



The Maryland Green Schools 2012 Program & Application Guide

Introduction

The **Maryland Green Schools Program** is an award winning program begun in 1999 which has certified 398 Green Schools. With over 2200 schools and 1 Million students, Maryland school communities represent an opportunity to maintain and improve environmental sustainability.

The MD Green Schools Program is a holistic, integrated approach to authentic learning that incorporates local environmental issue investigation and professional development with environmental best management practices and community stewardship. All Maryland schools pre K-12, public and private are eligible to apply.

The Program's goals are to transform education through the integration of a hands-on, inquiry-based instruction that is designed to empower youth to practically apply knowledge at school, home and in their communities to reduce pollution, decrease waste, increase habitat, limit carbon emissions, and create healthy learning and living environments. The aim of youth empowerment is a key component as students choose ways to engage with environmental issues to effect change. As schools recertify every four years, they reinforce the learning and operations lessons resulting in continued progress toward a more sustainable future.

As such, MDGS is playing a key role in achieving the environmental literacy goals and mandates established through the Governor's Partnership for Children in Nature. Not only is the program a method of improving environmental literacy for students, it is also a tool for catalyzing change within the community as envisioned in Maryland Children's Outdoor Bill of Rights, "Spending time outdoors is also the best way to develop a connection to nature and the foundation on which to build an environmental stewardship ethic". The Proclamation decrees that children:

- Discover and connect with their natural world.
- Explore wild places close to home.
- Share nature with a great mentor or teacher.

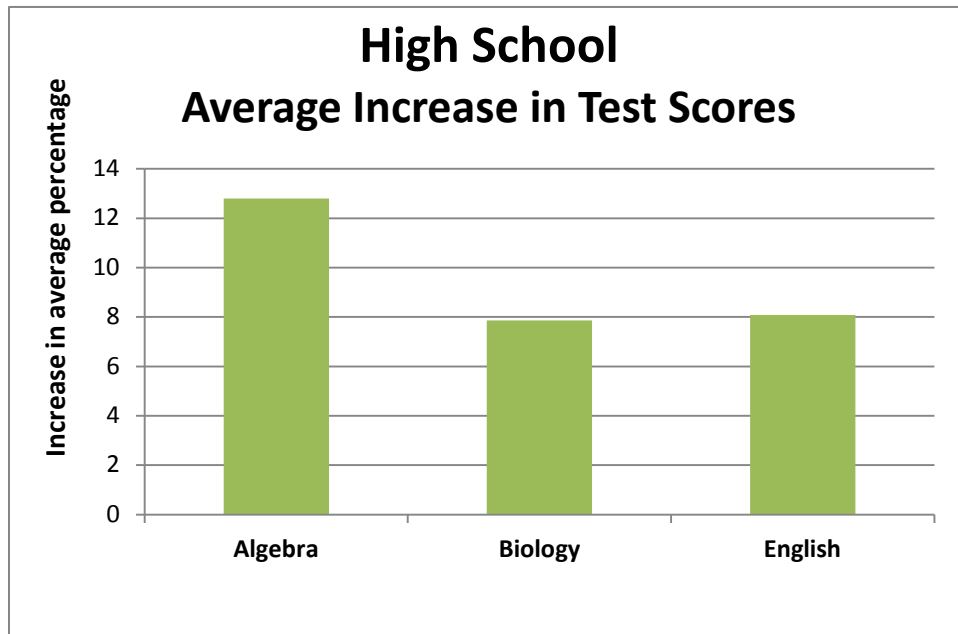
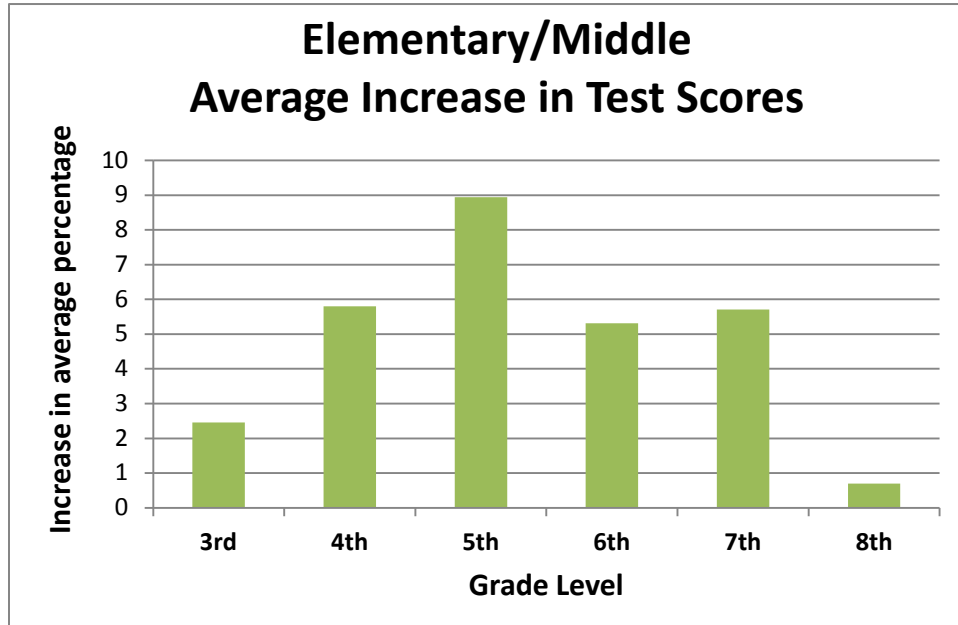
So, if you could...

- ✓ Increase Academic Performance
- ✓ Decrease Behavior Challenges
- ✓ Create Healthier Work Environments
- ✓ Boost School Morale
- ✓ Prepare Students for the 21st Century Workforce
- ✓ Help Restore the Environment

WOULD YOU???

Improvement on Test Scores

Repeated studies throughout the nation have shown improvement in standardized test scores when the environment is used as an integrating context within the curriculum. Studies in Maryland affirm the national findings. MAEOE has commissioned studies examining the links between academic performance on standardized tests and MDGS. The latest, from 2010, tracks test results at individual schools before and after becoming a Maryland Green School, and shows a strong correlation between the Maryland Green School process and improved academic performance.



Source: Dr. Sarah Haines, Director for Science and Mathematics Education, Department of Biological Science, Towson University.

Application Guide

What do Schools do?

Document two years of performance, from September of one year until June of the second year (e.g. September 2010 to June 2012) in the following areas:

Curriculum and Instruction	Best Management Practices	Community Partnerships
<p><u>Meet All Criteria</u></p> <ul style="list-style-type: none"> • Use of Environment as a context for learning Issue Instruction • Professional Development • Celebration 	<p><u>Schools Meet at least 4 of 7 Criteria</u></p> <ul style="list-style-type: none"> • Water Conservation/Water Pollution Prevention • Energy Conservation • Waste Reduction • Habitat Restoration • Structures for Environmental Learning • Responsible Transportation • Healthy School Environment 	<p><u>Meet 1 of 2 Criteria</u></p> <ul style="list-style-type: none"> • Your School is Active in the Community • The Community is Active in Your School

Steps to Achieving Maryland Green School Certification

- Have a whole staff presentation about the Maryland Green School Program (by a member of the green school committee, a MDGS Leader or Maryland Green Center)
- Form a Green School committee
 - Make a list of curriculum connections and the actions that the schools are already doing.
 - Decide which BMP's to focus on.
 - Involve your facilities support staff, and building staff
- Explore community partner options
- Plan out activities over the two school years (with student involvement)
- Complete the requirements
- Document the school's actions as they are completed
- Follow the application instructions
- File the Intent to Apply
- Submit by the deadline
- Celebrate your achievements at the Awards Ceremony and Youth Summit.

The Application

Part 1: The Cover Sheet

A Committee must be involved in the preparation of the application. The committee should include, but is not limited to a student, teacher, administrator, parent, community partner, and facility person. We are looking for a comprehensive team, supported by the principal or top administrator.

Part 2: Summary

a. One Page Narrative Overview

This is a stand-alone section which should present a general profile of the school, noting the location of the school, makeup of the student body etc. This section provides the review panel with an introduction to the MD Green School activities and will be used for public information if the school receives the Maryland Green School Award. The information will be shared with other recognized schools, future schools applying, and the press.

b. The Top Five List

The school's application is a compilation of the wonderful activities, projects, and experiences that tell the story of their Maryland Green School journey. During the Awards Ceremony, it is customary to highlight these accomplishments for each school as they are presented their Maryland Green School flag. Following the ceremony, the school's accomplishments are posted on the MAEOE website as a guide for others. MAEOE uses this list and the requested CD of photos to honor the schools.

Part 3: Objective 1: Curriculum and Instruction

Criteria 1: Use of the Environment as a Context for Learning

Students must have opportunities across grade levels and disciplines to learn about, study, and address environmental issues in the classroom, on the school site, and/or in the local and regional community. Outdoor experiences are an integral part of the MDGS Program:

- Investigation
- Outdoor based
- An integral part of instruction

Criteria 2: Professional Development

Staff education is required to ensure that the staff becomes environmentally literate in order to guide the students. Demonstrate that all of the staff is aware of the school's intent to become a Maryland Green School, and that a majority of the school staff is actively learning about the environment in some fashion over the two year period. Professional development can include environmentally related continuing education, bringing in a speaker to address the faculty, attending workshops, classes, conferences etc. Having time on the agendas of scheduled faculty meetings during the application period to discuss school progress can be used to fulfill this requirement. Show that at least 10% of the school staff has engaged in professional development or other training activities that enhance environmental awareness, literacy, knowledge, skills, and/or related instructional strategies during the application period.

Criteria 3: Celebration

The school wide community recognizes and celebrates student and staff achievement in the implementation of environmental best management practices in the operation, design, and maintenance of the school building and grounds and in developing active partnerships with the community. The school serves as a model in which these experiences are shared beyond the classroom and with the community. The school reflects on its accomplishments, relating small and large achievements to the larger picture of how schools fit in the ecosystem.

Examples: An Earth Day celebration involving the whole school, a school assembly to celebrate achievements, a performance by students about their activities.

Objective 2: Best Management Practices

Environmental best management practices (BMPs) are modeled in the operation, design, and maintenance of the school building and grounds. Like a school's books or computers, the school building and site is a tool to achieve curricular goals. Examination of their site offers an opportunity for students to interact with the environment, observe, explore, ask questions and seek answers to assess their local ecosystem. Some of the data that students can collect includes information on existing wildlife diversity, steep slopes, land use, erosion problems and naturalized space.

The schools choose at least **four of the seven BMP's** to focus on with **at least two actions in each area, and completes the data quantification form in the application.** There are many ways to address these requirements, below is a description of the scope of each and some examples. **Note :** **students should be involved with determining and implementing the BMP's.**

Water Conservation/Water Pollution Prevention

The scope: Indoor and outdoor user behavior – teaching about smarter water use, the energy and resource impacts of producing drinking water and treating wastewater, storm water management, erosion control, ways to reduce polluted runoff from the school site that impact watersheds and the Chesapeake Bay.

Examples: (but not limited to) “Bay starts here” stickers on faucets, rain gardens, erosion control measures, storm drain stenciling, curb cuts, pervious paving for reducing runoff from driveways and parking lots.

Energy Conservation

The scope: Reduce energy demands of the school by changing facilities and user behavior.

Examples: (but not limited to) Reminders to turn off the lights and devices, calculating the school's carbon footprint, sources of energy, and finding ways to reduce that footprint, conducting an energy audit, reduce phantom energy loss, tracking and reporting energy savings.

Waste Reduction

The scope: Resource use, waste disposal and waste management. Schools examine their resource use, with user education and behavior changes to reduce their waste stream.

Examples: (but not limited to) Collecting cell phones and ink cartridges for recycling, reducing volume of printing, sponsoring a “no waste lunch” day or week, and tracking and reporting number of pounds of waste reduced or recycled.

Habitat Restoration

The scope: Construct, install or enhance the school site with habitat restoration projects, with education on the benefits to the local ecosystem and watershed. Any landscape has potential to benefit and regenerate the natural benefits provided by natural ecosystems.

Examples: Native plant gardens, butterfly gardens, wetlands, rain gardens, and meadows.

Structures for Environmental Learning

The Scope: Design, installation, and use of structures for the school and students for ongoing environmental learning.

Examples: Bluebird houses, trails, signage on gardens and trails, pervious walkways, viewing blinds, green roofs, or outdoor classrooms.

Responsible Transportation

The Scope: Examine the transportation options used by students, parents and staff. Design and promote responsible and healthy options.

Examples: Carpooling programs, no-idle zones, walking, biking, “walking school busses”, use of public transportation.

Healthy School Environment

The Scope: Examine the elements of a healthy indoor and outdoor environment, including types of cleaners, chemicals, pesticides used, lighting options, drinking water quality, ventilation, purchasing options, and maintenance choices.

Examples: The safe use of chemicals, an Integrated Pest Management plan, improving indoor air quality and the purchase of environmentally friendly products.

Objective 3: Community Partnerships

The School is active in the Community/The Community is active in the School. The school/students extend their learning into the community through projects and partnerships that address local environmental issues. Community partners introduce knowledge, services, and resources to the students' activities. Students see that their individual efforts and changes make a difference in their community. The school meets **1 of the 2** following criteria:

a. The School is active in the Community

The school encourages and supports student, staff, and community partnerships that address environmental issues in the local community.

Examples: A campus cleanup day, advertised to the community, with the local waste management agency, giving away recycle bins. The school advertises a collection of Recyclables, cell phones, printer cartridges, partners with Terracycle etc. Staff and students arrange or participate in a stream clean, a tree planting, invasive plant removal etc.

b. The Community is active at the School

Community partners encourage and support students and staff to develop and implement solutions to environmental issues at the school.

Partners can be Maryland Green Centers, Master Gardeners, local businesses, Scout troops, MD DNR, parks & recreation agencies etc.

Examples: Bringing in a county recycling coordinator to speak to the staff, working with a Master Gardener to design a habitat, working with MD DNR on a grant to install a stream buffer.

What kind of documentation is required?

The reviewers need to be able to determine the scope of activities from the materials provided without being familiar with the school. We want to encourage an organized presentation, but allow for creativity. Student help in preparing the application is encouraged. Efficient methods of showing activities such as charts and graphs are desirable. Volume isn't required, just clearly showing activities – i.e. a graph of activities with one photo of each. Documentation may include, but are not limited to:

- Dated, Labeled Photographs, video, website presentations, wikis
- Student work
- Data charts
- Program agendas
- Faculty meeting agendas
- Meeting agendas
- Optional documents that quantify environmental results are strongly encouraged
- Certificates
- Specific lesson plans
- Calendars
- Blueprints
- Newspaper articles
- Maps
- Site maps indicating activities and their locations on school campuses are helpful to include with the application

Application Process, Deadlines and Fees

- File the Intent to Apply at www.maeoe.org by February 1st of the application year
- Send applications to MAEOE by April 1st
- Formats: Applications can be in a binder, a Power Point Presentation, on a website or Wikispaces site – but include the Cover Sheet, Summary and Top Five as paper copies.
- We recommend electronic formats – they are easy to add documentation to for future applications.
- Provide a **separate cd** of photos with the application, with a copy of your “Top Five Accomplishments” – we use these to honor your school at the ceremony.
- Decisions will be communicated by April 30th.

Application Type	Fee
New Schools/Centers	\$25
First recertification	\$25
2nd Recertification	\$25
Model	\$25

Time to Recertify?

Schools need to apply for recertification after four years. The recertification application form is slightly different from the first time application. Please note that the reviewers are not familiar with your school's first application. Show how your school has been maintaining the three Maryland Green School objectives, and document any new activities in the four year period since the initial certification. Download the application form from the MAEOE website:

<http://www.maeoe.org/greenschools/application/index.php>

The Maryland Green School Youth Summit

MAEOE is planning the **3rd annual Youth Summit on June 1st, 2012** at Sandy Point State Park. The event is free, and all schools in Maryland are invited to participate in this all-day, educational field experience. The event has several components:

1. **Maryland Green Schools Award Ceremonies** - Certifying schools are recognized by MAEOE in the presence of their peers and special guests to publicly validate the schools' accomplishments.
2. **Youth Leadership Development Workshops (Middle and High School students)**
3. **Green Job Fair**
4. **Environmental Literacy Bazaar** - Education through hands-on learning designed to empower youth in short interactive learning sessions. The environmental literacy bazaar will feature over 50 learning stations with separate areas geared to elementary aged students, and middle and high school students. Many partners across Maryland participate including: Maryland State Parks, NOAA, National Geographic, nature centers, Master Gardeners, UMD Extension, and The Chesapeake Bay Foundation. Teachers can learn about exciting programs and resources available to their schools.
5. **Governor's address (invited)**
6. **Culminating Group Celebration**

The Green School Certification: Benefits to Schools

Schools have reported a variety of ongoing benefits such as academic achievement, improved morale, more engaged students, new resources and partnerships. The school community can see the concrete benefits of their actions. Schools often report increased staff satisfaction. The involvement of youth results in development of a stewardship ethic, sense of responsibility and knowledge of each individual's impacts on the environment.

Program Rewards and Incentives:

- Maryland Green School flag
- Statewide and local county/city recognition
- Visibility as a model for other schools and for the local neighborhood
- Gifts
- Native MD tree from MD Department of Natural Resources (DNR) Tree-Mendous MD "Gift of Tree" Program.
- 1:1 match on future Tree-Mendous tree orders through MD DNR
- Green Centers: State and local recognition, native MD tree, Green School flag and banner, other gifts.
- Upon renewal of GS status: Statewide and local county/city recognition, plaque, other gifts

The Role of Maryland Green Centers, Certified Leaders and Champions

MAEOE Certified Green Centers offer a variety of services and supports to schools in their quest to become Green Schools:

- Teacher Professional Development opportunities
- Student programs
- Field Trip destinations
- Model of Best Management Practices for stewardship
- Provide Community Partnership with the school for its application
- Assistance with finding resources for the school
- Provide information about the Green Schools Program
- Tips and assistance with the Green School Application

An important goal of the Green Schools program is to introduce the school community to their local environmental assets, fostering an appreciation and use of the wonderful natural areas available in their own community. The Green Centers showcase best management practices in their facilities, and serve to educate the community in sustainability and preservation of those irreplaceable assets. For the current list of these valuable partners, see:

<http://www.maeoe.org/greenschools/greencenters/list.php> (Appendix A)

The Certified Maryland Green School Leaders and other champions have participated in training about the Maryland Green School Program and can be community partners, mentors and help in to schools as they work toward certification. Contacts are listed by county on the MAEOE website.

How Applications are Evaluated

While the MD Green Schools Program offers a framework within which each school achieves results unique to their community, there are requirements and standards to be met. The reviewers identify levels of performance to guide future schools and green centers with examples of achievement and best management practices. Reviewers evaluate with a rubric. They look to see that all parts of the application are complete, the documentation is organized and complete, and look for the scope of student involvement appropriate for the age range of the school.

Objective	Acceptable	Good	Excellent
Environmental Issue Instruction Curriculum Integration	Elem Schools: all grades MS/HS : all grades	ES: all grades, multiple subjects MS/HS: all grades core subjects	ES: all grades, all subjects MS/HS : all grades, more than core subjects
Professional Development	All staff aware of Green School App, majority have some EE, 10% have structured Prof Dev	20% have EE Prof Development	30% have EE Prof Development
Celebration	School-wide	Multiple or Annual events	Community Outreach Component
Best Management Practices	2 activities for each BMP	3 activities for each BMP	4 activities for each BMP/or more BMPS
The school is active in the Community	Environmental actions in the community	Multiple or annual actions	Model BMP's for the community
The Community is active in the school	Partner with a community resource	Ongoing partnership or multiple partners	Ongoing partnership and programs

These designations will not be advertised, but allow MAEOE to showcase exemplary examples of school activities. MAEOE is frequently asked by government agencies and the media for exemplary schools to interview or feature.

Resources from MAEOE: www.maeoe.org

The MAEOE website has lots of great content. Take some time to explore the Green School pages. Highlights include:

- Curriculum Integration Ideas:
 - <http://www.maeoe.org/habitat/connections/>
- Project Ideas:
 - <http://www.maeoe.org/greenschools/stories/2010schoolaccomplishmentscombined.pdf>
- Grant Resource Directory:
 - http://www.maeoe.org/resources/ee_resources.pdf
- Comprehensive website list by objective:
 - http://www.maeoe.org/resources/application_resources.php
- Comprehensive website list by Environmental Best Management Practice
 - http://www.maeoe.org/resources/ee_resources.pdf
- Template samples for PowerPoint, Website, Word versions of applications:
 - <http://www.maeoe.org/greenschools/application/index.php>
- Sample Documentation:
 - <http://www.maeoe.org/greenschools/application/tips.php>

Environmental Leaders and Maryland Green Centers by County

Allegany County

- University of Maryland, Appalachian Laboratory (ALESE), <http://alese.al.umces.edu/>

Anne Arundel County

- Arlington Echo Outdoor Education Center, <http://www.arlingtonecho.org/>
- Annapolis Maritime Museum, <http://www.amaritime.org/>

Baltimore County

- Jeanne Armacost: jarmacost@baltimorecountymd.gov
- Irvine Nature Center <http://www.explorenature.org/>
- Baltimore County Public Schools, Office of Science (Public Schools) http://www.bcps.org/offices/science/outdoor_ed/
- Marshy Point Nature Center, <http://www.marshypoint.org/>
- Oregon Ridge Nature Center, <http://www.oregonridge.org/>
- Cromwell Valley Park, <http://www.cromwellvalleypark.org/>
- Pearlstone Conference and Retreat Center-Kayam Farm, <http://www.pearlstonecenter.org/kayam.html>

Baltimore City

- Blue Water Baltimore, <http://bluewaterbaltimore.org/>
- National Aquarium in Baltimore, <http://www.aqua.org/>
- Masonville Cove Environmental Center, <http://www.masonvillecove.org/>
- Parks and People Foundation, <http://parksandpeople.org/>

Calvert County

- CHESPAX, <http://www.calvertnet.k12.md.us/departments/other/chespax/chespax.html>

Carroll County

- Hashawha Environmental Center/Bear Branch, <http://www.ccgovernment.carr.org/ccg/recpark/hashawha/>
- Carroll County Outdoor School, <http://www.carrollk12.org/ods/>

Cecil County

- NorthBay Adventure Camp, <http://www.northbayadventure.com/>

Charles County

- Nanjemoy Creek Environmental Education Center, <http://www2.ccboe.com/nanjemoycreek/>

Frederick County

- April Wells: April.Wells@fcps.org
- Mountainside Education and Education Center, <http://meegreen.org/>
- Blue Ridge Center for Environmental Stewardship, <http://www.blueridgecenter.org/>

Garrett County

- Hickory Environmental Education Center, <http://cardinal.ga.k12.md.us/Schools/Hickory/>
- Adventure Sports Center International, <http://www.adventuresportscenter.com/>

Harford County

- Anita C. Leight Estuary Center at Otter Point Creek, <http://www.otterpointcreek.org/>
- Harford Glen Environmental Education Center, <http://www.harfordglen.org/>
- Eden Mill Nature Center, <http://www.edenmill.org/>

Howard County

- Howard County Conservancy, <http://hcconservancy.org/>

Montgomery County

- Dave Honchalk: hayduke2@verizon.net
- Audubon Naturalist Society, <http://www.audubonnaturalist.org>
- Lathrop E. Smith Environmental Education Center, <http://www.montgomeryschoolsmd.org/curriculum/outdoored/>
- Calleva Outdoor Adventures, <http://www.calleva.org/>

Prince George's County

- Patuxent Research Refuge National Wildlife Visitor Center, <http://www.fws.gov/northeast/patuxent/vcdefault.html>
- William S. Schmidt Outdoor Education Center, <http://www1.pgcps.org/williamschmidt/>
- Patuxent River 4-H Center, http://www.patuxentriver4hcenter.com/PR4HC/About_Us.html
- Alice Ferguson Foundation, <http://www.fergusonfoundation.org/>
- Patuxent River Park, http://www.pgparcs.com/Things_To_Do/Nature/Patuxent_River_Park.htm
- Anacostia Watershed Society, <http://www.anacostiaws.org/>

St. Mary's County

- Elms Environmental Education Center, <http://www.elmseecenter.org/>

Talbot County

- Environmental Concern Wetland Learning Campus, <http://www.wetland.org/>

Washington County

- Becky Beecroft: beecroreb@wcboe.k12.md.us
- Claude E. Kitchens Outdoor School at Fairview, http://www.wcboe.k12.md.us/custom_pages/495/main/index.htm

Wicomico

- The Ward Museum, <http://www.wardmuseum.org/>

Worcester

- Assateague State Park, <http://www.dnr.state.md.us/publiclands/outdoorededuc.asp>
- Maryland Coastal Bays, <http://www.mdcoastalbays.org>