

The Partnership works to promote the wellbeing and environmental literacy of all Maryland youth, support environmental literacy programs in schools and contribute to thriving communities, by increasing opportunities for time spent outdoors in both structured and unstructured learning, recreation, and stewardship activities at school, in communities, and on public lands throughout the state of Maryland. The group serves as a convener of partners and stakeholders to improve coordination among and across programs; provides guidance and recommendations to help shape policy and practices; raise awareness and broaden the engagement of stakeholders; and more, to promote and advance the work of connecting children to nature.

Priorities identified to guide work in 2016 include the following (#s 1–5), with planned actions nested below each area of work. Actions that match up with [Chesapeake Bay Watershed Agreement Environmental Literacy Action Plans](#) (for Maryland, 2016-18) are marked (*).

(1) Improve and increase outdoor learning experiences and environmental literacy achievement for all students by supporting school environmental literacy programming through the following:

(A) Prepare educators by increasing access to high quality professional development and professional certification in environmental literacy and teaching in the outdoors – in part through disseminating models and best practices, with a focus on integrating Environmental Literacy Standards and content across the curriculum. *Desired outcome: Improve the capacity of preK-12 teachers to incorporate E-Lit/ outdoor experiences into their teaching.*

→ **E-Lit Workgroup with subcommittees for each action – Leads:** Laurie Jenkins, Montgomery County Public Schools laurie_c_jenkins@mcpmsmd.org and Joe Harber, National Aquarium jharber@aqua.org.

ACTION 1 *: Professional Development for **Pre-Service Teachers** –

Continue working to develop and institute teacher pre-service requirements for environmental literacy. Follow up w/ Professional Standards and Teacher Education Board (PSTEB), participating in committee to review and prepare recommendations.

Year 1: Work within MSDE and Institutions of Higher Education (IHE) structures to influence the PSTEB; research certification where it exists in other states; consider a requirement that takes place in the first five years of service rather than during pre-service.

Year 2: Develop a model program to integrate E-Lit into a science methods course, with emphasis on Standard 1 (Issues Investigation and Action).

ACTION 2 *: Professional Development for **Teachers** –

Contribute to the development of a plan to provide statewide professional learning for teachers in pedagogy to integrate environmental literacy education (including Meaningful Watershed Educational Experiences – MWEEs), within local curricula in multiple disciplines, aligned with NGSS and other requirements.

Year 1: Develop a plan to focus on MWEE's in schools, utilizing current guidance resources; and to support Local Education Agencies (LEAs) in meeting K-12 and graduation E-Lit requirements. MSDE work with LEAs to develop content, and identify and plan opportunities for delivery such as face-to-face training, webinar, podcast, etc.

Year 2: Implement the plan: MSDE and various EE partners statewide provide the PD through existing and new venues.

ACTION 3 *: Professional Development for **Environmental Education (EE) Providers** –

Develop a plan to coordinate, promote and track training statewide for non-formal environmental education (EE) providers on current formal education requirements and practices (NGSS, STEM, Social Studies C-3, etc.), and how to align their materials and programming to these requirements across disciplines.

Year 1: Review emerging examples of professional learning opportunities that focus on how to use the environment as a context for meeting formal requirements and practices in multiple disciplines. Identify successful elements, and create a plan to scale it up across the state.

Year 2: Engage multiple partners in delivering these professional learning opportunities, with guidance for consistent content. Assist providers with identifying where their programs are aligned and how they can align more closely.

(B) Provide authentic experiences in nature for all Maryland students by promoting and supporting Meaningful Watershed Educational Experiences, which begin in the classroom and include outdoor learning at natural sites on public lands, agricultural lands, and partner sites (highlighting a need to improve support for transportation to field experiences away from school). *Desired outcome: Facilitate integration of E-Lit / outdoor experiences into the curriculum so that it becomes part of the school culture.*

ACTION 4 *: Facilitate the use of parks and natural areas for outdoor learning through sharing of information – Provide information and programming to help encourage and incentivize schools to use parks/natural areas for outdoor learning experiences. Utilize centralized, coordinated online efforts through MSDE, Bay Backpack, and other sites as the hub for information (Year 2).

→ **Lead:** *Britt Slattery, MD DNR britt.slattery@maryland.gov with partners/small committees as needed.*

- (a) Help promote and “interpret” for teachers how to get funding for transportation through the “Every Kid in a Park” program, both the Federal program through National Park Service and the 2016 State Parks program – provide information to schools to simplify and clarify the process. (Year 1)
- (b) Facilitate increased use of State Parks by schools, such as by providing improved park facilities information for schools, planning a set of professional learning opportunities held at State Parks. (Year 1-2)
- (c) Coordinate with the Greater Baltimore Wilderness Coalition on methods to encourage and facilitate increased use of local parks, nonprofit sites, and other resources (this ties with Action 12). (Year 1-2)
- (d) Develop and share a “proof of concept” model of the intersection of Chesapeake Bay Program E-Lit, Stewardship, Diversity, and Public Access goals; showing a comprehensive example of integrating multiple disciplines through outdoor learning as part of the curriculum, connecting additional partners with schools, and utilizing natural/cultural heritage sites. (Year 1-2)

ACTION 5 *: Develop and market a “playbook” portal for outdoor learning –

Develop a “playbook” portal for resources and tools assist people in the field with building support for environmental literacy, outdoor learning, and unstructured outdoor time; and promote / facilitate its use among the E-Lit community. “Playbook” contents may include (for example) information and examples that define authentic experiences in nature, links to research on the benefits of outdoor structured learning and unstructured play, marketing tools, resources for educational professionals and decision makers, and more. → **Lead and subcommittee:** *TBD*

Desired outcomes:

- *Increase the number of administrators / decision-makers/ curriculum writers who support, encourage, and facilitate teachers taking students outside (on and off school sites) for authentic learning opportunities.*
- *Increase support and means for increasing children / families participating in active outdoor / nature experiences in more communities.*

Year 1: Develop outline for content, partners gather pieces that are readily accessible. Plan a timeline for compiling core material and launching the basic tool. Determine online format and where it will be housed. Once structure is framed, content can be built on an ongoing basis, with various contributors.

Year 2: Continue building the tool with attention to developing any pieces that don't exist elsewhere. Promote and launch the tool.

ACTION 6 *: Build administrative support for outdoor learning –

Build administrative support for outdoor learning and better align state-administered funding sources with E-Lit goals and requirements, including MWEE implementation. → **Leads and subcommittees:** *TBD*

- (a) Build on momentum gained at the CBP-sponsored Leadership Summit on Environmental Literacy (April 2016) to garner **active support** for and implementation of environmental literacy and outdoor learning – ongoing.

Regionally: Participate with CBP partners on next steps to engage higher level support regionally, and follow up on Maryland-specific actions/commitments; share MD's experiences with other states as requested; assist with planning additional annual Leadership Summits; determine our role in assuring statewide awareness of opportunities through the Every Student Succeeds Act (ESSA). – resulting in changed practices, programming, partnerships, policy, etc.

Statewide, at school system level: Host facilitated, model MWEE experiences for local school division administrators in Maryland, involving EE partners, to improve leadership support to increase MWEE implementation in all school systems. Focus on school systems most in need of support, identified using data from COMAR and CBP “ELIT” assessment results. Plan these events regionally across MD to serve 3-5 systems at a time; spreading them out over Years 1 and 2.

Statewide, among education/E-Lit community and partners: Continue assisting MSDE with hosting regional E-lit meetings among schools/school systems and EE provider partners. Focus on sharing best practices/models for integrating E-Lit with other disciplines.

(b) Identify needs and opportunities regarding funding for outdoor learning involving schools:

Year 1: Convene a panel to discuss comprehensive, collaborative, coordinated approaches and solutions to funding transportation for field experiences and for student stewardship efforts. This will occur as the focus of the Children In Nature meeting October 26, 2016.

Year 2: Develop and distribute resulting recommendations; meet with partners as appropriate to address priority opportunities.

ACTION 7 *: Promote an on-line community of practice for outdoor learning –

Centralize and promote online information sharing resources among partners to improve their content, reach and use by educators – to provide improved access to instructional resources, PD opportunities, program models, and research supporting outdoor learning and environmental literacy. → **Lead(s): TBD**

Year 1: Establish existing sites such as MSDE's E-Lit pages, Bay Backpack, MAEOE, Children In Nature, and MADE CLEAR as the hubs for certain types of information; assure that all desired types of resources are represented (such as instructional guidance and models, outdoor field sites, professional learning opportunities, funding resources, innovative partnership examples, etc). Coordinate among partners how these sites will be linked and shared through partners' sites, social media, etc.

Year 2, ongoing: Collect and contribute information as needed to include in these sites regarding resources for teachers/ educators.

Sustainable Schools:

(C) **Extend learning** beyond the classroom to the **schoolyard** and community, making outdoor learning spaces on school grounds and community stewardship priorities in Maryland schools for additional authentic experiences; provide guidance on development of outdoor classrooms, habitat areas, and other environmental features for use in instruction and student action projects; **AND**

(D) **Infuse sustainable practices throughout school culture**, encouraging schools to conserve resources, save money, and empower and prepare students as members of the workforce to address the realities of a changing climate; and coordinate support to increase the number of certified sustainable schools, including Maryland Green Schools, addressing buildings and grounds, human health, and the environment, and engaging students throughout the curriculum.

→ **Form and convene regularly a sustainable schools workgroup** to continue to provide support, promote, and facilitate sustainable schools practices throughout the curriculum, **with emphasis on the outdoors/ connections to nature** as CIN's role – through continued work on (and help promote) the *School Grounds for Learning* project, with Maryland Green Schools, and regionally through the Chesapeake Bay Agreement Sustainable Schools Action Plan. *Desired outcome:* Increase the ability of schools to utilize the schoolyard as a means for authentic hands-on outdoor learning and a place to practice stewardship – toward an eventual culture shift to embrace sustainable practices at school and in the community.

Sustainable Schools Workgroup – Leads: Laura Collard, Maryland Association for Environmental and Outdoor Education (MAEOE) director@maeoe.org and Kim Martinez, National Wildlife Federation kmartinez@nwf.org.

ACTION 8 *: Develop and market a framework for sustainable schools –

Assist with and participate in development and adoption of a framework for sustainable schools, and subsequent prescribed promotion activities – as guidance to inform the development of school system sustainability plans.

Year 1: Plan and conduct a collaborative workshop with stakeholders and partners statewide (pending funding) to develop a framework based on the US Green Ribbon Schools pillars, including relevant federal and state regulations.

Year 1-2: Proactively invite and engage a wider variety of experts in developing enhanced guidance on healthy schools practices.

Year 1-2, ongoing, contributing to framework and resources:

- Support / assist with a policy audit of (i.e., identify) existing regulations that pertain to the environment and could be used to further support sustainable schools practices.
- Help identify models of successful school system, state, and regional sustainability plans, share the information, and encourage replication.

[continued...]

ACTION 9 *: Enable the establishment of outdoor classrooms –

Work with partners to identify and recommend policies and existing funding sources to establish outdoor classrooms.

Year 1: Follow up on the fall 2015 Interagency Committee on School Construction (IAC) meeting that recommended that new construction requires an outdoor classroom; and pursue next steps with IAC and/or other resources.

Year 2: Determine recommendations to support outdoor classrooms outside of new construction.

-- *Additional Sustainable Schools actions to support, ongoing:*

- Encourage all MD schools to become Green Schools, provide support as needed to schools. Assist with efforts to build interest and awareness, especially among administrators at both the LEA/local level and at individual schools.
- Support efforts among partners to encourage establishment of sustainability plans in all school systems. Provide assistance and resource information to school systems statewide, using the MD School Grounds for Learning project as a key resource for staff training, improved communication, integration into instruction, etc. Assure outreach to and inclusion of schools in high need / underserved areas.

(2) *Connect more children outside of the school day with opportunities to play and learn in nature and practice stewardship through structured programs as well as self-directed activities.*

→ **Community Planning and Access to Nature Workgroup and subcommittees for each action – Lead: Sandi Olek, Maryland Department of Natural Resources, sandi.olek@maryland.gov.**

- (A)** Develop and promote planning policies and tools that increase safe access to parks and public lands for all Maryland citizens, addressing physical access, safety, facilities, activities and programming; and use gap analysis data to guide establishment of new or enhancements to existing green space as a means to improve health and community development.

ACTION 10: Engage the local and state planning community –

Year 1: Convene a small group to discuss how to connect CIN with planners in MD. Identify what is already happening, best management practices from MD and beyond, define list of partners and audiences.

Year 2: Host annual forum/dialogue with decision makers and partners to promote examples of good design and engaging people in using public spaces.

ACTION 11: Provide a centralized resource for local partners and community planners –

Develop a Community Planning Pattern Book website (site hosted by DNR) to provide ideas and guide inclusion of easily accessible green space. Include best practices and examples from across Maryland and beyond; and examples of policy, practices/programming, and design. Include examples of successful coordination among partners and recommendations to help facilitate coordination and aligning of resources.

Year 1: Develop outline for Pattern Book.

Year 2: Develop website.

- (B)** Invest in public parks and green spaces, promoting efforts that improve citizen interest and comfort level in using natural areas at parks and public lands for recreation, learning, and stewardship; including effective programming, outreach, mentoring, and volunteer opportunities, with intentional efforts to increase inclusion of community members from diverse backgrounds.

ACTION 12:

Coordinate with other public awareness tools and promotion campaigns to connect Marylanders to nature.

Year 1: Locate research/ data on interests and barriers among park users / non-users. Use information to identify where CIN can effect change (e.g., through marketing, education, programming, support for infrastructure improvements, etc.). Coordinate with Greater Baltimore Wilderness Coalition on efforts to address equity in park use and access.

Year 2: Coordinate/ upgrade park finding tools, such as websites and apps, and expand partnerships in order to streamline and connect similar resources; and assure that local parks & recreation and privately owned facilities are included. Explore how the Partnership can support corporate and large campaigns.

ACTION 13: Identify green space access and infrastructure needs that can be addressed through existing and new funding sources.

Year 1: Utilize the Re-invest MD report and recommendations to identify how green spaces are funded throughout the State. Identify the policies guiding where and how parks and green space is developed, and what can be done to focus resources to meet needs.

Year 2: Choose and implement action(s) based on outcome of above.

(3) *Support and present clearer pathways for career opportunities and workforce development for environment-based 21st Century jobs:*

- (A) Promote development of student leadership and enrichment programs that support in-depth understanding of environmental issues and opportunities for involvement in implementing solutions, and prepare youth for environment-based jobs through mentoring, encouraging development of incentives for providing experiential opportunities, alignment of job corps and internship programs to provide a continuum of opportunities, and intentional outreach to connect talented youth in underserved communities to these programs; **AND**
- (B) Improve awareness of the wide array of jobs in environmental, science, and STEM fields, by working through formal education academic and guidance programs at all grade levels preK-20 to provide information and opportunities.

ACTION 14*: Identify and help increase awareness of environmental career pathways –

Identify existing environmental career development opportunities and how they contribute to and lead to paid jobs/careers. Identify gaps, needs, and ways to improve this path for more students.

→ **Subcommittee Leads:** *Britt Slattery, MD Department of Natural Resources* britt.slattery@maryland.gov and *Tara Baker, Chesapeake Bay Trust* tbaker@cbtrust.org

Year 1: Identify existing youth career development opportunities and invite representatives to participate in a meeting to explore ideas for an improved pathway for environmental jobs/careers. Identify how students get information, opportunities, courses (preK-20) related to natural resources career fields, and other resources. Identify gaps/needs in delivering program information, recruitment, serving diverse participants, etc.; suggest solutions and make recommendations. How does the formal education system support these opportunities for students? Involve national, regional, state and local student/ youth/ careers organizations and conservation corps and similar -type programs, MSDE Career and Technology Education (CTE) Programs, school guidance representatives, and Institutions of Higher Education (IHEs).

Year 2: Develop a resulting short list of recommendations/ actions to address needs in existing opportunities and in support through schools, and choose 1-2 key item(s) to address this year. Compile information on programs and resources for use by schools, youth programs, etc.

(4) *Contribute to widespread recognition and acceptance of the importance and benefits of interacting with nature, from early childhood through adulthood, so that it becomes a priority consideration across educational and community planning – by implementing a communications plan that ties into larger scale efforts to bring nature into the mainstream, links to applicable research on benefits, and highlights success stories of improved quality of life and student achievement; and recommending supporting policies and operations, working collaboratively across State government and all other sectors and disciplines.*

ACTION 15: Plan and conduct promotional/ marketing activities to increase awareness of opportunities and benefits associated with connecting with nature. Utilize existing and develop new outlets for social media, email and online networking and information sharing, integrated with other similar actions, above.

Year 1: Establish a small group to develop a specific, manageable plan for social media and other promotional activities; develop a 6-12-month schedule of messages to distribute on a regular basis (e.g., monthly). Tie into and cross-promote National, statewide, and local efforts, campaigns and events; promote “places” to go to experience nature; distribute articles and research to support benefits, and contribute these to the “Playbook” action, above.

→ **Subcommittee Lead:** *Stephanie Oberle, Montgomery Parks*, stephanie.oberle@montgomeryparks.org.

Year 1-2/ ongoing: Use the above to guide promotional activities and continue to build resources, content, and networks. Work across agencies and additional partners to expand approaches to use these resources to encourage change (e.g., operations practices, cultural shift). → **Establish standing workgroup and Lead** (TBD).

(5) ***Improve practices and initiatives as a result of ongoing evaluation***, supporting efforts of Maryland Public Schools and the Chesapeake Bay Program to periodically measure and report the progress of school districts' environmental literacy programs and student outdoor learning experiences; and enlisting means to measure and evaluate the value and/or success of informal nature experiences outside of school and their impact on Maryland's children.

→ **Establish workgroup and Lead** (*TBD*).

ACTION 16 *:

Develop recommendations for evaluating the impact of E-Lit work on schools (formal education) and how to use the evaluation for program improvement.

Year 1: Use the CBP "ELIT" Tool and MSDE COMAR Survey data to establish a 'baseline' to use for identifying areas of need to focus efforts such as professional development and other opportunities; and to help highlight future growth of E-Lit. Seek funding as needed to support evaluation in out-years.

Year 2/beyond: Determine effective means as feasible to evaluate and show correlation between educator professional development and/or other E-Lit actions and their effect on achieving improvements in getting kids outdoors, student achievement, and other meaningful measures. Use results to help design or recommend improved practices.

ACTION 17:

Develop an evaluation plan similar to above for actions regarding connecting children to the outdoors in the community.

Year 1: Identify possible approaches to and/or resources for evaluation. Seek partners and/or funding as needed.

Year 2: Develop a long term plan for establishing a baseline and subsequent evaluation of progress, needs/gaps, and effective measures for improvement.

ACTION 18 *:

Track statewide progress toward Chesapeake Bay Watershed Agreement Environmental Literacy actions.

→ **Leads**: *DNR and MSDE staff support for CIN.*