

School Grounds for Learning

- An online step-by-step instruction guide to implement hundreds of environmental action projects in schools and on school grounds (and in communities!) across the Mid-Atlantic.
- Designed to be used by schools, educators and organizations in any of the Chesapeake Bay watershed states and D.C. to enable students, teachers, administrators & school facilities personnel to effectively plan, utilize & sustain a variety of school environmental projects.
- All projects are standards-aligned and aligned with the pillars and application requirements of State Green Schools, U.S. Green Ribbon Schools and Eco-Schools USA (and resources from each are imbedded throughout).
- Funded by a NOAA-BWET grant, led by MAEOE, with the Fish & Wildlife Service and national & regional partner organizations and experts.

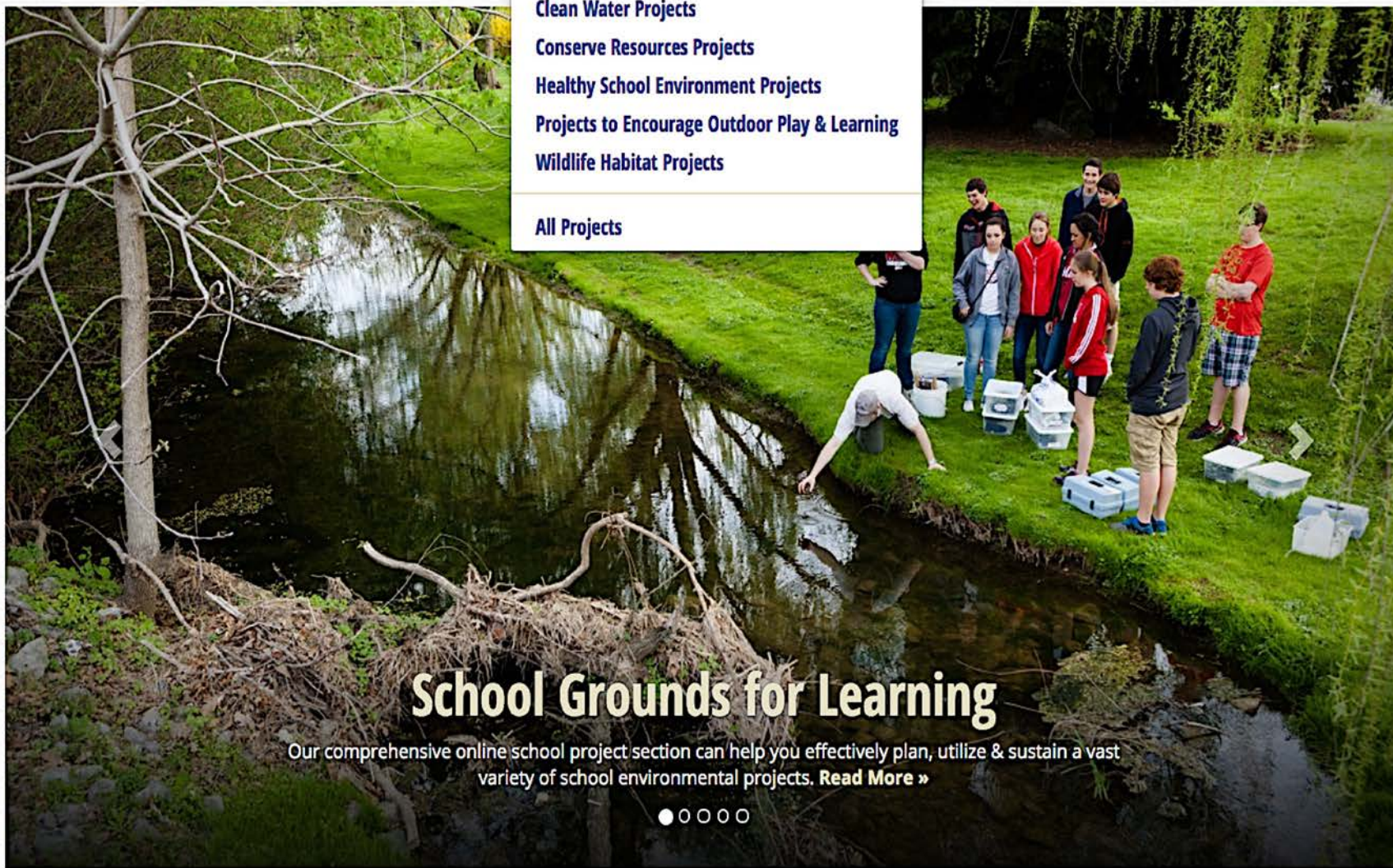
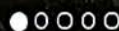
Very simply....we made it easy to



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School Grounds for Learning

Our comprehensive online school project section can help you effectively plan, utilize & sustain a vast variety of school environmental projects. [Read More »](#)



School Projects

The School Grounds for Learning initiative was funded by a NOAA-BWET grant, led by the Maryland Association for Environmental & Outdoor Education (MAEOE), and supported by a partnership of national & regional organizations and topical experts. Designed to be used throughout the Bay watershed, it provides comprehensive project resources aligned with U.S. Green Ribbon Schools pillars & application requirements, and Eco-Schools USA Sustainability Pathways, to enable schools to effectively plan, utilize & sustain a variety of school greening projects. **Tip:** Be sure to also check out the [Project Resource Library](#) to find incredible state & local project-specific resources for **all six Bay watershed states and D.C.! [Read More »](#)**



Clean Water Projects

Learn how to protect, improve and maintain creeks, rivers and the Chesapeake Bay through the installation of rain gardens & rain barrels, stream restoration & monitoring, wetland creation, and more!

[Read more »](#)



Projects to Conserve Resources

Explore projects that encourage and improve school energy efficiency, waste reduction & recycling programs and water conservation strategies!

[Read more »](#)



Projects for a Healthy School Environment

Learn about projects that support improved indoor air and water quality, sustainable and healthy food, green cleaning & classroom supply procurement, integrated pest management, physical fitness & outdoor time, and more!

[Read more »](#)



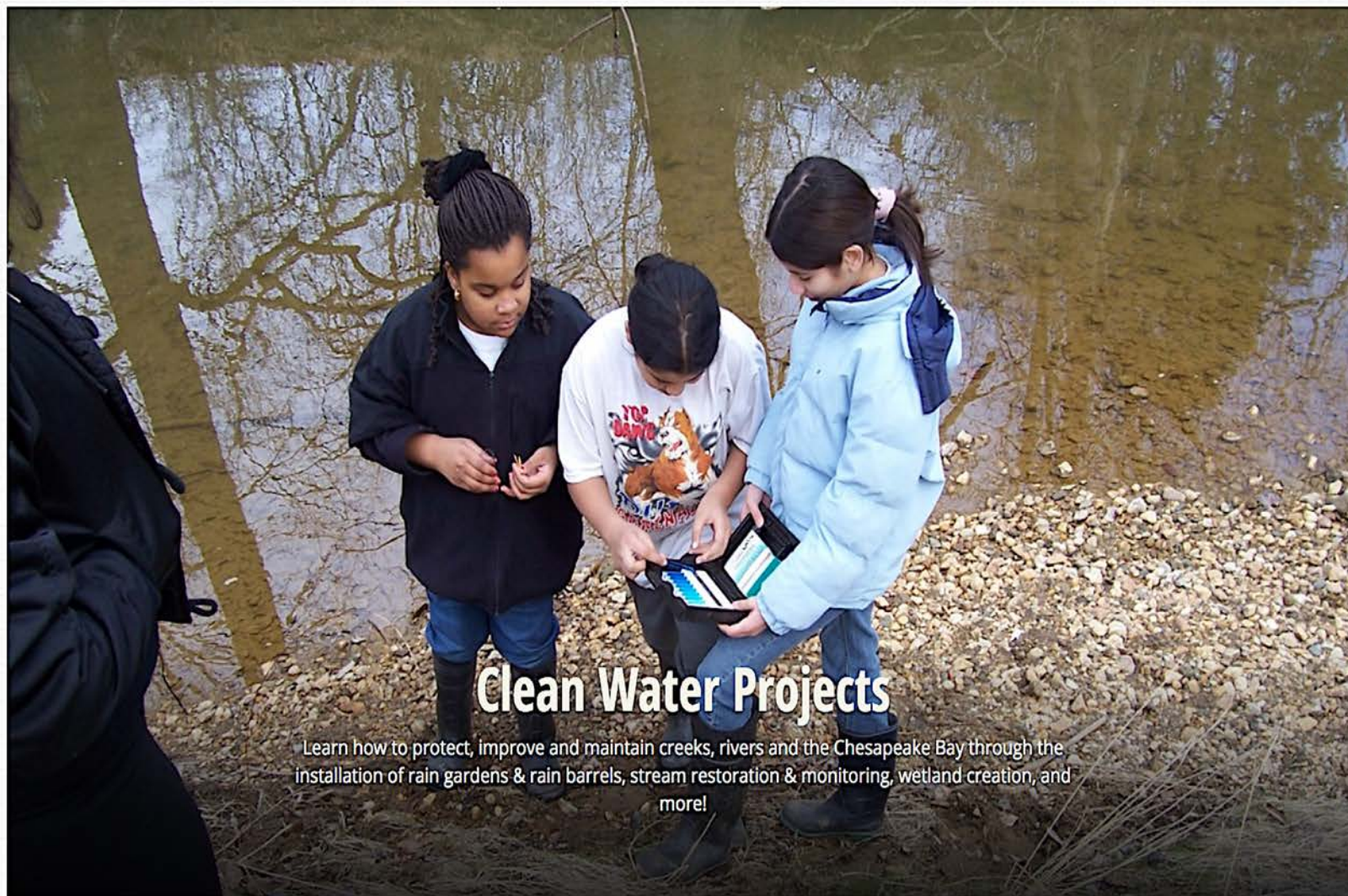
Projects to Encourage Outdoor Play & Learning

Explore features that can be added to your school grounds to encourage outdoor play and learning: outdoor classrooms, nature play areas, and features to encourage observation & discovery!



Wildlife Habitat Projects

Create, expand and improve habitat with projects that address native & invasive plants, woodlands, wetlands, streams and meadows and features that attract & support wildlife.

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Clean Water Projects

Learn how to protect, improve and maintain creeks, rivers and the Chesapeake Bay through the installation of rain gardens & rain barrels, stream restoration & monitoring, wetland creation, and more!

Topics

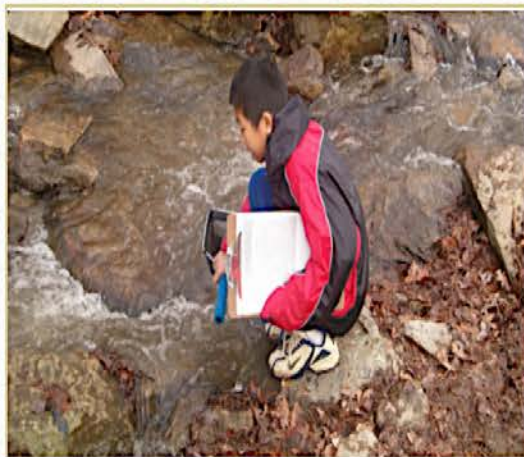


Rain Gardens & Rain Barrels

Installing rain gardens and rain barrels can help prevent local flooding and water pollution while conserving water and supporting valuable plant & wildlife habitat.

Projects »

- **Install Rain Barrels**
 - **Create a Rain Garden**
-



Streams

Did you know that everyone in the Bay watershed lives within a half mile of a stream, creek or river that flows into the Bay? Learn how to improve and protect waterways near you.

Projects »

- **Monitor Water Quality & Wildlife**
 - **Plan a Stream or River Clean-Up Event**
 - **Plant a Forest Buffer**
-



School Wetlands

Wetlands provide critical wildlife habitat and absorb stormwater runoff, plus a schoolyard wetland can also be a fascinating outdoor laboratory! Learn how to create, restore or enhance a wetland project on school grounds.

Projects »

- **Plan a School Wetlands Project**
-

[Home](#)[MWEE Guide ▾](#)[Teaching Resources ▾](#)[School Projects ▾](#)[Field Trips ▾](#)[Funding](#)[Blog](#)A photograph of a small garden growing through a hole in a wall. The garden is filled with green grass and several white flowers with yellow centers. The wall is made of grey concrete or stone, and the hole is irregularly shaped. The lighting is bright, suggesting sunlight.

Healthy School Environment Projects

Learn about projects that support improved indoor air and water quality, sustainable and healthy food, green cleaning & classroom supply procurement, integrated pest management, physical fitness & outdoor time, and more!



Green Cleaning & Sustainable Purchasing

There are many sources of chemical exposure in schools, from cleaning supplies, to science labs, to furniture and carpeting. Reduce the risk with green cleaning choices, safer chemical management, and sustainable product purchasing.

Projects »

- **Green Cleaning for Schools**
- **Purchase Green & Sustainable Products**
- **Safe Chemical Management in Schools**



Improve & Protect School Air Quality

Poor indoor air quality can impact the comfort and health of students and staff, which can affect concentration, attendance and student performance, and cause a variety of health problems. Learn more about improving air quality at your school.

Projects »

- **Improve & Protect School Air Quality**



Safe Drinking Water in Schools



Healthy & Responsible Transportation Projects

Addressing the ways students travel to and from school, and understanding the impact of those choices on the environment and children's health, is an important part of creating healthy school environments.

Projects »

- **Programs to Reduce Vehicle Idling**
- **Walking, Biking & Safe Routes Programs**



Integrated Pest Management (IPM)

Pesticides pose a serious threat to pollinators and can have short and long-term impact on children's health. Learn more below about developing an effective and environmentally sensitive school IPM plan to reduce contact with pests and exposure to pesticides.

Projects »

- **Integrated Pest Management (IPM)**



Healthy Sustainable Food for Schools

Learn about initiatives that can be implemented at your school to bring in fresh, local food; provide healthy school meals; improve student nutrition; provide edible gardening opportunities and connect schools to their local communities and farms.

Projects »

- **Healthy, Sustainable School Food Initiatives**
- **Procuring Healthy Food for Schools**
- **Edible School Gardens**



Physical Fitness & Outdoor Time

Studies show that time spent outdoors and active helps children's physical health, enhances attention spans, boosts classroom performance, and encourages environmental stewardship. Learn how to incorporate physical activity and outdoor time into the school day.

Projects »

- **Encourage Physical Fitness & Outdoor Time**

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Projects to Encourage Outdoor Play & Learning

Explore features that can be added to your school grounds to encourage outdoor play and learning: outdoor classrooms, nature play areas, and features to encourage observation & discovery!

Topics



Encourage Observation & Discovery

Even the best projects can fail if you don't incorporate elements that invite exploration and use. Learn about features to encourage students, staff and visitors to explore, utilize, enjoy and help sustain your project!

Projects »

- [Observation & Discovery Features](#)



Nature Play Areas

Learn how to create a safe, fun and engaging natural play space featuring natural items and creative play opportunities to connect children with nature, provide mental and physical health benefits, and promote future environmental stewardship!

Projects »

- [Create a Nature Play Area](#)



Outdoor Classrooms, Labs & Habitats

Learn how to construct and utilize outdoor classrooms, living laboratories and schoolyard habitats to provide engaging hands-on instructional and learning opportunities across the curriculum.

Projects »

- [Outdoor Classrooms, Labs & Habitats](#)



Conserve Resources Projects

Explore projects that encourage and improve school energy efficiency, waste reduction & recycling programs and water conservation strategies!

Topics



Recycling & Waste Reduction

Americans generate millions of tons of trash in our homes and communities. Learn about school programs to reduce, recycle & reuse resources and inspire students & staff to reduce waste at school and beyond!

Projects »

- Food Waste Reduction & Composting
 - Waste Free Lunches
 - Recycling & Waste Reduction Programs
-



School Energy Efficiency

States spend more on energy than any other school-related expense, aside from personnel. Learn how to implement engaging energy conservation programs that can save money and even potentially produce funding for your school, as well as exciting options like solar, wind and green roofs!

Projects »

- School Energy Efficiency Strategies
-



Water Efficiency & Conservation

According to the EPA, less than 1% of the Earth's water is usable for humans. With such a small amount of water available to us, small steps toward water conservation in our schools and communities can make a big impact.

Projects »

- School Water Conservation Strategies
-



Wildlife Habitat Projects

Create, expand and improve habitat with projects that address native & invasive plants, woodlands, wetlands, streams and meadows and features that attract & support wildlife.



Features to Attract & Support Wildlife

Explore dozens of projects to create habitat features to attract and support birds, bees, butterflies, amphibians, mammals & more!

Projects »

- [Install Features & Habitats for Wildlife](#)
- [Wildlife Problem-Solving](#)



Forest Buffers

If you have a stream or river on or near your school property, planting the edge can drastically improve water quality and increase wildlife habitat.

Projects »

- [Plant a Forest Buffer](#)



Meadows

Plant a meadow to provide erosion control, increase native habitat, and help restore plant and animal populations!

Projects »

- [Plant a Meadow](#)



Native Plants and Invasive Species

Learn how to choose, find and design with native plants to reduce pollution and increase wildlife habitat, and how to identify and manage invasive plant & animal species.

Projects »

- [Identify & Manage Invasive Species](#)
- [Chesapeake Region Native Plants](#)



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Projects »

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Woodland Enhancement Projects



Woodland Starter Projects

So What Does An Individual Project Page Look Like?






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Projects »

- **School Water Conservation Strategies**
-





School Water Conservation Strategies

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School Water Conservation Strategies

With the ease of turning a faucet, you may not often think about water conservation in your daily life. But did you know that forty out of fifty state water managers expect water shortages under average conditions in some portion of their states over the next decade? The numbers are staggering: The average person uses between 80-100 gallons of water each day. Just flushing a toilet uses 1 to 4 gallons per flush. Watering a lawn can use 2 gallons per minute. Just one dripping faucet can waste up to 2,000 gallons of water a year.

The largest uses of water in schools are restrooms, landscaping, heating & cooling, and cafeteria kitchens. Industry estimates suggest that implementing water-efficient practices can decrease operating costs by approximately 11% and energy and water use by 10-15%. Many water efficiency measures are easily implemented and of little or no upfront cost to the school, resulting in substantial savings (typically a 25-75% reduction of municipal water use). Learn more below about water conservation strategies for both indoor and outdoor water use. (Also be sure to visit our [National & State Green School Programs](#) page to learn more about local and national Green School programs and resources to help you to continue to improve the health and sustainability of your school!)

Before You Start

[Form an Action Team](#)
[Center for Green Schools: Water Management Video \(9mins\)](#)
[Center for Green Schools: Water Management Companion Guide](#)
[Review: EPA WaterSense Education Facilities Fact Sheet](#)

Design and Preparation

[Conduct a General Environmental Review Checklist](#)
[Assess Your School's Water Usage](#)

Implementation

[Choose Water Conservation Strategies](#)
[Develop a Water Conservation Action Plan](#)
[Signage: Share Your School Greening Efforts!](#)

Using Your Project

[EPA WaterSense for Kids Lessons](#)
[Participate in the Sustainable Water Challenge](#)
[Eco-School Sustainability Pathways Lessons & Resources](#)
[Eco School National Standards & Curriculum Alignment](#)
[Project Learning Tree Curriculum Offerings](#)
[Green Education Foundation: Sustainability Lesson Clearinghouse](#)
[Learning Lab Sustainability Lessons](#)
[EPA MyEnvironment: Search Tool of Environmental Data by Zipcode](#)
[Eco Schools Green STEM Initiative](#)

Resource Center

[Project Resource Library: Learn More!](#)
[National & State Green School Programs](#)
[Eco Schools USA Handbook](#)
[Bay Backpack Teaching Resources Search Engine](#)
[EPA Learning & Teaching About the Environment \(awards, resources, more\)](#)

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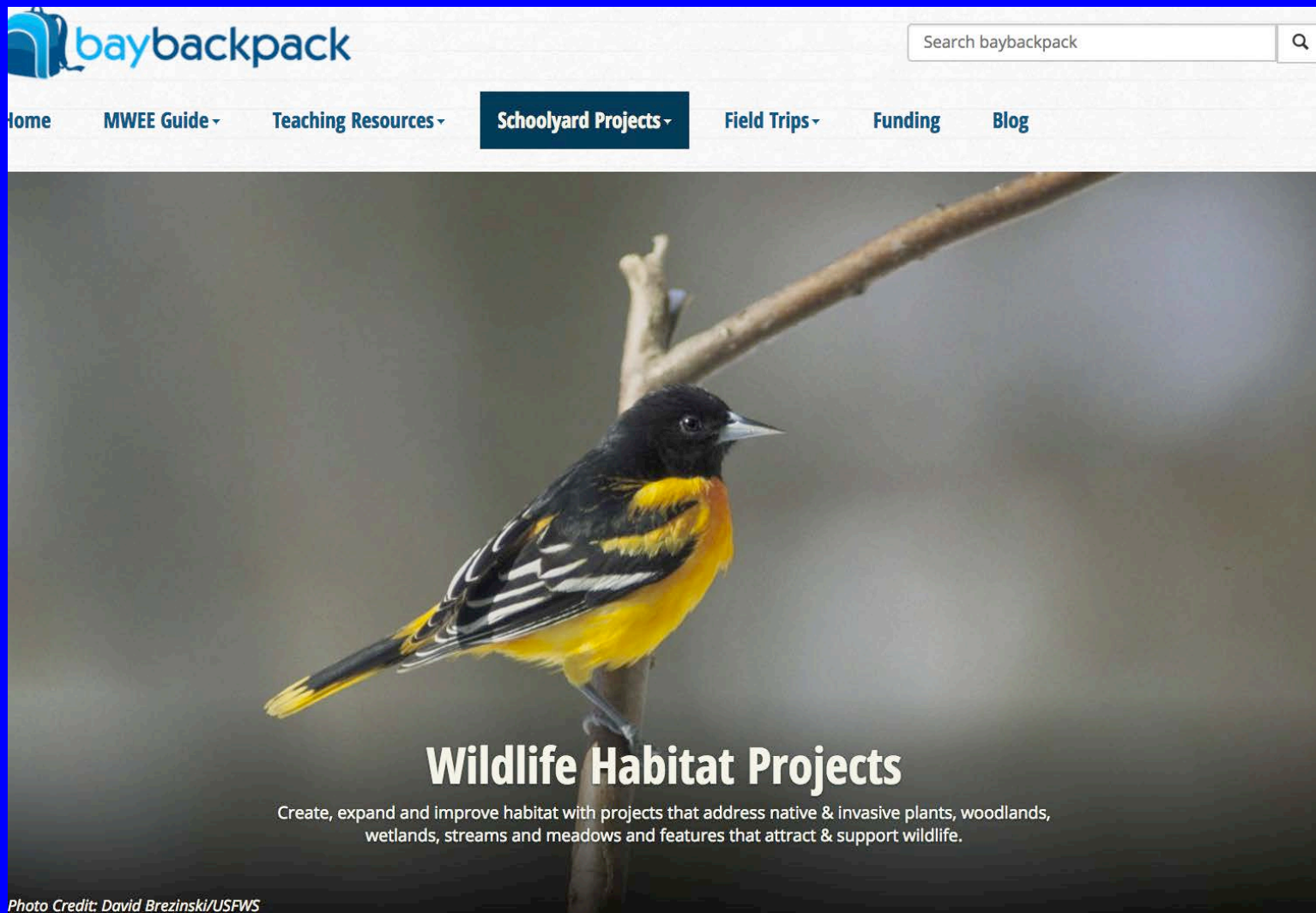
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Let's Try Another One...





Meadows

Plant a meadow to provide erosion control, increase native habitat, and help restore plant and animal populations!

Projects »

- **Plant a Meadow**



Plant a Meadow

Known for their striking colors and textures, meadows are grassland habitats that include a mix of wild grasses and wildflowers. Meadow grasses provide structural support with their dense, thick stems, and their fibrous root systems provide significant erosion control. Meadows also provide important habitat and food sources for many species of wildlife.

Love Wildlife? Plant a Meadow. Meadows support an impressive variety of wildlife. Tall grasses and wildflowers provide dense cover for ground-nesting birds and burrowing animals which attract predators including foxes, hawks and owls. Flowers provide important food sources with their blooms, leaves and seeds that support a vast variety of insects. Birds feed on these insects as well as highly nutritious seeds produced by meadow plants. Some plant species provide for a larger variety of insects than others, so choose wisely.

Take Action! Despite their undeniable value, meadows continue to be replaced by crops, pastures and development. Consequently, erosion and runoff has increased and many wildlife species that depend on grasslands are disappearing. Meadow projects are an excellent way to increase valuable native habitat and help restore plant and animal populations.

Before You Start

[Overview: Project Planning Basics](#)

[Overview: School Grounds Site Assessment](#)

Design and Preparation

[Overview: Project Design Basics](#)

[Meadow Design Considerations \(incl. seeds & plants\)](#)

Implementation

[Overview: Project Implementation Basics](#)

[Meadow Site Preparation](#)

[Meadow Seeding Technique](#)

Maintenance

[Overview: Project Maintenance Basics](#)

[Meadow Maintenance](#)

Using Your Project

[Overview: Using Your Project](#)

[Eco Schools Schoolyard Habitat Sustainability Pathway](#)

[Monitor for Change](#)

[Bay Backpack: Bay Animals Lesson & Activities](#)

[Project WILD \(K-12\)](#)

[Project WILD: Growing Up WILD \(Ages 3-7\)](#)

[Fostering Outdoor Observation Skills-Citizen Science K-8 \(AFWA\)](#)

[Eco-School Sustainability Pathways Lessons & Resources](#)

[Eco School National Standards & Curriculum Alignment](#)

[Project Learning Tree Curriculum Offerings](#)

[Eco Schools Green STEM Initiative](#)

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[Overview: Sharing Your Project](#)

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[Project Resource Library: Learn More!](#)

[Eco Schools USA Handbook](#)

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Project Planning Basics

Whether it's a waste reduction program within the walls of the school building or natural projects, such as habitat enhancement or outdoor classrooms in the exterior schoolyard, environmental projects on school grounds have the potential to significantly benefit both human and natural communities. Creating a successful project takes time and determination to ensure its continued use and long-term sustainability. The common qualities of excellent school grounds projects are: **ecological significance**, **curriculum integration** and **long-term community connection**. Effective projects improve the community's environmental health and provide students & teachers with opportunities for interactions with the natural world. These projects are an integrated component of the curriculum inextricably linked to the academic achievements of the school and the ecological health of the community. Whether you already have a project in mind, or are simply interested in learning about potential project choices, these first steps will help you create the foundation to ensure your project's success.

- **Establish Your Team:** Form a team to provide ideas, support, resources & whole-school investment.
- **Brainstorm Schoolyard Ideas:** What needs could a potential project address?
- **Survey the School Community:** Survey your school community to spur ideas and involvement
- **Brainstorm Schoolyard Possibilities:** Consider appropriate project types & features.

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Assessment



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School Grounds Site Assessment

Understanding your entire school site before choosing a project and project location is crucial for successful planning & implementation. There are two assessment phases: Developing a Master Plan and Assessing the Specific Project Site(s). To develop a master plan, you will walk the entire schoolyard with students using surveys to determine environmental conditions, use by wildlife & humans, and potential project sites & ideas. Once you have determined the location for your first project, work with students to assess the size and conditions of that site.

- **Phase I - Develop a Master Plan:** Conduct surveys of the schoolyard, wildlife and habitats; draw an informal master plan; decide on a project and develop a timeline
- **Phase II - Assess the Specific Project Site(s)** Measure the project site area, assess growing conditions, assess soil infiltration & texture.

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Project Design & Preparation Basics

Project Plans, Plants & Supplies, Budget How-To's

Now that you and your team have worked your way through the initial planning and site assessment process, you're ready to design your project in five simple steps! The first step is to take a moment and familiarize yourself – and your team – with the basic principles of schoolyard habitat design. Regardless of formality, all projects should include the following principles: native plants, ecological impact, long-term use, achievable maintenance, and attractive appearance. Next you and your team will draw your project plan, choose plants and develop a planting map. You will also learn how to determine what other supplies may be necessary, how to calculate soil and mulch quantities, how to develop a budget, and opportunities to fund and supply your project. Let's get started!

1. **Design Basics: Principles of Schoolyard Habitat Design**
2. **Draw Your Project Plan**
 - **Field Notes for Drawing A Project Plan**
 - **Examples of Project Plans**
3. **Choose Plants & Create a Planting Map**
(Note: Check instructions on specific project page)
 - **Overview: Creating a Planting Map**
 - **Field Notes for Choosing Plants**
 - **Chesapeake Region Native Plants**
 - **Field Notes for Creating a Planting Map**
 - **Examples of Planting Maps**
4. **Additional Materials:**
 - **Common Materials & Supplies**
 - **Calculating Quantities of Soil & Mulch**
5. **Money Matters:**
 - **Developing a List of Needs & Resources**
 - **Crafting a Budget:** Tips and sample budget forms
 - **Tips on Acquiring Resources:** Fundraising, donations, grants

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Project Implementation Basics

It's time to get your project in the ground! Proper preparation of the site, plants and your team (students, teachers, volunteers) is essential for success. Just follow these five steps to smoothly install your project! Remember to involve the students as much as possible throughout the process...and have fun!

1. **Create a Project Implementation Timeline**
2. **Prepare the Site**
 - **Techniques for Sod Removal**
3. **Prepare the People: Team, Students, Teachers, Volunteers**
 - **Tips for a Fun & Successful Planting Day**
4. **Create a Work Plan**
 - **Example School Work Plan**
5. **Planting Your Project: Staging & Planting Tips**
 - **Field Notes for Planting a Plant**

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Project Maintenance Basics

Schoolyard Habitat projects are generally lower maintenance landscapes if they have been designed to be ecologically sound. Most maintenance involves controlling unwanted plants, maintaining structures, removing trash and preserving aesthetics. Adjust the size and scale of your project to the level of maintenance you can handle based on the availability of your team members' time and the maintenance requirements of the different features of your project. There are essentially two levels of care that every project needs: **Short-term maintenance** includes watering, mulching, borders, weeding and replanting. **Long-term maintenance** includes invasive non-native species removal, care of structures and other project features. All maintenance provides an opportunity to engage students in learning more about their natural environment.

- **Consider Short-Term Maintenance**
- **Consider Long-Term Maintenance**
 - **Identifying & Managing Invasive Species**
 - **Wildlife Problem-Solving**
- **Sample Maintenance Plans**

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Using Your Project

Now that the project is installed and being maintained, there are likely to be even more opportunities for using the project than you had first imagined. Revisit your goals and consider all of the ways you can use the project in your school's curriculum. Consider other groups within your school community who may be interested in using the project. Revisit your master plan and think about what project should be next or ways to expand and enhance this project. The possibilities are as limitless as your imagination.

- **Brainstorm Ways to Use the Project**
- **Understand & Develop a Meaningful Watershed Educational Experience (MWEE)**
- **Provide Teacher Professional Development**
- **Incorporate Outdoor Learning & Discovery Features**
- **Develop a Monitoring Plan**
 - National Phenology Network
 - The Globe Program
 - Monarch Watch
 - Frog Watch
 - Journey North Migration Tracking
 - Earth Partnership for Schools
 - Cornell Lab of Ornithology Citizen Science
 - National Geographic FieldScope Citizen Science
- **Bay Backpack Teaching Resources Search Engine**
- **Resources Library: Explore the Project Topic Further!**

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Sharing Your Project

Sharing your project gives you and your team the opportunity to take a step back and celebrate the good work you have done. Take this opportunity to share the project you have completed, its benefits and the positive impact it has had (and will continue to have) on the students and the surrounding ecological community. The stories you share will inspire similar stories in the larger community. Your entire team should feel proud of what they have done to help improve the local ecosystem. Listed here are just a few of the many possibilities for sharing your project with others.

- **Make or Purchase a Sign**
- **Host a Celebration**
- **Alert the Media**
 - **Sample Media Release**
- **Incorporate Outdoor Learning & Discovery Features**
- **Share Your Story with U.S. Fish & Wildlife (and receive a project sign!)**

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Green School Basics

Several national and state green school programs are noted below; each addresses similar pathways to sustainability that can be achieved through a combination of projects. All School Grounds for Learning projects are aligned with U.S. Green Ribbon Schools pillars and application requirements, and U.S. Green Ribbon Schools tools and Eco-Schools USA Sustainability Pathway tools are imbedded in each of the project sections. Schools can work with their state green schools program while simultaneously pursuing recognition or assistance through any of the national programs noted below.

- **U.S. Green Ribbon Schools**
- **National Wildlife Federation Eco Schools USA**
- **Project Learning Tree Green Schools**
- **Tools to Green Existing Schools (U.S. Green Building Council & EPA)**
- **Professional Development**
- **State Green School/ Sustainable School Programs**

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What is a MWEE?

Meaningful Watershed Educational Experiences (MWEEs) are learner-centered experiences that focus on investigations into local environmental issues that lead to informed action and civic engagement. Teachers play an important role in presenting unbiased information and assisting students with their research and exploration. Four essential elements and four supporting practices build upon each other to create this comprehensive learning experience for students.

“Part of the beauty of MWEEs is that they are not something extra but are, indeed, a means of enriching lessons for deeper student learning while strengthening local and national academic standards.”

— Donna Balado, Maryland State Department of Education

Essential Elements

The MWEE consists of four essential elements that describe “what students do.” These elements promote a learner-centered approach that emphasizes the role of the student in actively constructing meaning from the learning experiences. Throughout the process students have time for reflection, allowing them to refocus on how what they are learning and experiencing affects the driving question.



Issue Definition

Students focus on a driving question that addresses a locally relevant environmental issue, problem, or phenomenon requiring background research and investigation. Students learn more about the issue through classroom instruction and by making observations, collecting data, conducting experiments, talking to experts, and reviewing credible publications. They also reflect on personal and public values and perspectives related to the issue.



Outdoor Field Experiences

Students participate in one or more outdoor field experiences sufficient to investigate the issue, problem, or phenomenon. Investigations may involve making observations, collecting data, and/or conducting other activities required for answering their questions and informing student actions. To the extent possible and within appropriate safety guidelines, students are actively involved in planning the inquiry that occurs during the outdoor field experience(s). These experiences can take place off-site and **on the school grounds**.

MWEE Guide

[What is a MWEE?](#)

[Why MWEE?](#)

[Developing Your MWEE](#)

[Promoting Your MWEE](#)

[Funding Your MWEE](#)

Download the Guide

Download the Toolbox

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Each project page also links into: the MWEE Toolkit



Resource Library

Information and Training to Support Environmental Literacy and Schoolyard Projects

Here you will find information on environmental literacy; local, state & national green school programs; environmental education resources; and a comprehensive collection of schoolyard project instructions and resources to help you plan, utilize & sustain a variety of environmental projects on school grounds. Schoolyard project resources are featured through the [School Grounds for Learning Project](#), a partnership with [Chesapeake Bay Program Bay Backpack](#) and local, regional & national organizations, funded by the NOAA Bay Watershed Education and Training program (B-WET).

Healthy School Projects

- [Healthy School Environment Project Resources](#)
- [Healthy School Projects](#) ↗
- [Case Study: Broadneck High School](#) ↗
- [Case Study: Annapolis Middle School](#) ↗

Projects to Conserve Resources

- [Conserve Resources Project Resources](#) ↗
- [Projects to Conserve Resources: Projects](#) ↗

Wildlife Habitat Projects

- [Wildlife Habitat Project Resources](#) ↗
- [Wildlife Habitat Projects](#) ↗

Clean Water Projects

- [Clean Water Project Resources](#)
- [Clean Water Projects](#) ↗
- [Case Study: Crellin Elementary School](#) ↗

Outdoor Play and Learning

- [Outdoor Play & Learning Project Resources](#)
- [Outdoor Play and Learning Projects](#) ↗

Green School Programs

- [National and State Green School Programs](#) ↗
- [MAEOE Maryland Green Schools Program](#)
- [MAEOE Green Leaders Program](#)
- [Maryland Green Centers Program](#)
- [Learn More: Environmental Literacy](#)

Case Studies

[View our list of case studies](#)

...and

a Resource Library which features national & regional resources and direct resources for each Bay watershed state & DC!

[Resource Library Home](#) /

Wildlife Habitat Project Resources

The Chesapeake Bay region provides a wide range of habitats supporting over 3,600 species of plants and animals. Rivers, streams, wetlands, forests, meadows and native plant habitats provide thousands of species with food, shelter, breeding grounds and nurseries for raising young. Visit the [Bay Backpack Wildlife Habitat Projects section](#) to learn how to protect, create and restore critical wildlife habitat with exciting, engaging projects. Check out additional excellent local and regional resources below!

Links to Sections

- [Features to Attract & Support Wildlife](#)
- [Chesapeake Region Native Plants](#)
- [Clean Water Projects: Streams, Wetlands, Rain Gardens](#)
- [Invasive Plant & Animal Species](#)
- [Meadow Projects](#)
- [Woodland Projects](#)

Features to Attract & Support Wildlife**For All Projects
Resources and Support**[Additional Schoolyard Habitat
Project Resources](#)[National & State Green School
Programs](#)[State Environmental Education
Organizations](#)[State Environmental Agencies](#)[State & Local Cooperative
Extensions](#)[State, Regional & National
Wildlife/Habitat Resources](#)[Sustainable Landscape
Maintenance Manual
Chesapeake Bay Watershed](#)[U.S. Fish & Wildlife Schoolyard
Habitat Guide](#)

Invasive Plant & Animal Species



Bay Backpack Projects:

[Identify & Manage Invasive Species](#)

National & Regional Invasive Species Resources:

[Forests for the Bay: Invasive Species ID & Control](#)

[Humane Gardener](#)

[Invasive Plants Guide: Identification, Impacts & Control](#)

[Mid-Atlantic Invasive Plant Council](#)

[National Invasive Species Council](#)

[USDA National Invasive Species Information Center](#)

State & Local Invasive Species Resources

[Find a Local Cooperative Extension Office](#)

Delaware:

www.dnrec.state.de.us/fw/invasive.htm

Maryland:

www.dnr2.maryland.gov/invasives

New York:

www.dec.ny.gov/animals/265.html

Pennsylvania:

www.dcnr.state.pa.us/forestry/plants/invasiveplants

Virginia:

www.dcr.virginia.gov/natural-heritage/invspinfo

Washington, DC:

www.doe.dc.gov/page/invasive-plants-district

West Virginia:

www.wvdnr.gov/wildlife/invasivewv.shtml

Conserve Resources Project Resources

The cost and environmental impact of a school can vary widely depending on how the school addresses energy and water usage, the disposition and reduction of waste, and the design of the school building itself. Visit the [Bay Backpack Projects to Conserve Resources](#) section to learn how students and staff can implement initiatives to use less energy, less water, and fewer natural resources while developing the knowledge and skills to address sustainability and environmental issues in their community and beyond. Want to learn more, and find resources and opportunities near you? Check out additional local and regional resources below.

Links to Sections

- [Recycling & Waste Reduction](#)
- [School Energy Efficiency](#)
- [Water Efficiency & Conservation](#)

For All Projects

Resources and Support

[Additional Schoolyard Habitat Project Resources](#)

[National & State Green School Programs](#)

[State Environmental Education Organizations](#)

[State Environmental Agencies](#)

[State & Local Cooperative Extensions](#)

[State, Regional & National Wildlife/Habitat Resources](#)

[Sustainable Landscape Maintenance Manual Chesapeake Bay Watershed](#)

[American Council for an Energy Efficient Economy](#)

www.energy.gov

[ENERGY STAR](#)

[EPA: Learning & Teaching About the Environment](#)

[Powering Down: Behavior-Based Energy Conservation in K-12 Schools](#)

[School Dude Energy Management Resources](#)

[Wind Exchange: Wind for Schools](#)

State & Local Energy Efficiency Resources

Delaware:

[Delaware Pathways to Green Schools](#)

[Energize Delaware: Pathways to Green Schools](#)

[Northeast Energy Efficiency Partnership: DE High Performance Schools](#)

Maryland:

[Maryland's First Net Zero Energy School](#)

[Maryland Net Zero Energy School Initiative Grant Program](#)

[Montgomery Co. School Energy & Recycling Team \(SERT\)](#)

New York:

[NYSERDA: K-12 School Energy Efficiency](#)

Pennsylvania

[Energy Efficiency Resources for Schools – Keystone Energy Efficiency](#)

[Guaranteed Energy Savings Act: PDE](#)

[High Performance Schools in PA](#)

[PA School Energy Retrofits Save Millions](#)

[PA Fuels for Schools: A Renewable Energy Resources Project](#)

Virginia:

[Arlington Public Schools: Energy Conservation](#)

[Loudon Co. Energy & Environment Team](#)

[VEWC: Energy & STEM Education](#)

[Virginia Beach Sustainable Schools](#)

[Virginia Division of Energy](#)

[Virginia Energy Sense: Saving Energy in Our Schools](#)

[Virginia Energy Sense: Energy Education in the Classroom](#)

[Virginia Extension: Energy & the Middle School Student](#)

Washington, DC:

[DC Dept of Energy & Environment](#)

[Energy Patrol \(DDOE\)](#)

[Grants for DC School Energy Efficiency & Evaluation Program \(DDOE\)](#)

West Virginia:

[Berkeley Co. Schools Net Savings Through Energy Initiatives](#)

[Net Zero Energy School:](#)

[Schools: Energy Efficient West Virginia](#)

[WV Center for Energy & Sustainable Development](#)



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MAEOE

Maryland Association for
Environmental & Outdoor Education