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.

Management Approach 1: Support school district efforts to embed locally appropriate environmental practices, content, and learning opportunities into curriculum and operations.

Management Approach 2: Use available data and information to strategically and equitably focus resources to support school district level environmental literacy planning and implementation.

Management Approach 3: Ensure broad understanding at the state and regional level of the progress, gaps, and opportunities related to the Environmental Literacy Goal.

1. Examine your red/yellow/green analysis of your management actions. What lessons have you learned over the past two years of implementation?

Summarize what you have learned about what worked and what didn’t. For example, have you identified additional factors to consider or filled an information gap?

What worked?

- **Analysis of ELIT Survey Data.** Data from the Environmental Literacy Indicator Tool (ELIT) Survey has allowed the Workgroup to identify gaps, determine the needs of individual school districts and celebrate successful efforts.

- **State Working Groups.** State working groups like Maryland Project Green Classrooms (MD PGC), Virginia Resource Use Education Council (VRUEC), and the PA Environmental Education Advisory Committee and affiliate organizations like Virginia Association for Environmental Education (VAEE), Maryland Association for Environmental and Outdoor Education (MAEOE), Delaware Association for Environmental Education (DAEE) and Pennsylvania Association for Environmental Education (PAEE) have championed environmental literacy planning in their respective jurisdictions. This localized approach is necessary to develop systematic environmental literacy for each State.

- **Leadership Summit.** The biennial Chesapeake Bay Environmental Literacy Leadership Summit allows education leaders from around the watershed to share environmental literacy planning successes and challenges from their respective states. The 2019 Summit focused on the
theme of ensuring equity in environmental education. These Summits will continue as a way to connect state policy efforts to regional efforts.

What didn’t?

- **Participation in ELIT Survey.** Data collected from the ELIT Survey provides the workgroup with the information necessary to strategically support environmental literacy planning. LEA participation in the ELIT Survey increased slightly from 2017 to 2019. Reporting rates dropped in Virginia and remain low for Pennsylvania. Delaware and New York did not contribute new data in 2019.

- **Environmental Literacy Plans.** The development and updating of district and division-wide environmental literacy plans remains a challenge. However, input received at the Workgroup’s biennial Environmental Literacy Forum demonstrated that there is significant interest in environmental literacy plans, but additional support is needed. Potential avenues for support include developing resources specifically addressing the environmental literacy plan template, highlighting case studies, promoting best practices, funding and trainings.

2. Regardless of how successful your short-term progress has been over the past two years, indicate whether we are making progress at a rate that is necessary to achieve the outcome you are working toward. The example graph below illustrates this concept.

   **NOTE:** A mistake was found in the data, which required a reanalysis of the data set. These numbers are currently being recalculated. Will be available prior to the May MB meeting.

3. What scientific, fiscal and policy-related developments will influence your work over the next two years?

   *This may include information learned at the previous biennial SRS meeting or more specific information about your outcome such as an increase or decrease in funding, new programs that address gaps, and new scientific data or research. Describe how these developments are likely to impact your recommended measure(s) of progress, the factors you believe impact your ability to succeed, and newly created or filled gaps. These changes should be reflected in the first three columns of your revised logic and action plan after your quarterly progress meeting.*

Legislation and Policy:

Several states are working on new state learning standards that will influence the curriculum developed by local school districts, including revisions to the PA science standards and the MD Environmental Literacy standards. It is important to participate in these processes to ensure that content and in some cases references to Meaningful Watershed Educational Experiences (MWEEs) and sustainable schools are included. Once developed, partners will work with school districts to ensure that the local curriculum, environmental literacy plans, and other relevant plans and programs embed both the content and pedagogy that advances environmental literacy.

Funding:
There continues to be lack of funding to support broad and sustainable environmental literacy efforts. The dissolution of the Math Science Partnership Program in 2015 was a blow despite environmental education being called out as an eligible expense under the Every Student Succeeds Act (ESSA) flexible block grant program known as Student Support and Academic Enrichment Grants (SSAEG) under Title IV Part A. This is because there is a long list of eligible types of programming -- everything from STEM and computer science to arts education and environmental education. States, however, may have discretion in identifying priorities for local school districts to respond to, which was a successful approach taken in Maryland under the Math-Science Partnership Program. States also have discretion over their Title II professional development funding, which could be used to train teachers in environmental literacy content and pedagogy.

The uncertain effects of COVID-19 to federal and state budgets will also influence our ability to meet the outcomes. Ongoing funding for NOAA B-WET and EPA EE grants, which are consistently absent from the President’s budget, are essential for moving this work forward. In addition, state funding programs (a.g. Chesapeake Bay Trust, MD DNR, PA DEP, etc.) could also be at risk in budgets affected by the pandemic.

School district implementation:
The Chesapeake Bay Program has the only tool in the country that is tracking environmental literacy programming at the school district level. The Environmental Literacy Indicator Tool (ELIT) survey, which is administered every two years, provides information on the readiness of school districts to support environmental education and the extent to which school districts are supporting MWEEs in elementary, middle, and high school grade bands. The importance of the data provided by these districts cannot be overstated; it drives the work of the core partners of the Chesapeake Bay Program and environmental education funders in the region. Participation in the survey increased slightly from 2017 to 2019 for schools districts in the watershed (there are 328 districts total in the watershed). Pennsylvania saw the greatest increase in responses (from 74 to 98 districts) and Virginia saw the largest decrease (from 105 to 76 districts). More than 73% of students in the watershed were represented by the 2019 ELIT data. Strong leadership from high levels within the state departments of education will be needed to ensure a robust and statistically valid sample size in 2021.

State agency and partner coordination:
Many partners are essential to environmental education at the state level, including state agencies, non-profit providers, colleges and universities, and businesses. Federal and local government agencies and funders are also important to the conversation. The organization of these partners into strategic collaboratives with complementary but distinct purposes helps to create a supportive environment for local school districts that includes effective and efficient state policies and resources and partners with the knowledge and skill to provide much needed capacity to local efforts. The North American Association for Environmental Education (NAAEE) recommends that states maintain a partnership co-chaired by leadership from the state department of education and an appropriate natural resource agency to drive environmental education efforts. States should also maintain a state environmental education organization that supports the nonprofit community. The existence, influence, and efficacy of these groups tends to ebb and flow over time in each state, and the status of functioning groups with strong representation from all key partners and high level engagement from state agencies and other decision makers will be essential to moving this work forward in the Chesapeake Bay watershed. A GIT funded project that is just beginning will evaluate the state and regional networks to look for opportunities to more efficiently and effectively reach our outcomes.
School community (teachers, principals, staff) awareness and readiness
We are all living under a new reality due to COVID-19 with school operations being majorly impacted throughout the region. The move to online learning this spring coupled with uncertainty for the fall and beyond greatly affects the environmental education field, which often relies on offsite field experiences and expert speakers to deliver programming. The next two years will undoubtedly see a greatly changed school environment, which will include social distancing. This may mean that offsite field experiences are canceled, and could mean that environmental education partners/providers are unable to access school buildings and properties. This could be catastrophic to the environmental education field in the short term and may take years to rebuild the partnerships and programming that we have worked to create.

State education agency leadership:
The Environmental Literacy Leadership Summit co-hosted with the Commonwealth of Virginia in June 2019 was a success with high level participation from education and natural resource agencies, and partner groups. These biennial convenings will be important to maintaining attention on the Environmental Literacy goal and outcomes of the Watershed Agreement. However, the infrequency of these meetings and the existing disconnect between them and existing state conversations needs to be addressed to ensure that state leaders remain actively engaged in driving environmental education efforts in their states.

4. Based on your response to the questions above, how will your work change over the next two years?

Describe the adaptations that will be necessary to more efficiently achieve your outcome and explain how these changes will lead you to adjust your management strategy or the actions described in column four of your logic and action plan. Changes that the workgroup, GIT or Management Board consider significant should be reflected in your management strategy.

- We need to make sure that we provide comments on any relevant state standards that are developed.
- We will need to assess the impact of COVID-19 to 2020-2021 school year operations.
- We need to continue leadership summits to share things across jurisdictions.
- We need to create a more intentional connection between regional and state policy efforts.
- We need state department of education and natural resource leaders to connect with one another -- regular basis -- around EL goal/outcomes (within states and between states).
- We need to engage state department of education leaders to encourage school districts to respond to the Environmental Literacy Indicator Tool (ELIT) survey in 2021.
- We need to encourage the increased use of existing state funding to support professional development, transportation, sustainable school projects, etc.

5. What, if any, actions can the Management Board take to help ensure success in achieving your outcome?

Please be as specific as possible. Do you need direct action by the Management Board? Or can the Management Board direct or facilitate action through other groups? Can you describe efforts the workgroup has already taken to address this issue? If this need is not met, how will progress toward your outcome be affected? This assistance may include support from within a Management Board member’s jurisdiction or agency.
• **Better connect regional and state environmental literacy efforts, and ensure appropriate state leadership to aid in ongoing decision making and support.** As a result of the last SRS Review, the Management Board and PSC helped to establish the expectation for a biennial Environmental Literacy Leadership Summit. These convenings are important to capture the attention of leaders at the state departments of education and have led to tangible results, including the hiring of a new environmental education lead at the PA Department of Education and an intentional connection to environmental education in the new VA STEM Coalition. Now the focus must turn to better connecting these infrequent meetings to the efforts underway in each state to advance environmental education to ensure that the Summits focus on relevant topics and to carry forward the work that is seeded at the Summits.

*ASK: Update a preliminary network analysis so we better understand the structure of your state environmental education networks, the leadership for these groups (and if they are not agency leaders how communication with leaders is accomplished), and how they operate together to advance state goals. We also need a single point of contact at the leadership level who can work with Education Workgroup members and other partners to collate and communicate state interests in environmental education. This information will be fed into a GIT funded project that is just kicking off.*

• **Identify funding to support MWEEs efforts.** Embedding MWEEs into school district curriculum and operations costs money. Existing programs such as the federal NOAA B-WET and EPA Environmental Education Grant programs, and state programs like the Chesapeake Bay Trust, the Virginia Environmental Endowment, the Environmental Education Grant Program administered by PA DEP, and funding from MD DNR can help to establish and grow programs in school districts, but in order to be sustainable a long-term, reliable sources of funding need to be put in place. A preliminary analysis of data shows that MWEEs cost on average $133/student. Costs may be able to be reduced by offering programming on school campuses. Additionally, COVID-19 could effectively shut down some MWEE providers. Should look for opportunities to provide support using emergency and/or stimulus funding.

*Ask: Using statewide funding estimates and a list of existing funding/programs developed as a result of the 2018 SRS review and updated this spring, develop a funding strategy that looks for opportunities to address the shortfall needed to provide systemic MWEEs for all students. In the short-term, ensure that environmental education providers are eligible for emergency and/or stimulus support.*

• **Use the data from the Environmental Literacy Indicator Tool (ELIT) to aid in decision making, and advocate for a strong communication strategy for 2021.** ELIT provides a wealth of data on the status and needs related to school district implementation of environmental literacy programming. The summary reports provide a snapshot of how each state is progressing towards the environmental literacy outcomes of the Chesapeake Bay Watershed Agreement. New for this year are district level reports available for state decision makers.
ASK: Discuss implications of ELIT data with leaders from the state education agencies to increase awareness of the needs and progress. Encourage the development of a communication strategy for school district superintendents to improve the data collection in Spring 2021. The leaders in question are the participants and invitees from the Summit.