart notes

#### 10:30 STATE REVIEW OF WORK PLANS

Participants broke out among states to refine Chesapeake Bay Program Work Plan based on input from Summit

- Delaware (Instructional Room West 158)
- District of Columbia (Instructional Room West 160)
- Maryland (Instructional Room West 161)
- Pennsylvania (Instructional Room West 158)
- Virginia (Instructional Room West 160)
- West Virginia (Instructional Room West 161)

## **11:30** HIGHLIGHTS FROM STATE WORK PLANS (Instructional Room West 161)

Facilitators: Kevin Schabow, NOAA and Lorna Rosenburg, EPA Group review and comment on morning discussions of work plans

The group reconvened after breakouts and shared highlights of their discussion, including recent jurisdictional accomplishments as well as near and long-term actions to advance sustainable schools. Discussion points and high level actions for each jurisdiction included:

#### Pennsylvania:

- Focus on establishing and supporting the Green and Healthy Schools Partnership
- Partnership is formalizing partnership with National Wildlife to use the Eco-Schools program as a framework for helping schools achieve U.S. Department of Education Green Ribbon School status
- Consider pursuing a "green cleaning law" which would build upon the current Maryland law. Green school stakeholders from the two states have been in communication about this, and an action about this coordination will be added to the workplan

## Maryland

- Develop a state level definition of sustainable schools with corresponding measurable goals
- Encourage a state-wide policy to have LEAs develop sustainable school plans. The first step towards this is to convenes a superintendents meeting focused on sustainable schools
- Develop a "Chemical Cleanout program" similar to Pennsylvania that includes a training program for facilities staff. Collaborate with representatives from PA conducting similar trainings.

#### Delaware

• Identified actions from other states that could have applicability to DE with an action to follow up with applicable state reps to learn how those actions could be modeled in DE

## District of Columbia

- Conduct an annual meeting with healthy youth and schools commission
- Continue developing a green and healthy schools certification process
- Explore collaborations with university partners

#### West Virginia

• Continuing promoting U.S. Department of Education Green Ribbon Schools

## Virginia

- Add more details to performance targets to green schools in the work plan and create a guidance document for facilities personnel
- Update playgrounds and outdoor learning publication based on current standards and research, and explore how the publication can coordinate with Schools Grounds for Learning project.
- Work with EPA Region 3 staff o supplement resources on the VA resource website

#### 12:00 LUNCH

# 1:00 REGIONAL REVIEW (Instructional Room West 161)

Facilitator: Shannon Sprague, NOAA

Group discussion to create and refine regional strategies for Chesapeake Bay Program Work Plan

The group identified several actions that could be taken to support the development and implementation of the work plans, including:

- Identifying and (as needed) facilitating conversations among "thought partners" across states to collaborate on similar projects or among people with similar roles
- Continuing to look for opportunities to work with 3rd party sustainable schools certification partners to build out a continuum of opportunities for schools to pursue
- Collaborating on state level guides for schools that outline policies, programs, and strategies for sustainable schools based on current standards and research
- Sharing and exchanging models of sustainable schools, program, and policies within and across states
- Developing a regional level plan for the health component of sustainable schools and exploring the opportunity for building this out on the School Ground for Learning website
- Replicating this type of sustainable schools meeting in each state on an ongoing basis
- Advocating for youth leadership on state and regional workgroups

The group also discussed ideas on what types of projects should be considered for capacity building funds. Idea included:

- Mentorship programs for school systems
- Convening meetings for superintendents / state leadership
- Sustainable schools "kits"
- Menu of options for states to choose from to advance the projects that they need
- Student Leadership programs
- Exploring opportunities for collaboration across Chesapeake Bay Program Goal Implementation Teams

#### 2:30 NEXT STEPS

## 3:00 ADJOURN

\*Work Session was intended for a small group of individuals to apply what they learned in the Summit to state work plans