

**Maryland Department of Natural Resources  
Environmental Literacy Funding Opportunity**

**Grants Gateway -- Guidance for Outcome 4: Outdoor Learning and Watershed Stewardship**

**Outcome 4:**

Improve student ability to take action benefiting Chesapeake and coastal ecosystems through outdoor learning and stewardship.

**Background:** This opportunity, funded through the EPA Chesapeake Bay Implementation Grant, is offered primarily to support two key components of environmental literacy programs for students in pre-Kindergarten through grade 12: outdoor learning field investigations, preferably taking place on public lands, and related student stewardship activities. Programs supported will be those that demonstrate how they are part of comprehensive Meaningful Watershed Educational Experiences (MWEEs) that contribute to school environmental literacy programs, meeting state Environmental Literacy requirements and/or Next Generation Science Standards. Projects **must** emphasize stewardship, involving students in extended learning that includes outdoor experiences and leads to concrete student action projects that aim to improve water quality in the Chesapeake Bay watershed. For this opportunity, [public lands](#) include primarily state-managed properties such as [state parks](#), [estuarine research reserves](#), designated [natural areas](#), [state forests](#), [trails](#), [water trails](#), etc.; or may include Federal facilities such as National Parks, National Wildlife Refuges, etc.; or local, county or municipal parks offering opportunities to explore and study nature and natural systems. ***Given changes to school situations and practices during and in the wake of the COVID-19 pandemic, accommodations for alternative arrangements will be considered, such as blended learning that includes asynchronous student investigations at home or in their community, a combination of virtual and in-person learning. School/district guidance regarding the pandemic/reopening must be included/documented in the application.***

Eligible costs necessary to bring outdoor learning and stewardship to fruition may include transportation and facility fees, supplies for field investigations and stewardship projects, and teacher professional development and technical assistance necessary to conduct the program's student activities. Professional development may involve assistance with transitioning to blended virtual/in-person outdoor learning options (including asynchronous, at home or in the community activities), training on virtual or blended learning and associated technology tools, and lesson planning support. Stewardship activities may take place at school, in the surrounding community, or elsewhere as appropriate to the program's content. Student stewardship may include community outreach or awareness activities that students can develop and share with others virtually/using technology. An emphasis on planning for future curriculum integration will be considered.

School systems (districts) and partners working with schools are encouraged to apply under this outcome. Partners may include local or state agencies, nonprofit entities such as environmental organizations or outdoor schools. Proposals are preferably for systemic district-wide programs and can support schools that are fully ready to implement their MWEEs but are lacking funding resources for the stated costs associated with outdoor experiences and/or stewardship; or school districts that need more help in planning and implementing quality, sustained student experiences as part of their local curriculum. There is a preferred minimum request of \$25,000 up to a maximum of \$100,000 (those with projects less than \$25,000 are encouraged to arrange a discussion with the outcome contact listed here, to determine if the project may be eligible). Funds may be used for the 2020-2021 school year, and summer of 2021 for planning and teacher preparation. Funds should serve as many students as possible.

**Need ideas for nearby public lands and how to arrange a visit?** Please check out our [Outdoor Learning on Public Lands](#) page (full link address: <https://dnr.maryland.gov/Education/Pages/teachersonpubliclands.aspx>) for more information. And [Bay Backpack](#) is a great place to find instructional resources, field study sites, stewardship ideas, and more.

**Intended Outcomes:**

- Increased outdoor learning about the environment at sites where students can experience nature/natural resources. Engagement of students in hands-on, interactive learning about the environment through innovative means during distance learning.
- Support for schools, particularly those with demonstrated economic need or funding barriers, to provide improved environmental literacy programs that include outdoor learning experiences.
- Assistance building environmental stewards among Maryland students by nurturing a passion for the outdoors, and increasing understanding of actions that will protect and improve the quality of local waterways and the Chesapeake Bay.
- Actionable student-led stewardship projects focused on improving habitat and water quality in the Chesapeake Bay watershed within Maryland.
- Support educators and schools to build capacity and skills to integrate a variety of learning opportunities using technology and other means for blended virtual/at-home learning, to provide students with environmental education during distance learning.

**Allowable Expenses:**

- Transportation costs to public lands such as state parks, research reserves, etc. as noted; federal parks or refuges; or local parks and public green spaces. Expenses may include buses, boats, public transit, etc.
- Site fees, program fees, cost per student. (This includes online fees for virtual experiences.)
- Site needs (portable toilets, reasonable accessibility modifications, etc.), if not available through another source and that would, if not funded, prevent the field experience from taking place for all students.
- Field equipment/supplies to support the outdoor experience(s) (such as boots/gloves, water quality monitoring equipment, nets, and other necessary field equipment) and stewardship projects (such as trees/plants, shovels, other habitat restoration supplies, etc.). These are items that will be added to curriculum supplies and are not otherwise funded by the schools' funds/budgets.
- Substitute teachers as needed to allow teachers to lead student field experiences.
- Staff assistance (e.g., from partners) for program support directly related to components of the proposed activities.
- Professional development costs that are directly associated with the proposed experiences and necessary for teachers to be able to lead these experiences as part of the curriculum, including training on virtual teaching and learning and associated technology or other tools.

**Budget & Timeline:**

- \$100,000 total is available (2021-2022 Opportunity)
- Minimum proposal \$25,000 (if your request is slightly smaller, contact DNR to discuss)
- Maximum request is \$100,000
- Timeline is not limited to one year, and funds may be used during parts of two school years if necessary. This funding must be used by / projects completed by June 30, 2022.
- DNR expects to fund a small number of projects under this opportunity (likely three or four projects).

**Eligible Applicants** - the following, serving as a resource or partner for schools:

- Local school systems or districts
- Institutions of higher education
- Non-profit environmental education providers
- State or local agencies
- Parks authorities in local or state agencies
- Individual schools may apply but should keep in mind the minimum funding amount and timeline for spending, as well as the selection criteria.

## **APPLICATION GUIDANCE:**

Applicants are encouraged to use the following guidance as they prepare answers to the questions in the online application. The criteria described are strongly encouraged and will earn applications higher ranking, though they are not required. Applicants should clearly articulate, within the narrative responses to the application questions, information pertaining to any of these points that apply to their program. Any additional pieces to support this information may be included in the uploads (see suggestions below).

You may want to prepare your responses in a separate document and paste them into the text boxes in the online application. Length limits provided for some questions are based on using a font such as 11 or 12 point Times, on standard 8.5 x 11" paper with ¾-inch margins.

**Selection Criteria** include the following. Additional guidance regarding the criteria is embedded within the application questions, below:

- Funds will be used to support student watershed investigations as part of comprehensive Meaningful Watershed Educational Experiences (MWEEs). ***During the COVID-19 pandemic and associated distance learning accommodations, we encourage applicants to propose creative solutions to integrate various, alternative means to engage both teachers and students in learning about the environment. Although the original intent of this funding opportunity has been to get students outdoors for learning and stewardship, given the situation, new ideas are welcome. Preference will be given to those programs that deliver environmental education using ingenuity during distance learning, but still contribute to the long term goal of enabling schools to engage student groups outdoors in the future.***

In order to address equity challenges, ideally the projects will support students in under-represented, under-resourced or high need communities, Title I schools, or areas where access to nature is severely limited. Funds will be used preferably to support outdoor interaction with natural settings away from school campuses such as on public lands, but alternatives will be considered and *should be discussed with the project manager in advance especially in light of the ongoing COVID-19 pandemic and associated accommodations. Links to mapping tools to use to identify these communities are provided, here.*

- The proposal demonstrates support for and contribution to environmental literacy priorities with a MWEE focus, for programs that have already begun being implemented or are currently under development.
- The program aims to use funds cost-effectively to reach ALL students (or as many as feasible) systemically, i.e., within a given grade throughout a school system.
- The program includes professional development for teachers as needed to facilitate the student activities.
- Partners demonstrate the ability to undertake and sustain the proposed work.

## **Required Attachments:**

- Transmittal letter from applicant organization, with signature of authority
  - Letter(s) of support from the school system(s) superintendent(s)
  - Environmental Literacy Plan or other evidence of environmental literacy programming -- such as curriculum alignment, Meaningful Watershed Educational Experience plan or Environmental Literacy Model (ELM), etc.
  - **School/district guidance regarding the pandemic/reopening must be included/documented if the requested project includes distance learning accommodations.**
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## APPLICATION QUESTIONS GUIDANCE:

As a guide, you should limit your narrative for all questions to a **total of no more than 8 pages**; uploads are separate.

### **Section 1: COMMON APPLICATION:**

#### **Proposal Abstract --**

Describe your project including the overall goals and methods of the proposed project(s). **Limit 5 sentences.**

#### **Demographics --**

Please describe the population(s) of students that will be served and engaged in this program, including demographic information about the students and their community. Include information about the percentage of students on Free and Reduced Meals (FARM) Program, percentage of schools designated as Title I, or with a high number of Section 504 Plans, etc. *The Department of Natural Resources is committed to expanding the diversity, equity and inclusion of Marylanders in its programs and services. To the extent possible, demographics as well as economic need will be considered as a priority factor in decisions under this opportunity, aiming to put the funding to its best use in this regard among applications received.*

- Criteria: Funds will be used to support student watershed investigations as part of comprehensive Meaningful Watershed Educational Experiences (MWEEs), ideally supporting students in under-represented, under-resourced or high need communities, Title I schools, or areas where access to nature is severely limited. The program addresses priority communities and student populations identified using tools such as the [Maryland Environmental Justice Screening Tool](#), [Maryland Park Equity Mapper](#), and the [Get Kids Outside in Maryland](#) initiative. These are suggested resources but not the only means to determine priority or need. Provide information to support how the audience or school system was selected.

#### **Local Environmental Need --**

Please describe local environmental issues, problems or phenomena that might be particularly prominent in the project area to add weight to your proposal. Is your chosen area or school district affected by environmental issues (poor water quality, pollution from urbanization, strong economic ties to diminishing natural resources, etc.); or are students situated to be able to positively affect change? Use tools such as the Chesapeake Bay Program's [ChesapeakeProgress](#) or the [Maryland StreamHealth map](#), to identify, demonstrate, or support this information.

#### **School System Need or Gap--**

Discuss the curriculum focus or other changes in the school system that this project will ultimately support or address, including the emphasis on outdoor learning and stewardship, and incorporating it into the curriculum. How will this project help schools implement the environmental literacy program or MWEE in a way that they have not been able to before? Demonstrate need: Provide information to illustrate the fiscal challenges and/or budget gaps or other challenges for the school(s) or school system(s) involved. **Limit to 2 pages or less.**

- Criteria: The program aims to use funds cost-effectively to reach ALL students (or as many as feasible) systemically, i.e., within a given grade throughout a school system.
  - Recipients will be required to have a method in place for selecting the students (schools) to be served, for example, a brief application internal to the school district with criteria that describe how individual schools will be selected for participation. The plan for this process should be described in the application.
  - The proposed program is cost-effective, utilizing funds within reasonable costs to reach as many students [and teachers] as feasible to achieve stated goals.

#### **Project Goals and Outcome(s) --**

Describe succinctly the goals and objectives of the proposed program/project.

### **Applicant's Experience / Role --**

Describe your ability to undertake and sustain the proposed work. Briefly explain your experience with this type of activity and your role in the project. If there are partners on board, explain their role in the project and the abilities they bring to the partnership.

- Criteria: Partners demonstrate the ability to undertake and sustain the proposed work.

### **PROJECT TIMELINE**

**Key Milestones --** Provide a concise timeline describing the implementation, activities, major tasks, milestones, and deliverables, with their associated start and end dates.

### **REQUIRED ATTACHMENTS**

- Transmittal Letter -- from the applicant's agency or organization on letterhead, with signature of executive authorized to request funding on applicant's behalf.
- School System(s) Superintendent Support Letter(s)
- Environmental Literacy Plan (priority) or if there is no written plan, provide other supporting documentation to show how the program is anchored in the curriculum
- **School/district guidance regarding the pandemic/reopening must be included/documented if the requested project includes distance learning accommodations.**

### **OPTIONAL ATTACHMENTS -- upload under "Other Attachments"**

- Letters of support from partners (best to combine all into one pdf document)
- Supplemental supporting documentation for curriculum connections

### **Section 2: PROJECT DETAILS LISTING:**

When you see "Add New Item..." use your project name as below. You do not need the 8-digit watershed or to identify the legislative district for this application for Outcome 4.

**Site or Task Name --** For this application (under Outcome 4), use the title of your application that you entered at the beginning of the application.

### **Proposed Activities --**

Provide a description of the proposed activities, clearly explaining how it will address the specific criteria referenced in the solicitation for this funding opportunity. Include a description of the engagement of school districts, schools, teachers and students – for example: How will school system staff participate in shaping the program and integrating it into the curriculum? How will teachers be trained? What will students learn and do throughout the project? How many school districts, schools, students and teachers will be served, engaged, trained? How many field experiences are anticipated? Include a summarizing list of main **deliverables** throughout the project, including numbers to quantify project outputs and outcomes. When specifying stewardship projects, include an estimate of the anticipated square feet of rain garden, number of trees planted, quantity of stream buffer area created, or other restoration or implementation specifics Even though projects will be planned by students, give an idea of the potential magnitude of projects. ***This question is limited to one page.***

### **Which school systems will be served? --**

Check all school systems with which you will be working on this project. You must designate at least one. For applicants that are not school systems, those working with multiple school systems will be given a more favorable rating.

**Curriculum Connections --** Programs supported under this funding opportunity must be anchored or embedded in the curriculum, not conducted as an isolated activity or event. The program should align with the school system's

plans to meet state Environmental Literacy Standards as part of content in science, social studies, mathematics, language arts, or a combination of disciplines. The Meaningful Watershed Educational Experience (MWEE) is one means for delivering a comprehensive instructional program to meet academic requirements and is encouraged, though alternate programs with compatible elements (extended study, outdoor learning, stewardship activities, etc.) are acceptable for this funding opportunity. These elements should be described in the following section of the application.

### **Environmental Literacy Plan --**

Do(es) the school system(s) supported have a written environmental literacy plan in place or being developed? If so, please upload it as an attachment, and describe briefly here how this proposal supports it (which grade level(s), content areas, topics of study, etc.). If there is not a written plan, describe what is being done to contribute to developing a plan for the system or otherwise incorporating environmental literacy into the curriculum. If no formal environmental literacy plan exists, an alternate document to illustrate this may be uploaded under "Other Attachments." Some suggestions are below. If there are questions, contact the DNR Outcome Contact listed.

- Criteria: The proposal demonstrates support for and contribution to environmental literacy priorities with a MWEE focus, for programs that have already begun being implemented or are currently under development. Situations and documentation may include any of the following:
  - The program is part of the school district Environmental Literacy plan -- applicant should include a copy of the plan.
  - Describe/demonstrate that the schools/school system(s) have worked to plan and implement comprehensive environmental literacy programs/MWEEs as part of their curriculum, and everything else is in place except the funding for transportation and other costs associated with the off-site field experiences and/or for stewardship projects.
  - The schools/school system(s) are early in the process of building their environmental literacy programs/goals and garnering funds for transportation and other costs for outdoor learning and stewardship will boost progress in this effort (explain how the funding will benefit the process).
  - The school system included environmental literacy activities in their Every Student Succeeds Act (ESSA) plan for Title IV funding -- applicants should include documentation from the school district.

### **Meaningful Watershed Educational Experience (MWEE) description --**

Explain how this proposal is part of implementing a Meaningful Watershed Educational Experience (MWEE), including how it achieves or supports each of the elements listed below. Provide enough detail to describe the degree of student engagement in each element (what students will do, and which grade levels are involved), how teachers/educators are involved (what teachers will do), and how the elements are supported by partners from science-based resources, environmental education partners, or the community. Include an explanation of how this fits with and helps meet the required curriculum and aligns with academic content standards. Be sure to include, for the outdoor experiences, where students will go and what they will do there (very important). For the stewardship component, explain how students will participate in the planning and decision-making, and how educators will facilitate this process. ***This question is limited to no more than 3 pages.*** For more information visit: <http://baybackpack.com/mwee/what-is-a-mwee>.

- Issue Definition
- Outdoor Field Experience(s), issue investigation
- Synthesis and Conclusions
- Stewardship & Civic Action
- Supporting Practices: Active Teacher Support, Classroom Integration, Local Context, and Sustained Activity

**Is Professional Development needed? --**

Is teacher professional development needed in order to better prepare teachers to provide and facilitate a quality MWEE for students including field experiences and stewardship actions? If so, please explain (why it's needed, what teachers need to know, etc.), and include associated costs in the budget and justification. State the environmental education partners (or others) who are on board to provide this training. Describe what will take place, when, how long is the training, and what will the content include?

- Criteria: The program includes professional development for teachers as needed to facilitate the student activities, with environmental education partners on board to provide it. Professional development may involve assistance with transitioning to blended virtual/in-person outdoor learning options (including asynchronous, at home or in the community activities), including training on virtual or blended learning and associated technology tools, and lesson planning support.

**Section 3: BUDGET:**

Use the template provided in the online application for download. The template provides space below the budget table to break out costs (for example, list field supplies and costs for each) and briefly explain any justification or clarification necessary, so there is a clear understanding of how you will use funds. Match is not required, but it may be included if you will be able to report and document it during the project, in accordance with Federal guidelines. Providing a match is helpful and can add to a proposal's ranking.

Funding may be used to support school costs of participation (bus or other transportation allowed by school system policies, entrance fees to sites visited, substitute teachers, etc.) and costs for partners providing support for teacher training and student educational activities. See "allowable expenses" on page 1 of this guidance.

**Contact for Outcome 4:** Jen Wolfe, Maryland Department of Natural Resources, Explore and Restore Maryland Streams Program, [jennifer.wolfe1@maryland.gov](mailto:jennifer.wolfe1@maryland.gov), 410-260-8988