

Partnership’s Mission: To inspire, advise, and mobilize resources to ensure all of Maryland’s youth experience, understand, and conserve the natural environment.

The Partnership serves as an advisory body, working collectively to bring about advancements in the following areas. These actions have been identified to guide CIN work in 2017. All of the actions (except those under “Nearby Nature”) specifically match up with and help achieve Chesapeake Bay Watershed Agreement Environmental Literacy Action Plans for Maryland, 2016-18. http://www.chesapeakebay.net/chesapeakebaywatershedagreement/goal/environmental_literacy

Environmental Literacy (ELit) / Every Student Every Year (ESEY)
Support educators and education systems in advancing environmental literacy through planning, training, exchange of best practices, linking schools with partners, and more.
Increase opportunities to eventually provide outdoor learning experiences for “every student every year.”

ELit / ESEY – Professional Development
Leads: Laurie Jenkins, Montgomery County Public Schools laurie_c_jenkins@mcpsmd.org
 Joe Harber, National Aquarium jharber@aqua.org

Actions	Notes or steps	Actions Achieved -- April 2016-March 2017
<p><u>ACTION 1:</u> 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. <u>Lead contact:</u> Laurie Jenkins, Montgomery County Public Schools laurie_c_jenkins@mcpsmd.org</p>	<p>Work within MSDE and Institutions of Higher Education (IHE) structures to influence the standards and certification as feasible; consider model program to integrate E-Lit into coursework, with emphasis on Standard 1 (Issues Investigation and Action).</p>	<p><i>CIN E-Lit members are participating in a MSDE workgroup to analyze new draft pre-service K-6 Elementary Teacher Standards, in regard to the inclusion of the content and pedagogy of environmental education. Workgroup is being reorganized and needs to wait for update to standards from the accrediting body (CAEP-Council for Accreditation of Educator Preparation). MSDE bases the state professional standards for teachers on CAEP.</i></p>
<p><u>ACTION 2:</u> Professional Development for Teachers – Contribute to development of a plan to provide statewide professional learning for teachers in pedagogy to integrate E-Lit education (including Meaningful Watershed Educational Experiences – MWEEs), within local curricula in multiple disciplines, aligned with NGSS and other requirements. <u>Lead contact:</u> Donna Balado, MSDE donna.balado@maryland.gov</p>	<p>Develop guiding documents: align NGSS and ELit standards; CBP group is developing a new MWEE guide. Next, develop and implement regional workshops to provide PD in the standards alignment, and roll out MWEE guide.</p>	<p><i>MSDE is working on guiding documents containing ELit & NGSS alignment, which will contribute to providing valuable PD experiences for everyone and, ultimately drive curriculum integration. Continuing work on ELit & NGSS alignment. MWEE guide being developed. Next Environmental Educator Briefing will take place in March. Aligned standards should be ready for draft review.</i></p>

<p><u>ACTION 3:</u> Professional Development for Environmental Education (EE) Providers –</p> <p>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.</p> <p><u>Lead contact:</u> Joe Harber, National Aquarium jharber@aquaria.org</p>	<p>Conduct needs assessment – develop, distribute, and collect results of survey to EE providers.</p> <p>Develop plan for training based upon results of needs assessment.</p> <p><i>This <u>may</u> dovetail workshops noted above.</i></p>	<p><i>A small committee is working on planning NGSS-focused workshop(s) for nonformal educators, to learn more about the requirements and how they can align their programs. The committee developed a Needs Assessment to better understand the professional learning needs of environmental education practitioners and provider organizations regarding NGSS and other areas. The Needs Assessment was distributed in early Feb 2017. A total of 55 people responded to the survey by the April 1st deadline. Results are currently being tabulated and summarized. Preliminary findings have been encapsulated into PowerPoint slides. The committee will discuss results and next steps in late April/ early May.</i></p>
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ELit / ESEY – Authentic Experiences In Nature

Promote and assure authentic experiences in nature for all Maryland students by promoting and supporting Meaningful Watershed Educational Experiences (MWEEs), which begin in the classroom and include outdoor learning at natural sites on public lands and other partner sites.

Facilitate integration of E-Lit / outdoor experiences into the curriculum so that it becomes part of the school culture.

Actions	Notes or steps	Actions Achieved -- April 2016-March 2017
<p><u>ACTION 4:</u> Facilitate the use of parks and natural areas for outdoor learning through sharing of information –</p> <p>Provide information and connect resources to help encourage and incentivize schools to use parks/ public lands/ natural areas for outdoor learning experiences.</p> <p><i>(This also fits with Nearby Nature and Promotion...)</i></p> <p><u>Lead contact:</u> Britt Slattery, MD DNR britt.slattery@maryland.gov</p>	<p><i><u>Example:</u></i> Facilitate increased use of State Parks by schools – provide schools with improved information on park facilities and resources such as through the “Every Kid in a Park” program, facilitate offering teacher workshops at parks, etc.</p>	<p><i>(a) Every Kid in a Park information was collected and distributed through CIN networks to help educators understand how to get access to parks for their students, either as school groups or individually – including how to get passes, how to find participating parks, additional educational resources. In Maryland, Governor Hogan decided to honor the Federal passes at State Parks for 2016; and DNR made a subsequent decision to continue that for 2017. (b) DNR is working on a checklist of school-friendly facilities information for Maryland State Parks, to make available to schools/educators statewide. (c) DNR has identified several State parks that are underutilized by schools, where they would welcome additional use by schools; will align those sites with school systems nearby with interest in using the park sites and resources to enhance their E-Lit curriculum; DNR aims to develop customized teacher PD at those parks to link these needs.</i></p>

<p>Ongoing: Improve support for field experiences away from school.</p> <p>Identify/address needs for transportation resources, policies, administrative support, and other logistics.</p> <p><u>Lead contact:</u> <i>Britt Slattery, MD DNR</i> britt.slattery@maryland.gov</p>		<p><i>This was part of the focus of the CIN Partnership meeting Oct 2016 (broad discussion about access to nature and transportation-related opportunities). In follow-up, ideas generated have been compiled and are being considered; a meeting of relevant partners to discuss further will occur early spring; resulting ideas and recommendations will be distributed to facilitate and encourage partners to connect to address priority opportunities.</i></p>
<p>(ACTION 14: Improve pathways to conservation-related careers and green jobs.)</p>	<p>See Promotion section, below.</p>	
<p>ELit / ESEY – Sustainable Schools</p> <p>Leads: <i>Laura Collard, Maryland Association for Environmental and Outdoor Education (MAEOE) director@maeoe.org</i> <i>Holly Shields, National Wildlife Federation shieldsh@nwf.org</i></p> <p><i>Coordinate support to help increase the number of certified sustainable schools.</i></p> <p><i>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.</i></p> <p><i>The decision was made by MAEOE and NWF (co-leads in this area) to focus this work around the Sustainable Schools Framework process (see below). MAEOE holds 3-4 meetings/year to discuss the MD Green Schools program. MAEOE and NWF meet bi-monthly to promote the certification. Meeting held in June each year to discuss next year's application.</i></p>		
<p>ACTION 8: Develop a framework for sustainable schools –</p> <p>Assist with and participate in development and adoption of a framework for sustainable schools, and subsequent activities to promote its use – as guidance to inform the development of school system sustainability plans.</p> <p><u>Lead contact:</u> <i>Laura Collard, MAEOE</i> director@maeoe.org</p>	<p>Use this as a tool to support efforts among partners to encourage establishment of sustainability plans in all school systems.</p> <p>Working to engage a wider variety of subject matter experts in helping schools plan and implement sustainable schools practices.</p>	<p><i>The framework and workshop are being planned / developed. Clarity of purpose and primary audience were determined at an initial meeting; next steps in planning. Identified lead facilitators for meetings aligned with the 3 pillars of sustainable schools. Discussions with leads to determine agenda, format and set dates (spring); sent meeting invitations. Survey sent to 24 school districts to determine which districts have Sustainability Plans and Sustainability leads; results are being collated April 2017. Bay Backpack website for School Grounds for Learning resources is under construction; site ready for testing in June; on schedule to launch in September. Region 3 EPA, MAEOE and health experts met with Baltimore City Schools reps in March to discuss sustainable schools, air quality and student engagement in schools.</i></p>

<p><u>ACTION 9:</u> Enable the establishment of outdoor classrooms – Work with partners to identify and recommend policies and existing funding sources to establish outdoor classrooms at schools.</p> <p><u>Lead contact:</u> <i>Laura Collard, MAEOE</i> director@maeoe.org and <i>Holly Shields, National Wildlife Federation</i> shieldsh@nwf.org</p>	<p>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.</p>	<p><i>Several counties have expressed interest in developing more outdoor learning areas and considering policy and resource investment. MAEOE and others are working with them. The School Grounds for Learning resource is progressing (see #8 above). We are seeing examples of integration of School Grounds for Learning concepts in Green Schools applications, MWEE BWET grantee work; teacher PD to build confidence using the schools grounds; student learning NGSS and STEM ties to school grounds lessons; outdoor classroom construction; use of habitat on the school grounds for standard aligned lessons; creation of habitat on the school grounds.</i></p>
<p><u>Ongoing:</u> 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.</p> <p><u>Lead contact:</u> <i>Laura Collard, MAEOE</i> director@maeoe.org</p>	<p>Assure outreach to and inclusion of schools in high need / underserved areas.</p>	<p><i>MSDE EE Briefing held (Fall 2016) provided a session with insights from previous USDE Green Ribbon School honorees. Notified participants of application deadline. MAEOE Conference (Feb 2017) contained sessions focused on promoting Green School status. 145 Applications received March 2017 for 2016/17; applications reviewed (3 reviews each); MD Green Schools awards announced April; US Green Ribbon results to be announced on Earth Day, April 22.</i></p>

Nearby Nature

Lead: *Sandi Olek, MD DNR* sandra.olek@maryland.gov

*Increase **access to “nearby nature,”** to assure opportunities for youth and others to experience nature within close proximity of communities, or to reach larger natural places.*

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.

Actions	Notes or steps	Actions Achieved -- April 2016-March 2017
<p><u>ACTION 10:</u> Engage the local and state planning community – Develop and promote planning policies and tools that increase safe access to parks and public lands for <u>all</u> Maryland citizens, addressing physical access, safety, facilities and more as part of community development; and use gap analysis data as a guide.</p>	<p>Collaborate with local and state planning authorities on green space initiatives, supporting and promoting parks and public lands, and more. Host an opportunity to work together to identify needs, promote best practices, engage decision makers.</p>	<p><i>Workgroup has been formed and met late summer. List of best practices assembled and community green guide web-site launched. The framework for a fall (2017) forum has been developed, potential partners are reviewing scope. The forum will likely be combined with the Greater Baltimore Wilderness Coalition fall climate resiliency forum.</i></p>

<p><u>ACTION 11:</u> Provide a centralized resource for local partners and community planners –</p> <p>Develop a Community Planning Pattern Book website to provide ideas and guide inclusion of easily accessible green space. Include best practices and examples from across Maryland and beyond; examples of policy, practices/programming, and design; examples of and recommendations for successful coordination among partners; and more resources.</p>	<p>The new guide is live! See the following website hosted by DNR:</p> <p>Community Green Space Guide</p> <p>http://dnr.maryland.gov/cin/Pages/GreenSpaceGuide/home.aspx</p>	<p><i>Outline developed using input from community planning workgroup, input from July 2016 CIN meeting. Website has been development, was presented to members of the Sustainable Growth Commission, and to the American Planning Association MD/ DE conference in October 2016. Web-site launched and demonstrated at Feb 2017 CIN Partnership meeting. Developed survey for feedback for site (link on the website). Plan to launch twitter links and best practices campaign to promote site.</i></p>
<p><u>ACTION 12:</u> Coordinate with other public awareness tools and promotion campaigns to connect Marylanders to nature.</p>	<p>This is being combined and coordinated with other actions found under Promotion. Several action items address similar sharing of resources online, and streamlining how users find that information.</p>	<p><i>Initial review of park finding tools included local and state park data. DNR is coordinating with Greater Baltimore Wilderness Coalition (GBWC) and has included some equity data in GBWC's climate resiliency mapping tool.</i></p>
<p><u>ACTION 13:</u> Identify green space access and infrastructure needs that can be addressed through existing and new funding sources.</p> <p>Promote efforts that improve citizen interest and comfort level in using natural areas at parks and public lands and other green spaces.</p>	<p>Includes intentional efforts to increase inclusion of community members from diverse backgrounds.</p>	<p><i>Session at MD/DE American Planning Association conference included discussion on possible recommendations. MD Sustainable Growth Commission education workgroup working on re-invest MD efforts; met to discuss ways to support CIN through this effort. The workgroup is in support of fall 2017 forum, and will help to promote forum, identify speakers and audiences.</i></p>
<p><u>Ongoing:</u> Nature Play Spaces – Developing recommendations, guidance, providing training for decision-makers and others, supporting demonstration projects.</p>		<p><i>The Nature Play Spaces Workgroup met in July with the MSDE Office of Childcare at their bi-monthly meetings of regional managers and supervisors. The workgroup shared presentations on the science behind the benefits of nature play, the growing example of nature play spaces at child care facilities in MD, and how these spaces fit into licensing guidelines and COMAR regulations. The group led an interactive discussion and was well received by the MSDE staff. The Chief of Licensing then invited the workgroup to present the same material at the statewide meeting of licensing supervisors, fall 2016. Presented a workshop in December in St. Mary's County for southern MD child care providers. Evaluations from participants were outstanding, such as "I wasn't familiar with these ideas, but I loved them!" and "I'm excited about taking the information I've learned today and implementing it into my center." The group also presented at the MAEOE conference, Feb 2017.</i></p>

Promotion / Building Support

Lead: Britt Slattery, MD DNR britt.slattery@maryland.gov

Promote and build support for use of the outdoors for learning, discovery, and healthy play; and promote outdoor experiences as a means for career exploration. Identify gaps and barriers, and make recommendations to decision-makers regarding solutions that will bring about change to advance in all of these areas.

Promotion – Building Administrative, Leadership, and other Support; outreach, messaging, etc.

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.

Actions	Notes or steps	Actions Achieved -- April 2016-March 2017
<p><u>ACTION 6:</u> Build administrative support for outdoor learning –</p> <p>To 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; and</p> <p>To better align state-administered funding sources with E-Lit goals and requirements, including MWEEs.</p> <p><u>Lead contact:</u> Tom Ackerman, Chesapeake Bay Foundation, tackerman@cbf.org</p>	<p>Currently planning, identifying needs, opportunities, and resources for: <u>regional</u> activities through Chesapeake Bay Program to reach higher-level administrators; and <u>statewide</u> measures to reach school system administrators and content supervisors (at State and local levels); and to facilitate ongoing communication and partnerships.</p>	<p><i>Ongoing actions are focused on continuing to build leadership support among agencies and organizations. The continuation of in-state regional meetings is being considered for this year [new staff at MSDE still becoming oriented to all that has been happening]. Reviewing and clarifying this action in order to identify an appropriate lead; small group has discussed potential approaches for outreach to school administrators at different levels (State, LEA, or school-level) -- need followup planning time. Have engaged leadership in speaking at recent events to celebrate milestones and successes (such as conservation corps graduations; World Future Council visit to MD to learn about out E-Lit program; etc). CBP continues to convene regional ELit workgroup and members share among states how they are implementing new actions as a result of the April 2016 meeting; 2nd summit planned for April 2017 to reconvene State leaders. The Oct 2016 CIN meeting focused on discussion of transportation and transportation-related opportunities to increase access to nature – intended outcome of identifying recommendations for next steps on priority actions. Action items are being considered, information was organized, will convene groups with similar interests to choose some manageable action items and move forward (spring/ summer 2017). DNR has 2 part time interns working on some actions, such as collecting information on funding sources, and community planning best practices to address access issues. An offshoot of this group will discuss school-specific matters re transportation.</i></p>

<p><u>ACTIONS 5, 7, 12, 15, combined:</u></p> <p>Develop an outreach and marketing plan and tools for specific audiences. <i>See below.</i></p> <p>All will be coordinated and linked among key partners' websites to serve as hubs of information, including CIN, MSDE, MAEOE, and Bay Backpack.</p> <p><u>Lead contact:</u> TBD – need to form a small planning committee</p>	<p>Actions 5, 7, 12, and 15 will be combined to the extent appropriate. First steps include identifying audiences and appropriate tools needed, defining scope and intent.</p>	<p><i>Several action items here address similar sharing of resources online, and streamlining how users find that information. CIN is looking at these actions to further combine them, and to work with new staff managing Bay Backpack to assure coordination and not duplication.</i></p>
<p><u>ACTION 5:</u> Develop a “playbook” portal for outdoor learning – <i>Feature resources and tools to build awareness and support for outdoor learning as part of E-Lit, as well as unstructured outdoor time – such as: examples that define authentic experiences in nature, links to research on the benefits of outdoor structured learning and unstructured play, marketing tools, additional resources.</i></p>	<p>– for educational professionals, decision makers, advocates, etc.</p>	<p><i>Actions 5, 7, 12, and 15 will be combined, as above.</i></p> <p><i>An outline was drafted for potential contents of the “playbook” portal. A social media / marketing outreach plan was drafted to begin to carve out messages that can be delivered among the partners. Coordination of different types of information to be made available through the set of “hubs” has been discussed, to meet Bay Agreement action items. All of these items are on hold temporarily while we sort out the combined approach to online resources, as noted above. MSDE has started an e-community for ELit, science, and STEM educators, though it is not yet all-inclusive.</i></p>
<p><u>ACTION 7:</u> Promote an on-line community of practice for outdoor learning – <i>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.</i></p>	<p>– for educators</p>	<p><i>Share your work with outdoor learning, discovery, and play using #MDkidsoutdoors on social media!</i></p>
<p><u>ACTION 12:</u> Coordinate with other public awareness tools and promotion campaigns to connect Marylanders to nature – <i>To build interest and awareness, bridge barriers, encourage and facilitate increased participation in outdoor pursuits at parks / public lands. May include outreach, social media, as well as coordinating existing park-finding tools, websites, and apps.</i></p>	<p>– for the public</p>	<p><i>Share your work with outdoor learning, discovery, and play using #MDkidsoutdoors on social media!</i></p>
<p><u>ACTION 15:</u> Plan and conduct promotional/ marketing activities to increase awareness of opportunities and benefits of connecting with nature. Utilize existing and develop new outlets for social media, email and online networking and information sharing, integrated with other similar actions. – <i>Develop a manageable plan for social media and other promotional activities, to be shared among partners and tie into national, statewide, and local efforts, campaigns and events; promote “places” to go to experience nature; distribute articles and research to support benefits, etc.</i></p>	<p>– for educators, decision-makers, parents, public... various audiences.</p>	<p><i>Share your work with outdoor learning, discovery, and play using #MDkidsoutdoors on social media!</i></p>

Promotion – Career Pathways

Leads: Tara Baker, Chesapeake Bay Trust, tbaker@cbtrust.org
 Britt Slattery, DNR, britt.slattery@maryland.gov

Support and present clearer pathways for career opportunities and workforce development for environment-based 21st Century jobs (conservation careers and green jobs).

Promote development of student leadership and enrichment programs, and prepare youth for environment-based jobs through various opportunities.

Improve awareness of the wide array of jobs and careers in environmental, science, and STEM fields – working through formal education academic and guidance programs at all grade levels preK-20.

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. Compile information on programs and resources for use by schools, youth programs, etc.

Lead contact: Tara Baker tbaker@cbtrust.org

Career pathways forum held Dec 2016; several follow-up recommendations and actions are being planned, including 1-2 additional events in 2017.

Includes intentional outreach to youth from diverse backgrounds and/or in underserved communities.

Identified existing youth career development opportunities, chose a date December 2016 to bring together those interested and working in the field. Held a Green Career Pathway Forum to (1) explore ideas for an improved pathway for environmental jobs/careers and identify how students get information, opportunities, courses (preK-20) related to natural resources career fields, and other resources; (2) identify gaps/needs in delivering program information, recruitment, serving diverse participants, etc.; (3) suggest solutions and make recommendations. Workgroup composed a list of existing internship, corps and other youth programs connected to the environmental field. This included: youth programs like MCC, P&P Branches Program, Volunteer Maryland, Montgomery Conservation Corps, Ready Program, Chesapeake Research Consortium, Jr MANNRS; large entities with internship programs such as NOAA, National Aquarium, NCTC, USFWS; contacts from the school system e.g., MSDE and the Career & Technology Education Program. The day included young professionals speaking about their career pathways, obstacles, etc. Also group breakouts into 3 sessions: (1) defining and promoting green careers, (2) building green career readiness in schools and (3) building a diverse workforce. Throughout these discussions the Workgroup took notes on what was being discussed. The workgroup has aggregated these recommendations into a list of potential actions for CIN and others to improve the green career pathway in MD. The Workgroup will meet in late April to discuss which actions to prioritize.

Promotion – Evaluation and Tracking

Improve practices as a result of ongoing evaluation that measures the impact on Maryland's children of formal environmental literacy programs/student outdoor learning experiences, and informal nature experiences outside of school.

<p><u>ACTION 16:</u> Develop recommendations for evaluating the impact of E-Lit work on schools (formal education) and how to use the evaluation for program improvement.</p> <p><u>Lead contact:</u> Donna Balado, MSDE donna.balado@maryland.gov and Shannon Sprague, NOAA shannon.sprague@noaa.gov</p>	<p>This action supports CBP's Environmental Literacy Indicator ("ELIT") Tool and the MSDE COMAR Survey; using 'baseline' data to identify areas of need, to focus support efforts such as professional development, and to help highlight future growth of E-Lit.</p>	<p><i>Bay Program is working on interpreting and presenting data gathered in the ELIT survey tool, with input from ELit workgroup reps in all states. CBP retreat in December reviewed the data and began planning for next survey. The baseline has been established so care has been taken to revise the tool with an eye for maintaining data integrity.</i></p>
<p><u>ACTION 17:</u> Develop an evaluation plan similar to above for actions regarding connecting children to the outdoors in the community.</p> <p><u>Lead contact:</u> Stephanie Oberle, Montgomery Parks stephanie.oberle@montgomeryparks.org</p>	<p>Pilot survey instrument developed to provide initial information. Will identify possible approaches to and/or resources for evaluation, and seek partners and/or funding as needed.</p>	<p><i>As a first step, an intern has been working on a pilot evaluation of impact EE programs have had on school students visiting Brookside Gardens (Montgomery County).</i></p>
<p><u>ACTION 18:</u> Track statewide progress toward Chesapeake Bay Watershed Agreement Environmental Literacy actions.</p> <p><u>Lead contact:</u> Britt Slattery, DNR britt.slattery@maryland.gov</p>	<p>This is an ongoing activity</p>	<p><i>CIN has aligned our workplan with the Maryland actions under the Watershed Agreement. We are working on approx. half of the CBP plan, and that represents approx. half of our CIN plan. We will continue to identify additional partners to achieve remaining actions for the CBP plan. Tracking progress (ongoing); working on re-focusing our action items to assure effective outcomes, within our capacity. Most items are in progress and tracking well. Still need to reconfigure a few actions and identify a lead and working group for the combined action.</i></p>