Education Workgroup Meeting Minutes

November 10, 2016 from noon-2:30PM
Suite 305, EPA Conference Room
410 Severn Avenue
Annapolis, MD 21403

All slides from our presenters can be accessed on the Chesapeake Bay Program Calendar at: http://www.chesapeakebay.net/calendar/event/24530

12:00 PM Welcome and Introductions
Shannon Sprague, Chair

Goals and Outcomes of the Education Workgroup

The Environmental Literacy Goal is one of four outcomes put in place under the 2014 Chesapeake Bay Watershed Agreement. The Education Workgroup is a component of the Fostering Chesapeake Stewardship Goal Implementation Team (GIT 5) and helps students in the region to graduate with the knowledge and skills to act responsibly to protect and restore their local watershed. The Workgroup is an intersection between state, federal, non-profit, and academic institutions and contains 3 objectives:

1. **Student Outcome**- Continually increase students' age-appropriate understanding of the watershed through participation in teacher-supported, meaningful watershed educational experiences (MWEEs) and rigorous, inquiry-based instruction, with a target of at least one MWEE in elementary, middle and high school depending on available resources.
2. **Sustainable Schools Outcome**- 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.
3. **Environmental Literacy Planning Outcome**- Each participating Bay jurisdiction should develop a comprehensive and systemic approach to environmental literacy for all students in the region that includes policies, practices, and voluntary metrics that support the environmental literacy Goals and Outcomes of this Agreement.

12:10 PM Stormwater on Schoolgrounds Project
Kevin Schabow, NOAA

Background and Funding of the Project

This Chesapeake Bay Program funded project will support the use of stormwater best management practices (BMPs) for teaching on schoolgrounds. The project enables teachers to incorporate stormwater BMPS into their curriculum and promote these BMPs to their administrators. It will be a tool for schools, with existing projects and those schools looking to implement new projects. The project will focus on urban and suburban schools and will

be funded up to $70,000. The funding will be made available early 2017, with the project wrapping up by March 2018. The work will be done by a partner via funds the Bay Program provided to the Chesapeake Bay Trust.

Project Products and Outputs

Resources developed through the Stormwater on School Grounds Project will be housed on baybackpack.com. The website will contain video case studies and a "how-to guide" targeting teachers and their administrators. The exact nature of these trainings and videos will be determined in the coming months.

Connection to Other Workgroups and Resources

The education workgroup will consult with the Diversity Workgroup about the development of this resource to ensure it meets the needs of the urban communities it intends to serve. In addition, existing resources that could inform the project include: Project WET, Healthy Water and Healthy People, and Aquatic WILD curriculum guides.

12:30 PM School Grounds for Learning (SG4L)
Julie Dieguez, Karen Kelly Mullin

Background and Funding of the Project

School Grounds for Learning is a project funded by NOAA-BWET. The project targets the "How-to" component of the MWEE under the 2014 Chesapeake Bay Watershed Agreement and is a two part program that offers comprehensive online resources and trainings with comprehensive DIY Instructions.

Online Resources

School Grounds for Learning will be housed on both maeoe.org and baybackpack.com and will be accessible spring, 2017. Chesapeake Exploration is an additional resource for educators and contains online trainings regarding environmental literacy tests, school yard habitats, etc.—the website allows participants to re-take quizzes until they have mastered their desired subject(s).

Featured Outcomes

There are intended ecological, health, and educational benefits that will result from implementing the project:

- Increase in habitat for wildlife-woodlands, wetlands, invasive species, etc.
- Improvements in water quality
- Healthier school environments, eg., better air quality
- Conservation of resources
- Outdoor learning and discovery
- A resource and training center with case studies

*MAEOE is launching an Energy and Air Quality Program as a pre-learning piece before participants attend trainings—15 hours of content time must be completed under MSDE standards.

12:50 PM Environmental Literacy Indicator Tool (ELIT)
Shannon Sprague, NOAA

Background

A survey was distributed to 800 school districts in the watershed to assess the degree of preparedness to provide environmental education, the extent to which MWEE is provided to students in k-12, and the number of sustainable schools and capacity to support them. More supporting documentation can be found on the *Environmental Literacy Indicator Tool Final Report*: http://www.chesapeakebay.net/channel_files/21540/final_report_for_cbt-noaa_sept_29_2014_(2).pdf

Featured Outcomes

The survey response rate was high for DC, MD, and VA. Based on responses, elementary schools in DC and MD have system wide MWEEs in place, whereas other states are still building or have no evidence in program development. Additional observations pulled from the survey suggest that MWEEs in high schools are science-focused and that MD has the greatest number of green schools in the watershed.

Indicators
Laura Free, EPA

Background

Indicators assess progress towards goals set under the 2014 Chesapeake Bay Watershed Agreement. Updates are based on data availability and are managed by the Indicators Coordinator, Web Content Specialist, and Workgroup Chair or Coordinator.

The following outcomes support the Environmental Literacy Goal:

Sustainable Schools Outcome

Outcome: To continually increase the number of schools in the region that reduces its carbon footprint on buildings and grounds

Indicator: The number of certified sustainable elementary, middle, and high schools in the watershed, tracked by jurisdiction (we are interested seeing how this number changes over time)

Environmental Literacy Planning Outcome

Outcome: Each participating Bay jurisdiction should develop a comprehensive and systematic approach to environmental literacy for all students in the region

Indicator: The percentage of prepared local education agencies

Student Outcome

Outcome: To increase students' age-appropriate understanding of the watershed through teacher-supported MWEEs

Indicator: The number of students that receive MWEEs and number of local education agencies that provide MWEEs

1:10 PM MWEE How to Guide
Amy Green, Erin O'Neal

Background

The purpose of having a Guide to Creating Meaningful Watershed Experiences is to provide information and resources that will enable educators to engage students in meaningful Bay or stream outdoor experiences. A meaningful Bay or stream outdoor experience consists of at least three parts: inquiry-based field investigations; classroom based-research and standards-based activities; and a student action designed and implemented to reduce pollution and improve water quality in the Chesapeake Bay and its watershed. The Guide is being developed to provide curriculum guide support. The How-to Guide will be completed in January and given to practitioners for further review. This would primarily function as a living resource on Bay Backpack and on print.

Each MWEE should adhere to the Environmental Literacy Model (ELM). ELM is a product of the MD Environmental Literacy Partnership (MELP) which uses field-based investigations and civic actions to meet curriculum goals. After the investigation is over, a claim must be developed; a solution and attributing action must be implemented and then evaluated. The product must be sustainable.

- Next actions to developing a sustainable product are to support, connect, educate ourselves as well as others, and fund.

*The How-To Guide for School Grounds for Learning and curriculum actions from the How to Guide for MWEEs are both available together on Bay Backpack.

Featured Outcomes

A showcase will be developed to display successful and sustainable MWEEs and the many ways they can come to life in different environmental and academic settings. The Chesapeake Bay Program and MAEOE will present work as well as hold online resources for educators. Moving forward, developing a brand name for MWEEs could help to further promote the project across the region.

Provide additional comments to Erin O'Neal via email at cbfoneal@gmail.com

2:15-2:30 PM Closing Comments and Adjourn

- The Education Workgroup will convene twice a year. The next meeting will be held July 13, 2017 from 9:30 AM-noon and January 11, 2018 9:30 AM-noon.

- Other upcoming events: MAEOE Conference Feb 2nd-4th

Attendees
Cindy Etgen- MD DNR
Donna Balado- MSDE
Shannon Sprague-NOAA
Tara Baker- CBT
Kevin Schabow- NOAA
Drew Pizzala- CRC Fellow
Bill Portlock- CBF
Laura Free- EPA
David Christopher- National Aquarium Inc.
Suzanne Cox- US Forest Service
Barbara McGuiness- US Forest Service
Tom Ackerman- CBF
Bart Merrick- NOAA
Christen Miller-
Sarah Nuss- VIMS
Holly Shields- National Wildlife Federation
Page Hutchinson- VA Project Learning Tree
Chris Kemmerer- PA DCNR
Suzie Gilley- VA Department of Game and Inland Fisheries
Ann Devine- PA DEP
Coreen Weilminster- CBNERR-MD
Chris Petrone- Delaware Sea Grant/University of Delaware
Laura Collard- MAEOE
Erin O'Neal- CBF
Amy Green- CBF
Josh Montanari- NPS
Karen Mullin- Willow Oak Group, LLC
Julie Dieguez- School Grounds for Learning
Anne Peterson- VA Dept. of Education
Eric Rhodes-VA Dept. of Education
Betsy Ukeritis- NYS DEC