



Maryland Project
Green Classrooms
**Annual Progress
Report &
Recommendations**

January 2022

The statewide Project Green Classrooms initiative was established in June 2017 by Governor Larry Hogan's [Executive Order 01.01.2017.12](#). The executive order directs the Maryland Department of Natural Resources (DNR) to provide an annual report to discuss Project Green Classrooms' activities and make recommendations to advance the priorities of the initiative. The Project Green Classrooms initiative, co-chaired by DNR and the Maryland State Department of Education (MSDE), is an advisory body tasked with making recommendations to state decision-makers in three main focus areas including:

1. Supporting environmental literacy programs in schools;
2. Increasing access to nearby nature; and
3. Promoting the use of the outdoors for learning, discovery, healthy play and career exploration.

Action Plan

The work of Project Green Classrooms (PGC) has been guided by annual plans to track collaborative efforts through each year. These annual PGC plans have also been aligned with the environmental literacy goals of the [2014 Chesapeake Bay Watershed Agreement](#) and play a key part in developing the two year Maryland environmental literacy action plan which works towards the goals of the Agreement. An updated 2021-2022 action plan was developed by the coalition partners with specific, actionable items to advance work in priority areas.

2021 Recommendations Update

Project Green Classrooms has been working collectively to identify gaps and barriers to environmental literacy and access to nature in Maryland. The PGC partners have developed solutions and recommendations that will bring about change in these priority areas. In this report, each current PGC recommendation is listed along with brief information about the actions and implementation strategies undertaken in 2021. More detailed information on these recommendations can be reviewed in the [2020 report](#) and accessed through the [Project Green Classrooms website](#).

1. Environmental Literacy Programs in Schools

RECOMMENDATION: Support converting the existing Environmental Literacy Program Specialist position at MSDE from a contractual to a permanent position.

PROGRESS: This recommendation has been achieved. MSDE converted this to a permanent position in November 2019, and hired a new specialist that began work in February 2020.



2. Environmental Literacy Guidance to Local Education Agencies

***RECOMMENDATION:* Develop and promote guidance to local education agencies on environmental literacy programs, identify effective professional development components and support implementation of these programs.**

PROGRESS:

- An initial draft environmental literacy instructional framework has been developed. This framework connects the Environmental Literacy Standards to multiple content area standards. Within this framework, enduring understandings, essential questions, and objective statements will support environmental literacy program development, implementation, and review given the revised Environmental Literacy Standards adopted in April 2020.
- To further develop this framework, MSDE was awarded a grant from the National Geographic Society to build an additional resource to provide environmental phenomena, examples showcasing best practices in environmental education, and interdisciplinary integration of Environmental Literacy Standards. This document will be crafted in collaboration with formal and informal educators in 2022.
- Professional learning was being implemented through Project Green Classrooms-aligned organizations and agencies to include: the expansion of Meaningful Watershed Educational Experience and Climate Change virtual programming through National Oceanic and Atmospheric Administration's (NOAA) Chesapeake Exploration Courses, summertime collaboration and outdoor exploration with Chesapeake Classrooms, providing teachers with increased comfort teaching outdoors through the Maryland Association for Environmental and Outdoor Education support, and back to school programming from Alice Ferguson Foundation and NOAA through MSDE's summer workshops.

FUTURE DIRECTION:

- In 2022, MSDE will host feedback sessions for the environmental education community to inform the development of the instructional framework.
- Partnerships between Project Green Classrooms agencies and organizations will continue into 2022 to provide professional learning opportunities to formal and informal educators. With funding provided by the National Geographic Society grant, professional learning will be offered to local school systems and the environmental education community as the final draft of the instructional framework is developed.
- In collaboration with Washington College, through a grant from DNR, a statewide environmental literacy plan is in development. In 2022 the template will be piloted with a few local school systems to develop or refine their environmental literacy plan.

3. Preparation of Pre-Service Teachers

RECOMMENDATION: *Develop and promote guidance to local education agencies on environmental literacy programs, identify effective professional development components and support implementation.*

PROGRESS:

- Strategic planning occurred for the convening of pre-service teacher (training prior to entering service as a teacher) program faculty and instructors. A collaboration with the North American Association for Environmental Education's Higher Education online community was established to discuss lessons learned in order to shape Maryland's pre-service teacher learning community.
- Project Green Classrooms' higher education committee member organizations identified and applied for funding through multiple grant programs to develop and deliver the professional learning series for college and university faculty in summer 2022.

FUTURE DIRECTION:

- A benchmark survey of pre-service educators will be piloted at Towson University to serve as baseline data to inform development of guidance and further tools to evaluate efficacy of teacher preparation programs for environmental literacy. Through a grant from DNR, Project Green Classrooms is partnering with a faculty member at Washington College to develop guidance and other support materials around the Environmental Literacy Standards.
- Once funding has been secured, the professional learning series for college and university faculty will be implemented beginning in summer 2022 to integrate Environmental Literacy Standards into their courses.

4. Sustainable Schools

RECOMMENDATION: *Establish a sustainable schools team at the state level to support school districts in developing and implementing sustainability plans.*

PROGRESS:

- In order to identify drivers, incentives and guidance to facilitate and increase sustainable practices, planning was initiated to convene a multi-disciplinary group of state agency representatives & stakeholders in spring 2022.
- Implementation of the Maryland Green Schools Act of 2019 began during FY21. With a goal of increasing the number of green schools in Maryland, the Maryland Association of Outdoor and Environmental Education increased support for the development of green schools and provided professional development to teachers about the benefits of green schools in their school communities.

FUTURE DIRECTION:

- Using the guidance developed during stakeholder meetings, identify opportunities for incorporating sustainable practices into existing local plans that provide environmental, educational and economical benefits to the school system.
- Project Green Classrooms will connect environmental science subject matter experts to schools to provide technical assistance on stewardship and/or larger scale restoration efforts. Utilizing the Chesapeake Bay Program's Bay Backpack website as a repository of this information, partner websites will be promoted through existing sustainable schools programs.



5. Funding For Outdoor Learning Experiences

RECOMMENDATION: *Identify public and private funding sources to support field-based outdoor educational experiences for students at public lands (such as local, state, and federal parks, forests, natural areas, and reserves) or other nature-based sites away from school campuses.*

PROGRESS:

- Initiated a Maryland Cost Analysis Survey to be completed in spring 2022. A committee of environmental education funders determined basic cost analysis from grant data. To ground truth and refine, the committee, led by MSDE, will distribute a survey to all 24 school district contacts to collect current experiences, costs, needs, and how school districts are using different sources of funding from grants to Elementary and Secondary School Emergency Relief Funds to support environmental literacy. Survey results will show funding gaps and inform cost needs to ensure every student in Maryland receives a field-based outdoor educational experience away from their school campus at least once before graduating.

FUTURE DIRECTION:

- Given the realities of instructional changes due to COVID-19, many schools are not engaging in off campus field experiences. As a result, Project Green Classrooms plans to expand this recommendation to include novel ways to maintain the presence of greater natural spaces while students remain on school grounds.
- Project Green Classrooms will use the results of the Maryland Cost Analysis Survey and the Chesapeake Bay Program Environmental Literacy Indicator Tool to provide funding recommendations for ways Maryland can ensure equitable access to high quality, rigorous environmental literacy programming for all students.

6. Environmental Education Experiences on Public Lands

RECOMMENDATION: *Establish a panel or other means to identify and invest in a sustainable model of environmental education implementation at state parks. Develop partnerships with outside organizations to support environmental educational experiences within Maryland State Parks to benefit students and their families.*

PROGRESS:

- After setting record attendance in State Parks during 2020, the Maryland Park Service (MPS) focused on a renewed interest in the Leave No Trace initiatives for the 2021 season and beyond. The seven Leave No Trace principles have been incorporated into interpretive programming and the creation and promotion of new stickers and signs within State Parks.
- Through a partnership spearheaded by the Friends of Patapsco Valley State Park and Towson University, Chesapeake Bay Foundation, Patapsco Heritage Greenways and more, MPS has deployed a Mobile Visitor Center to respond nimbly to the ever-changing needs within Patapsco Valley State Park. The Mobile Visitor Center is deployed to park special events such as Es Mi Parque, an event program geared towards Spanish speaking park visitors, and deployed on busy and at capacity days to maximize visitor experience and support crowd control. This effort is an example of partner collaboration, and the

flexibility of resources to serve the dynamic visitorship and needs for environmental education.



FUTURE DIRECTION:

- Convene education community members to determine needs and opportunities to conduct professional learning focused on increasing teachers' comfort teaching outdoors, work with partners to address needs, and increase professional learning that encourages using public lands.

7. Equitable Access to Green Space

RECOMMENDATION: Address equitable access to parks and green space, working with communities.

PROGRESS:

- DNR has worked to complete the Park Equity Analysis, a GIS analysis that demonstrates the disparities of physical proximity to parks. DNR continues to provide this tool to local communities as they embark on their land preservation, park and recreation plans.
- To improve access at state lands, DNR together with partners such as the Chesapeake Conservancy, NPS and NOAA worked to provide seasonal bilingual rangers at some of the busiest parks this summer. These rangers developed and conducted bilingual user surveys and programs to help create a more welcoming and inclusive environment at our state parks. DNR is developing a multicultural outreach plan that will build upon this initial survey work and engage outside partners to define challenges, best practices and priorities.
- MPS' Es Mi Parque program also coordinated with several partner organizations to host events and program in busy state parks on Saturdays during the summer season. Additionally, Sandy Point State Park's new Nature Center is being designed to be bilingual, with all exhibit text in both English and Spanish.

FUTURE DIRECTION:

- The Project Green Classrooms partners will focus on both equitable access to parks and outdoor green spaces to include working with schools and communities to provide access to schoolyards and greenspaces during the school day. Future work will identify and promote existing incentives and help communities prioritize projects that establish and maintain equitable access to safe outdoor spaces.
- Use the Park Equity tool and additional health and connectivity initiatives to focus increased tree planting for both improved access to green space and for health benefits in areas of highest need.

8. Outdoor Play and Learning Environments

RECOMMENDATION: *Establish formal policies that encourage and facilitate all public and private early learning facilities to designate space for children to interact with nature.*

PROGRESS:

- A workgroup on licensing of outdoor early childhood centers was formed representing groups such as educators, policy makers and more in 2021. The group began developing a pilot project based on a model program conducted by the State of Washington's Department of Education.



FUTURE DIRECTION:

- Project Green Classroom partners, including MSDE, DNR, and the Eastern Regional Association of Forest and Nature Schools, will continue to develop a pilot program that will engage local partners, develop guidance and highlight necessary changes to Maryland's existing licensing program. This program will increase equitable access for children to outdoor education programs, provide training for teachers and other education providers and improve access to needed resources to enroll in programs. This pilot program will also help to increase the amount of early childcare providers experienced in outdoor education in Maryland.

9. Improve Connections to Health and Wellness

RECOMMENDATION: Identify how best to include health considerations into all programs and services for children/youth/families.

PROGRESS:

- New steering and leadership committee members from the Maryland Department of Health (MDH) recently joined the Project Green Classrooms Initiative to identify how best to include health considerations into all programs and services for children/youth/families. A draft resource portfolio was developed and shared at a previous Project Green Classrooms Leadership Team meeting. It included a summary of the scientifically proven benefits of nature to academic learning, mental and physical health and other topics related to children and provided resources for outreach and building awareness. A review of existing policies that support outdoor time both during and outside of the school day is underway , and recommendations for the narrative format of the health benefits of outdoor time will be drawn from the scientific references.

FUTURE DIRECTION:

- In 2022, MDH will continue to engage members from the Project Green Classrooms, and interested stakeholders to determine target audiences, messaging and appropriate dissemination formats to support behaviors, which allow Marylanders to take advantage of outdoor and green spaces to improve health outcomes.

10. Coordination Among Complementary Groups

RECOMMENDATION: Direct, encourage, and guide coordination between Project Green Classrooms members and a variety of existing state boards, commissions and other stakeholders.

PROGRESS:

- Project Green Classrooms continues to reach out to organizations and agencies to meet the Chesapeake Bay Program's Goals and Outcomes. Most recently, Project Green Classrooms engaged with the National Association of Interpretation to collaborate about reaching additional audiences in parks and other settings. This allows Project Green Classrooms to expand access by communicating effectively to engage underserved populations.
- Through the North American Association's Environmental Education Professional Development for Higher Education online platform, Project Green Classrooms initiated collaboration with professionals in Wisconsin engaged in work similar to the professional learning the higher education committee would like to implement in Maryland. Additionally, partners have been in collaboration with Washington State to learn how they navigated the process to persuade outdoor preschools to get certified.

FUTURE DIRECTION:

- Project Green Classrooms will deliberately expand its network to include groups and organizations that reach diverse and underserved communities, ensuring their voices are represented as recommendations are prepared.

Looking Ahead Into 2022



Priority Areas

Defining goals and priorities for Project Green Classrooms is ongoing and reflective of the work of the coalition. The Project Green Classrooms steering committee will be leading a revitalization of the initiative's mission and goals as defined in the executive order early in 2022. During the October 2021 Project Green Classrooms Leadership Team meeting, three of the 10 major recommendations were elevated as priority issues for 2022. Further discussion of the Leadership Team and partners identified expansion of ideas for these priority areas to reflect current conditions:

- Addressing equitable access to parks and green spaces with a focus on expanding access on school grounds.
- Developing guidance about children's health related to environmental literacy programs and services to include health benefits for the entire school community.
- Leveraging funding opportunities to support off campus learning experiences in order to reestablish relationships with informal environmental education partners.

Additional leadership considerations include opportunities to leverage Chesapeake Bay restoration efforts and emerging local examples of natural resource curriculum developed for career and technology schools.

An opportunity exists to connect Project Green Classroom actions with the Tree Solutions Now Program which will plant 5 million trees across the state. These efforts will further the connection of trees and green space to the community, support the greening of schoolyards and encourage community stewardship of our natural resources

Collectively, Project Green Classrooms will evaluate priority areas that maximize the benefit of bringing together varied agencies and organizations of the coalition to build an informed community proficient in environmental literacy that supports equitable access to nature. As such, future work plans, reporting and efforts will focus on these identified shared priorities.