INTRODUCTION

The Chesapeake Bay Program’s Environmental Literacy Indicator Tool – or ELIT – was distributed to school divisions across Virginia in the summer of 2015. The purpose of the ELIT is to help school 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 2014 Chesapeake Bay Watershed Agreement.

Descriptive and summary statistics from the survey are included in this report.

DESCRIPTIVE STATISTICS

There were 104 valid survey responses representing 102 Local Education Agencies. Of the LEA’s represented, 80 percent of respondents reported that their LEA was located at least partly in the Chesapeake Bay Watershed (see Figure 1).

Figure 1. Percent of LEA’s located at least partly in the Chesapeake Bay Watershed

<table>
<thead>
<tr>
<th>Percentage</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>In Watershed</td>
<td>80%</td>
</tr>
<tr>
<td>Not in Watershed</td>
<td>20%</td>
</tr>
</tbody>
</table>

N=104

SUMMARY STATISTICS

The survey questions were organized into five sections, noted below:

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

Survey responses are summarized below by each survey section. A copy of the survey has been provided in Appendix A at the end of this report.

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1 The survey was made available on May 8, 2015 and the deadline for submission was September 1, 2015.
2 There were 106 records in the dataset which included duplicate records from two school divisions. In each case, the record with more completed fields was kept, and the lesser discarded. The final dataset includes 104 survey responses.
SECTION I: ENVIRONMENTAL LITERACY PLANNING

Items assessing the current capacity of each responding school division/local education agency (LEA) to implement a comprehensive and systemic approach to environmental literacy are included in Section I, Environmental Literacy Planning. 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. One objective of the 2014 Chesapeake Watershed Agreement is that every student in the region graduates with the knowledge and skills to act responsibly to protect and restore their local watershed. Further, environmental education, embedded into the local curriculum and Meaningful Watershed Educational Experiences (MWEEs) 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 extent to which responding school divisions exhibit the capacity to implement a comprehensive and systematic approach to environmental literacy is shown below in Figure 2.

Figure 2. Capacity to Implement a Comprehensive and Systematic Approach to Environmental Literacy

Sixty-four percent of respondents indicated that their LEA does not have an established program leader for environmental education providing effective, sustained, and system leadership or an established team that facilitates multi-grade/multidiscipline curricular infusion of environmental projects and practices, such as student MWEEs. However, over one-third of respondents indicated that a support system that enables teachers and administrators to engage in high quality professional development in content knowledge, instructional materials, and methodology related to environmental education and an integrated program plan infusing environmental concepts and student MWEEs in appropriate curricular

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areas were partially in place. In all, a small number of responding divisions have fully implemented the above mechanisms toward comprehensive environmental literacy education.

SECTION II: STUDENT PARTICIPATION IN MEANINGFUL WATERSHED EDUCATIONAL EXPERIENCES (MWEEs)

In Section II of the ELIT Survey, respondents described the participation of their school division's elementary, middle, and high school students in MWEEs for the 2014-2015 academic year. Participation in MWEEs is thought to 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 MWEE. The following experiences are gained through participation in an MWEE:

- **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 experiences 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.

Level of MWEE participation in grades K-8 are displayed below in Figure 3.

*Figure 3. Student Participation in MWEE Programs for Responding School Divisions, Grades K-8*

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4 **System-wide** = A system-wide MWEE experience is in place for students in this grade; **Some Schools** = Some schools or classes in this grade participate in MWEEs; **No Evidence** = No evidence that students in this grade participate in a MWEE
There appears to be more instances of “system-wide” MWEE program participation between grades 3-7 than in the early grades (k-2) and grade 8. However, in grades k-2 and grade 8, nearly half or more of the respondents indicated that there was no evidence of MWEE program participation in their school division.

Student MWEE participation by required course was also captured. The responses are summarized below in Figure 4.

Figure 4. Student Participation in MWEE Programs for Responding School Divisions, by Required Course

Twenty-nine percent of respondents indicated that MWEE participation was occurring in science courses “system-wide” throughout their school division. Nearly half (44%) indicated that students in science courses were participating in MWEE programs at “some schools” throughout their school division. MWEE participation occurred primarily in Biology and Earth Science (21% of respondents listed these courses when prompted to indicate where participation was primarily occurring). Beyond science courses, respondents largely indicated that there was “no evidence” of MWEE participation in other required courses.

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5 System-wide = A system-wide MWEE experience is in place for students in this grade; Some Schools = Some schools or classes in this grade participate in MWEEs; No Evidence = No evidence that students in this grade participate in a MWEE
In addition to required coursework, respondents also specified the extent to which students in elective classes were participating in MWEEs. These responses are shown in Figure 5 below.

**Figure 5. Student Participation in MWEE Programs for Responding School Divisions, by Elective Course**

Student participation in MWEE programs occurred most frequently in Ecology courses with 27 percent of respondents indicating “system-wide” participation at schools in their division. Further, nearly half (48%) of respondents indicated that MWEE participation in Environmental Science/Ecology courses was occurring in “some schools” throughout their division. Not surprisingly, MWEE participation in Advanced Placement Environmental Science is occurring “system-wide” and in “some schools” in just over half (52%) of the participating school divisions. Conversely, a majority of respondents signified “no evidence” of MWEE participation in non-science elective courses.

**SECTION III: ENVIRONMENTAL LITERACY IN DESIGNATED SUSTAINABLE SCHOOLS**

One measure of environmental literacy is reflected by the number of schools that strive to 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. These “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.

Qualifying sustainable schools have a formal recognition and/or certification process that evaluates school performance in more than one U.S. Green Ribbon School Pillar, including student-led action projects, and allowing for continuing improvement and multi-year participation. The Chesapeake Bay Program Education Workgroup has compiled a list of certification programs that meet these criteria. Section II of the ELIT Survey prompted respondents to provide information on their schools’ environmental impacts.

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6 **System-wide** = A system-wide MWEE experience is in place for students in this grade; **Some Schools** = Some schools or classes in this grade participate in MWEEs, **No Evidence** = No evidence that students in this grade participate in a MWEE.
based on standards set forth by the U.S. Department of Education Green Ribbon Schools, Eco Schools (National Wildlife Federation), Project Learning Tree Green Schools, Maryland Green Schools (MAEDE), Virginia Naturally Schools, and West Virginia Sustainable Schools.

Of the 104 survey respondents, roughly 84 percent indicated that none of the elementary schools in their division held sustainable schools certification/recognition based on the standards of the programs mentioned above. Reporting divisions were most likely to have only one elementary school earning sustainability certification/recognition. Similar patterns were found at the middle and high school levels.

Respondents also addressed the existence of the following in their LEA:

- A staff lead or team responsible for coordinating sustainable efforts
- Policies or programs that go beyond state requirements to reduce impacts of school buildings and grounds on the watershed and larger environment, and
- Policies or programs that go beyond state requirements to improve the health and wellness of schools, students, and staff

The extent to which these measures were in place in each responding division is shown in Figure 6 below.

Figure 6. Presence of Staff Lead Team, Policies to Reduce Buildings' Environmental Impacts, and Advanced Policies to Improve School, Student, and Staff Wellness

Less than one-third of respondents indicated that schools in their divisions implemented a staff lead team, policies to reduce the environmental impacts of buildings, and policies to improve school, student, and staff wellness. According to the answers from all possible respondents (N=104), a majority of reporting divisions did not have the above measures in place or the respondents were unaware of whether the measures had been implemented.

SECTION IV: CONTINUOUS ENVIRONMENTAL EDUCATION IMPROVEMENT EFFORTS

Respondents were asked to provide information reflecting continuing needs in their divisions to improve environmental education programs. Improvements within the school such as outdoor classroom

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7 Two divisions reported a larger number of certified elementary schools (20 schools and 33 schools, respectively); however, these numbers appear to be erroneous as one division only includes two elementary schools and the other only includes 4 elementary schools).
experiences, teacher professional development, curriculum alignment/planning/support as well as outside measures such as school board support, funding, and community partnerships are shown below in Figures 7a and 7b.

**Figure 7a. Priority Needs for Improving Environmental Education Programs**

Need across all surveyed parameters exists according to survey responses. For example, 81 percent of respondents indicated a “high need” for more outdoor classrooms. Resources for teachers are also in “moderate” or “high need” as more than two-thirds of the respondents indicated that increased curriculum alignment and teacher professional development, were important improvements to their division environmental education programs.

Further, a majority of respondents also indicated a “moderate” or “high” need for sustainable schools technical assistance, support for curriculum planning and integration, funding, and community partnerships. A full breakdown of responses to these four measures is shown below in Figure 7b.

**Figure 7b. Priority Needs for Improving Environmental Education Programs**
LIMITATIONS

Overall, the picture of student participation in MWEE experiences seems unclear for non-sciences courses. However, this may not be a telling indication that students in non-science courses are not participating in MWEEs, rather, the respondents may not have had the necessary information to accurately answer the questions. For example, some comments at the end of the survey indicated that compiling accurate information to answer the survey questions was difficult due to lack of appropriate staff availability, the timing of the survey (i.e., a due date of early September was cited as a difficult date for setting aside time to answer the questions and having access to the information – of staff who could provide the information - necessary to fully answer the questions on the survey). However, the responses pertaining to MWEE participation in science courses appear to be more informed.

Other notable limitations may be embedded in the lower number of respondents providing answers to some of the survey questions. A glance at responses to the final question on the survey instrument (“Do you have any suggestions for improving the design and/or functionality of the ELIT survey”) may provide some insights as to why not all respondents answered each question. For example, multiple respondents suggested pushing the survey due date back to late September so that respondents would have more time to gather required information. Improvements to the survey’s functionality (i.e., including a mechanism to allow respondents to save their responses and continue at a later time) might also have an impact on the quality of data captured.

CONCLUSION

Results from 104 respondents to the ELIT survey appear to suggest that environmental programming in grades k-8 and in both required and elective classes is not fully implemented in the responding divisions. Further, most respondents indicated a “moderate” or “high” need for support in the classroom, from their respective school boards, and in their communities to provide higher quality environmental programming in their schools.
APPENDIX A: ELIT SURVEY

Q5 Is your school division at least partly in the Chesapeake Bay Watershed? If you are uncertain, refer to this map: CB Watershed Counties.pdf

☐ Yes
☐ No

Q6 Please complete this information.

- Name of Individual Completing this Form
- Title of Individual Completing this Form
- Email Address
- Phone Number

Q7 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 2014 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 assessments 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: Continuous EE Improvement Efforts
Section V: Feedback on ELIT

Note: You can close the ELIT survey and return to the same place as long as you use the same computer to continue completing the survey.

If you have questions about this tool, please contact: Shannon Sprague, Co-Chair Chesapeake Bay Program Education Workgroup  NOAA Chesapeake Bay Office  shannon.sprague@noaa.gov 410.267.5664

8 Questions 1-4 were instructional and were therefore not included here.
Q8 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-g) and, using the scale below, make a determination about your LEA’s capacity to address them.

Q9 a. An established program leader for environmental education (providing effective, sustained and systemic leadership).
- Not in Place
- Fully in Place: Program leader is in place to design, implement, and/or monitor EE program

Q10 Comments

Q11 b. An established team that facilitates multigrade/multidiscipline curricular infusion of environmental projects and practices, such as student MWEEs.
- Not in Place
- Partially in Place: EE team established and meets to share information
- Fully in Place: Multi-disciplinary EE team meets regularly to design, implement, and/or monitor EE program

Q12 Comments

Q13 c. 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

Q14 Comments

Q15 d. An integrated program infusing environmental concepts and student MWEEs in 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

Q16 Comments

Q17 e. A plan to ensure opportunities for all students to engage in meaningful watershed educational experiences 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)

Q18 Comments
Q19 f. A plan or initiative to create sustainable schools to reduce negative environmental and human health impacts of school buildings and grounds

- Not in Place
- Partially in Place: LEA has identified sustainable schools as a priority
- Fully in Place: LEA has a plan or initiative to implement sustainable practices in all schools

Q20 Comments

Q21 g. 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

Q22 Comments

Q23 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 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 division’s elementary, middle, and high school students in MWEEs in the 2014-2015 school year.

Q24 In your school division, how many students were enrolled in each of these grades during the 2014-2015 school year?

- _____ Kindergarten
- _____ 1st grade
- _____ 2nd grade
- _____ 3rd grade
- _____ 4th grade
- _____ 5th grade

Q25 For each grade level, please indicate student participation in MWEE programs during the 2014-2015 school year.

<table>
<thead>
<tr>
<th>Grade</th>
<th>A systemwide MWEE experience is in place for students in this grade</th>
<th>Some schools or classes in this grade participate in MWEEs</th>
<th>No evidence that students in this grade participate in a MWEE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kindergarten</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>1st grade</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>2nd grade</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>3rd grade</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>4th grade</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>5th grade</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
</tbody>
</table>
Q26 Please describe the systemwide MWEE programs that are in place to reach all elementary school students (i.e., grade, description of unit, partnerships, etc.).

Q27 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.).

Q28 In your school division, how many students were enrolled in each of these grades during the 2014-2015 school year?

______ 6th grade
______ 7th grade
______ 8th grade

Q29 For each grade level, please indicate student participation in MWEEs during the 2014-2015 school year.

<table>
<thead>
<tr>
<th>Grade</th>
<th>A systemwide MWEE experience is in place for students in this grade</th>
<th>Some schools or classes in this grade participate in MWEEs</th>
<th>No evidence that students in this grade participate in a MWEE</th>
</tr>
</thead>
<tbody>
<tr>
<td>6th grade</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>7th grade</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>8th grade</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
</tbody>
</table>

Q30 Please describe the systemwide MWEE programs that are in place to reach all middle school students (i.e., grade, description of unit, partnerships, etc.).

Q31 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.).

Q32 How many students TOTAL were enrolled in grades 9-12 in your school division during the 2014-2015 school year? (please provide a number rather than a range)

_______ Number of high school students

Q33 For each required course, please indicate student participation in MWEEs during the 2014-2015 school year.

<table>
<thead>
<tr>
<th>Course</th>
<th>Systemwide, a MWEE is included in this course</th>
<th>Some schools or classes include a MWEE in this course</th>
<th>No evidence that students in this course participate in a MWEE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Science (indicate course)</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>History and Social studies (indicate course)</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>English (indicate course)</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Mathematics (indicate course)</td>
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<tr>
<td>Other (indicate course)</td>
<td>○</td>
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<td>○</td>
</tr>
<tr>
<td>Other (indicate course)</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
</tbody>
</table>
### ELIT Summary

Q34 For each elective, please indicate student participation in MWEEs during the most recent school year.

<table>
<thead>
<tr>
<th></th>
<th>System-wide, a MWEE is included in this elective</th>
<th>Some schools or classes include a MWEE in this elective</th>
<th>No evidence that students in this elective participate in a MWEE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Environmental Science/Ecology</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>AP Environmental Science</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Career and Technical Education</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Health and Physical Education</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Other Science Course (indicate course)</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Other History or Social Studies Course (indicate course)</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Other elective (indicate course)</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Other elective (indicate course)</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
</tbody>
</table>

Q35 Please describe the systemwide MWEE programs that are in place to reach all high school students (i.e., grade, description of unit, partnerships, etc.).

Q36 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.).

Q37 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.  
Qualifying sustainable schools have a formal recognition and/or certification process that evaluates school performance in more than one U.S. Green Ribbon School Pillar, include student-led action projects, and allow for continuing improvement and multi-year participation. The Chesapeake Bay Program Education Workgroup has compiled a list of certification programs that meet this criteria. For the purposes of this survey, only the following sustainable schools' certifications should be included: U.S. Department of Education Green Ribbon Schools (http://www2.ed.gov/programs/green-ribbon-schools/index.html) Eco Schools (National Wildlife Federation) Project Learning Tree Green Schools Maryland Green Schools (MAEOE) Virginia Naturally Schools West Virginia Sustainable Schools  
If you believe that another sustainable schools certification program meets these criteria, please contact: Shannon Sprague Co-chair, Chesapeake Bay Program Education Workgroup NOAA Chesapeake Bay Office shannon.sprague@noaa.gov 410-267-5664

Q38 Please indicate the number of schools in your LEA:

- _____ Elementary
- _____ Middle
- _____ High
Q39 Please indicate the number of schools in your LEA that hold a sustainable schools certification/recognition (see list of programs above).

____ Elementary
____ Middle
____ High

Q40 Other than those sustainable schools programs identified above, what best practices are schools implementing and/or in what environmental certification programs do schools in your LEA participate (e.g. LEED)?

Q41 Please select one answer per question.

<table>
<thead>
<tr>
<th>Does your LEA have a staff lead or team responsible for coordinating sustainable schools efforts?</th>
<th>Yes</th>
<th>No</th>
<th>I don't know</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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<td>O</td>
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<table>
<thead>
<tr>
<th>Does your LEA have policies or programs that go beyond state requirements to reduce impacts of school buildings and grounds on the watershed and larger environment? (if Yes, please describe)</th>
<th>Yes</th>
<th>No</th>
<th>I don't know</th>
</tr>
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<tbody>
<tr>
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<table>
<thead>
<tr>
<th>Does your LEA have policies or programs that go beyond state requirements to improve the health and wellness of schools, students, and staff? (if Yes, please describe)</th>
<th>Yes</th>
<th>No</th>
<th>I don't know</th>
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Q42 SECTION IV: Continuous Environmental Education Improvement Efforts

Q43 What are the strongest elements of your environmental education program for students? What data or subjective assessments support this?

Q44 What are the strongest elements of your environmental education program for teachers? What data or subjective assessments support this?

Q45 Please share any success stories as exemplars and models of best practice that are not detailed above. (Please provide links to Web sites, articles, etc. if possible.)

Q46 What are the greatest challenges related to establishing/implementing your environmental education program?

Q47 What are opportunities to grow your environmental education program?
Q48 What are your highest priority needs for improving your environmental education programs? Please rate each of the items below as low, moderate, high, or no need.

<table>
<thead>
<tr>
<th>Item</th>
<th>0=No need</th>
<th>1=Low need</th>
<th>2=Moderate need</th>
<th>3=High need</th>
</tr>
</thead>
<tbody>
<tr>
<td>Outdoor Classrooms</td>
<td></td>
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<tr>
<td>Increased Alignment with Curriculum</td>
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<tr>
<td>Support from Board of Education</td>
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<tr>
<td>Teacher Professional Development</td>
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<tr>
<td>Sustainable Schools Technical Assistance</td>
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<tr>
<td>Curriculum Planning/Integration Support</td>
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<tr>
<td>Funding</td>
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<tr>
<td>Community Partnerships</td>
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<tr>
<td>Other (please describe)</td>
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</tbody>
</table>

Q49 Section V: Feedback on ELIT

Q50 On a scale from 1 to 10, how difficult was it to provide the data for the ELIT survey overall?

<table>
<thead>
<tr>
<th>Very difficult:Very easy</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
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</tbody>
</table>

Q51 Do you have any suggestions for improving the design and/or functionality of the ELIT survey?