

## **Attachment 2: Environmental Literacy Indicator Tool Survey**

This is a voluntary survey.

### **Paperwork Reduction Act Statement**

Public reporting burden for this collection of information is estimated to average 90 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other suggestions for reducing this burden to Shannon Sprague, NOAA Chesapeake Bay Office, 410 Severn Avenue, Suite 207, Annapolis, MD 21403.

Responses are voluntary, but are not confidential. Information will be treated in accordance with the Freedom of Information Act (5 USC 552).

Notwithstanding any other provision of the law, no person is required to respond to, nor shall any person be subject to a penalty for failure to comply with, a collection of information subject to the requirements of the Paperwork Reduction Act, unless that collection of information displays a currently valid OMB Control Number.

### **Important Tips before You Begin the ELIT**

- We recommend that you preview the Environmental Literacy Indicator Tool (ELIT) before completing it online. Download a Word version of the survey at this link: [Environmental Literacy Indicator Tool](#).
- We recommend you first make note of your responses within this “offline” document, including consulting with colleagues, as needed, to answer the questions accurately.
- Use this online survey to enter and submit your responses. If you’ve typed answers into Word, you can copy-and-paste into the online survey.
- We recommend that you enter the answers online during one sitting. Due to security settings on some computers, your system may not retain previously entered responses between two different sessions.

## Introduction

The purpose of the Chesapeake Bay Program's Environmental Literacy Indicator Tool (ELIT) is to help local and state schools systems collect important information that will help advance the implementation of environmental education efforts in schools in the mid-Atlantic region.

This tool, the data collected, and related efforts supporting environmental education in the region are in direct support of the Environmental Literacy Goal and Outcomes of the new Chesapeake Bay Watershed Agreement (signed 6/19/14).

**Environmental Literacy Goal:** Enable every student in the region to graduate with the knowledge and skills to act responsibly to protect and restore their local watershed.

**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.

**Student Outcome:** Continually increase students' age-appropriate understanding of the watershed through participation in teacher-supported, meaningful watershed educational experiences and rigorous, inquiry-based instruction, with a target of at least one meaningful watershed educational experience in elementary, middle and high school depending on available resources.

**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.

The underlying principles of the outcomes and the resulting elements of this tool are founded on research-based best practices in the field of environmental education. The results from these data collection efforts will provide valuable information to states and the Chesapeake Bay Program Education Workgroup about how best to support local efforts to create and implement comprehensive strategies to support student environmental literacy. It will also be used by major funding partners, including the NOAA Bay Watershed Education and Training (B-WET) Program and the Chesapeake Bay Trust, to inform funding priorities and decisions. Therefore, accurate reports of both accomplishments and gaps are important.

Please complete the five sections of the Environmental Literacy Indicator Tool:

- Section I: Environmental Literacy Planning
- Section II: Student Participation in Meaningful Watershed Educational Experiences (MWEEs)
- Section III: Sustainable Schools
- Section IV: Environmental Education Improvement Efforts
- Section V: Feedback on ELIT

If you have questions about this tool, please contact:

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410.267.5664

**Please complete this contact information before you begin completing the Environmental Literacy Survey.**

*\*required question*

Please select your state from the drop-down list below:

- Delaware
- District of Columbia
- Maryland
- Pennsylvania
- Virginia
- West Virginia

*\*required question*

Please select your school district or local education agency (LEA) from the dropdown list.

*[pre-populated drop-down list with LEA names]*

*\*required question*

What is your primary job title/responsibility? (please select the title that most closely matches your job)

- District-level superintendent
- District-level assistant superintendent
- District-level director of curriculum/instruction/education
- District-level curriculum supervisor/coordinator
- District-level STEM supervisor/coordinator
- District-level business administrator

- School principal
- School assistant principal
- Classroom teacher
- Other, please describe: \_\_\_\_\_

## **Section I: Environmental Literacy Planning**

***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.*

State departments of education and local education agencies play an important role in establishing expectations and guidelines, and providing support for the development and implementation of environmental education programs within their schools. To ensure that every student in the region graduates with the knowledge and skills to act responsibly to protect and restore their local watershed as called for in the Chesapeake Watershed Agreement, environmental education should be embedded into the local curriculum and Meaningful Watershed Educational Experiences (MWEE Definition 2014.pdf) should occur at least once during each level of instruction (elementary, middle, and high school).

In the development of plans and the delivery of programs, local education agencies can also benefit from partnerships with environmental education organizations, natural resource agencies, universities, businesses, and other organizations that have a wealth of applicable products and services as well as a cadre of scientific and professional experts that can complement the classroom teacher’s strengths and heighten the impact of environmental instruction both in the classroom and in the field.

The following questions are intended to help assess the current capacity of your school division/local education agency (LEA) to implement a comprehensive and systemic approach to environmental education. **Please review the following elements (a-f) and, using the scale below, make a determination about your LEA's capacity to address them.**

a. An established program leader for environmental education (providing effective, sustained and system leadership)

- Not in Place
- Fully in Place: Program leader is in place to design, implement, and/or monitor EE program

Comments

b. An integrated program infusing environmental concepts into appropriate curricular areas

- Not in Place
- Partially in Place: EE is represented in some LEA curricula (science, social studies, math, reading, etc.) or initiatives (STEM, Service Learning, etc.)
- Fully in Place: EE is fully embedded in the curriculum across all relevant PK-12 LEA curricula and initiatives

Comments

c. Regular communication among staff responsible for environmental education curriculum and program implementation.

- Not in Place
- Partially in Place: Appropriate staff meet periodically and/or share information about environmental education curriculum and programs
- Fully in Place: Appropriate staff meet regularly to design, implement, and/or monitor environmental education curriculum and programming for students

Comments

d. A support system in place that enables teachers and administrators to engage in high quality professional development in content knowledge, instructional materials, and methodology related to environmental education.

- Not in Place
- Partially in Place: PD in environmental education is offered periodically to teachers and/or administrators
- Fully in Place: PD in environmental education is provided regularly for all relevant teachers and administrators

Comments

e. A plan to ensure opportunities for all students to engage in meaningful watershed educational experiences (MWEEs) at the elementary, middle and high school levels

- Not in Place
- Partially in Place: LEA has a plan to provide MWEEs in one or two grade bands (elementary, middle, and high)
- Fully in Place: LEA has a plan to provide MWEEs at least once in each grade band (elementary, middle, and high)

Comments

f. Established community partnerships for delivery of environmental education, including implementation of MWEEs

- Not in Place
- Partially in Place: Partners are offering environmental education programs in schools, but these are not coordinated with the LEA
- Fully in Place: Partners are working with LEA to coordinate delivery of environmental education programs in support of a LEA environmental education plan or priorities

Comments

## **Section II: Student Participation in Meaningful Watershed Educational Experiences**

***Environmental Literacy Student Outcome:** Continually increase students' age-appropriate understanding of the watershed through participation in teacher-supported, meaningful watershed educational experiences and rigorous inquiry-based instruction, with a target of at least one meaningful watershed educational experience in elementary, middle and high school depending on available resources.*

All four of these components are required for the experience to qualify as a Meaningful Watershed Educational Experience (MWEE) (for a more detailed definition, see MWEE Definition 2014.pdf):

***Issue Definition:** Students identify an environmental question, problem, or issue and explore through background research and investigation.*

***Outdoor field experiences:** Students participate in one or more outdoor field experience sufficient to collect the data required for answering the research questions and informing student actions.*

***Action projects:** Students participate in an action project during which students take action to address environmental issues at the personal or societal level.*

***Synthesis and conclusions:** Students analyze and evaluate the results of their investigation of the issue and synthesize and communicate results and conclusions.*

**On the following pages, please describe the participation of your school district's elementary, middle, and high school students in MWEEs in the 2016-2017 school year.**

## Elementary School

For each grade level, please indicate student participation in MWEE programs during the 2016-2017 school year.

*A complete MWEE program includes: 1) Issue Definition, 2) Outdoor Field Experience, 3) Action Project, and 4) Synthesis and Conclusions.*

	A system-wide MWEE is in place for students in this grade	Some schools or classes in this grade participate in MWEEs	No evidence that students in this grade participate in a MWEE
Kindergarten	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
1st grade	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2nd grade	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3rd grade	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4th grade	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5th grade	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

[If selected column 1 for any item above]

Please describe the system-wide MWEE programs that are in place to reach all elementary school students (i.e., grade, description of unit, partnerships, etc.).

[If selected column 2 for any item above]

Please provide examples of MWEE programs in which students participate that are currently not offered to all elementary school students (i.e., grade, description of unit, partnerships, school(s), etc.).

Do you have any other system-wide outdoor education experiences that do NOT meet the full criteria of a MWEE at any elementary grade level(s)?

- Yes
- No

[If at yes is selected above.]

In which grade level(s) do you have a system-wide outdoor education experience that does NOT meet the full criteria of a MWEE? (select all that apply)

- K
- 1
- 2
- 3
- 4
- 5

[If yes is selected above.]

Please describe the system-wide outdoor education experiences for the grade(s) selected above. (i.e., location, partnerships, description, etc.)

**Middle School**

For each grade level, please indicate student participation in MWEEs during the 2016-2017 school year.

*A complete MWEE program includes: 1) Issue Definition, 2) Outdoor Field Experience, 3) Action Project, and 4) Synthesis and Conclusions.*

	A system-wide MWEE is in place for students in this grade	Some schools or classes in this grade participate in MWEEs	No evidence that students in this grade participate in a MWEE
6th grade	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7th grade	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8th grade	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

[If column 1 is selected for any items above.]

Please describe the system-wide MWEE programs that are in place to reach all middle school students (i.e., grade, description of unit, partnerships, etc.).

[If column 2 is selected for any items above.]

Please provide examples of MWEE programs in which students participate that are currently not offered to all middle school students (i.e., grade, description of unit, partnerships, school(s), etc.).

Do you have any other system-wide outdoor education experiences that do NOT meet the full criteria of a MWEE at any middle school grade level? (select all that apply)

- Yes
- No

[If at yes is selected above.]

In which grade level(s) do you have a system-wide outdoor education experience that does NOT meet the full criteria of a MWEE? (select all that apply)

- 6
- 7
- 8

[If a yes is selected above.]

Please describe the system-wide outdoor education experiences for the grade(s) selected above. (i.e., location, partnerships, description, etc.)

**High School**

For each **REQUIRED** high school course (i.e., every student takes the course), please indicate student participation in MWEEs during the 2016-2017 school year.

*A complete MWEE program includes: 1) Issue Definition, 2) Outdoor Field Experience, 3) Action Project, and 4) Synthesis and Conclusions.*

*Just answer for required courses. We'll ask about elective courses next.*

	System-wide, a MWEE is included in this course	Some schools or classes include a MWEE in this course	No evidence that students in this course participate in a MWEE
Biology (required course)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Chemistry (required course)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Physics (required course)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Earth Science (required course only)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
History and Social studies	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
English	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Mathematics	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other Required Science Course (indicate course)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
_____			
Other Required Course (indicate course)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
_____			

For each high school **ELECTIVE course**, please indicate student participation in MWEEs during the 2016-2017 school year.

	System-wide, a MWEE is included in this elective	Some schools or classes include a MWEE in this elective	No evidence that students in this elective participate in a MWEE
Environmental	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Science/Ecology	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
AP Environmental Science	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Career and Technical Education	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Health and Physical Education	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other Science Electives (indicate course)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other History or Social Studies Electives (indicate course)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other elective (indicate course)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other elective (indicate course)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

[If column 1 is selected for any items in the above two tables.]

Please describe the system-wide MWEE programs that are in place to reach all high school students (i.e., grade, description of unit, partnerships, etc.).

[If column 2 is selected for any items in the above two tables.]

Please provide examples of MWEE programs in which students participate that are currently not offered to all high school students (i.e., grade, description of unit, partnerships, school(s), etc.).

Do you have any other system-wide outdoor education experiences that do NOT meet the full criteria of a MWEE, at any high school grade level?

- Yes
- No

[If yes is selected above.]

In which grade level(s) do you have a system-wide outdoor education experience that does NOT meet the full criteria of a MWEE? (select all that apply)

- 9
- 10
- 11
- 12

[If yes is selected above.]

Please describe the system-wide outdoor education experiences for the grade(s) selected above. (i.e., location, partnerships, description, etc.)

**Section III: Sustainable Schools**

*Environmental Literacy 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.*

Sustainable Schools Pillars (as defined by the U.S. Department of Education Green Ribbon Schools):

- Reduce environmental impact and costs,
- Improve the health and wellness of schools, students and staff, and
- Provide effective environment and sustainability literacy, incorporating STEM, civic skills and green career pathways

Separate from this survey, we will receive data about which schools in your LEA are recognized as Sustainable Schools by several certifying organizations that are recognized by the Chesapeake Bay Program Education Workgroup, including:

- U.S. Department of Education Green Ribbon Schools
- Eco Schools (National Wildlife Federation)
- Project Learning Tree Green Schools
- Maryland Green Schools (MAEOE)
- Virginia Naturally Schools
- West Virginia Sustainable Schools

Other than the sustainable schools programs above, what best practices are schools implementing and/or in what environmental certification programs do schools in your LEA participate (e.g. LEED)?

Please select one answer per question.

	Yes	No	I don't know
Does your LEA have a staff lead or team responsible for coordinating	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

sustainable schools efforts?

Does your LEA have a sustainability plan or formal environmental sustainability objectives?

Are sustainable school efforts, which may be overseen by facilities departments, incorporated in district curriculum?

Do you encourage your schools to seek sustainable school certification?  
If yes, which certification program(s) do you encourage:

\_\_\_\_\_

Has your school district received district-level sustainable school certification?

**Section IV: Continuous Environmental Education Improvement Efforts**

What are the strongest elements of your environmental education program for students? What data or subjective assessments support this?

What are the strongest elements of your environmental education program for teachers? What data or subjective assessments support this?

Please share any success stories as exemplars and models of best practice that are not detailed above. (Please provide links to websites, articles, etc. if possible.)

What are the greatest challenges related to establishing/implementing your environmental education program?

What are opportunities to grow your environmental education program?

What are your highest priority needs for improving your environmental education programs? Please rate how much of a need each of the items below is for your LEA.

	1 No need	2	3	4	5	6	7 High Need
Outdoor Classrooms	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Increased Alignment with Curriculum	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Support from Board of Education	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Teacher Professional Development	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Sustainable Schools Technical Assistance	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Curriculum Planning/Integration Support	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Funding	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Community Partnerships	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other (please describe)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**Section VI: Feedback on ELIT**

On a scale from 1 to 10, how difficult was it to provide the data for the ELIT survey overall?

	1	2	3	4	5	6	7	8	9	10	
Very difficult	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Very easy

Do you have any suggestions for improving the design and/or functionality of the ELIT survey?

THANK YOU for completing this survey! Please click on the SUBMIT button below to complete the survey. After you submit the survey, you will see a summary of your entered responses. Click on the Adobe symbol to download a PDF and save a copy of your data.