

THE  
*Augusta Fells Savage*  
INSTITUTE OF  
VISUAL ARTS

# BECOMING A GREEN SCHOOL



# 2013-2014

Mr. Herrera and Ms. Wilson

# **PROGRAM OBJECTIVES:**

- Engage students in interdisciplinary and environmentally-related curricula to promote environmental awareness, stewardship, and responsible citizenship.
- Build partnerships with the local community to enhance environmental education.

- “The purpose of Maryland's Environmental Education program is to enable students to make decisions and take actions that create and maintain an optimal relationship between themselves and the environment, and to preserve and protect the unique natural resources of Maryland, particularly those of the Chesapeake Bay and its watershed.”

*<http://www.marylandpublicschools.org/MSDE/programs/environment.html>*

# Incentives and Rewards:

- Green school flag
- Citations
- Gift bags and other rewards
- Statewide and local recognition
- Native plants from DNR
- Tree program (service learning hours)
- Books, posters, and other resources for classes and school library
- Model for other schools and neighborhoods

# Other Impacts

- Academics
- Student engagement
- College and career ready students
  - Implementation of STEM
- Climate and culture
- Parent and community involvement
- Environmental awareness

# Partnerships:

- Alliance for Climate Education
- Baltimore City Office of Sustainability
- Baltimore Energy Challenge
- Blue Water Baltimore
- Chesapeake Bay Foundation
- Cornell University
- Towson University (MDLL & Scitech)
- Maryland Pesticide network

# TARGET SITES:



# PART III: DOCUMENTATION

**OBJECTIVE # 1:** Systemic Sustainability:  
Green School Building, Curriculum and  
Instruction, Professional Development and  
Celebration

- Criteria 1: Environmental Issue Instruction
- Criteria 2: School-wide Environmental Behavior Changes
- Criteria 3: Professional Development
- Criteria 4: Celebration



# **Criteria 1: Curriculum and Instruction**

## **Classroom:**

### **1. Curricula:**

- **Chesapeake Bay Exploration Online Course**
- **Why Do We Explore? How Do We Explore?**
- **Climate Change: Our Global Experiment**
- **Climate Change Connections**
- **Biology and Society**
- **Cornell University Modules**
- **MDLL Modules**

# **Criteria 1: Curriculum and Instruction**

Classroom:

## **2. Research-Based Activities:**

- **Classroom-based research** – i.e. research that is related to how nitrogen concentration impacts freshwater.
- **Water-Quality Testing in the Classroom** –i.e. Properties of water – comparing pH, nitrogen content, dissolved oxygen, turbidity, and phosphate of different water samples (tap water, bottled water, Chesapeake bay water).

# Criteria 1: Curriculum and Instruction

## School Site:

1. **School Yard Research** - Students will study how climate change affects the growing season of trees at the courtyard.
2. **School Yard Report Card** –Students will study how healthy the school is by analyzing the different components of a healthy school.
3. **Water Audit** –Students will study how to reduce the storm water runoff.

## At the Park:

4. **Tree Identification** – Students will tag the trees present in the school park using the online tool “leafsnap”.
5. **Diversity Index** - Students will determine the diversity index of the park and compare it to the diversity index of other forest ecosystems.

# **Criteria 1: Curriculum and Instruction**

## **Community:**

1. **Chesapeake Bay Water Quality Testing and Monitoring** (Baltimore to the Bay, Arthur Sherwood, and Philip Merrill Education Center)
2. **One-day field trips to the Chesapeake Bay**
3. **Three-Day Programs to the Chesapeake Bay** (Kareen Noonan Center and Fox Island)
4. **Tree-Planting Activity**
5. **Participation to International Sea turtle Conservation symposium**
6. **Participation to Conservation, Science and Art workshop**
7. **Attendance in the public lecture of Jean Michel Cousteau on Ocean Conservation**
8. **Attendance in the city-wide “GreenScape” celebration**
9. **Energy Conservation Guest Speaker**
10. **Chesapeake Bay Critters study at SciTech**

# **Criteria 2: School-wide Environmental Behavior Changes**

## **(Not Required)**

- 1. Electronic Newsletters/Meeting Agenda**
- 2. Teachers and custodians using green cleaners in the classroom**
- 3. Day Lighting**
- 4. Staff utilizing environmental resource libraries**
- 5. Staff carpooling**
- 6. Electronic assignments/teacher website**

# **Criteria 3: Professional Development for Teachers**

## **School-Based:**

1. Curriculum Training
2. Hands-on Professional Developments
3. Field Investigations

## **Off-site/Summer Professional Developments:**

1. Chesapeake Classroom Summer Courses for Teachers
2. Environmental Leadership for leadership team
3. North Cascade Climate Change Training
4. How Do We Explore? Why Do We Explore
5. Project Wet

# Criteria 4: Celebration

1. Literary and Poster Making Contest and Awarding Ceremony
2. Parents Meeting
  - Highlight the Environmental program of AFSIVA
  - Invite BGE to talk to the parents
3. Green School Bulletin Board
4. Earth day Celebration in April
  - Invite Environmental Organizations to set up booths at the park, school grounds, or gymnasium
  - Climate Change Presentation (ACE)
5. Awarding Ceremony for Environmental Stewardship Award to students.
6. Morning Announcements (Green Topics)

**OBJECTIVE # 2:** Best Management Practices –  
Action in at least four of the seven areas – data  
quantification.

- **Water Conservation/ Pollution**
- **Energy Conservation**
- **Solid Waste Production**
- **Habitat Restoration**
- **Structures For Environmental Learning**
- **Responsible Transportation**
- **Healthy School Environment**



# **WATER CONSERVATION/POLLUTION**

- Water Quality Testing
- Tree Planting
- Water Audit
- Rain Storm Drain stenciling
- Rain Garden
- Rain Barrel
- Water Footprint Calculation and Reduction

# **ENERGY CONSERVATION**

- Energy Audit, Implementation, and Monitoring
- Education Awareness Program – BGE personnel to talk to parents about energy saving tips
- Strategic turning on/off of lights and school electronic devices (computers, smartboards) – “energy patrols” tickets or pride cards
- Energy Saving Tips on morning announcements
- Guest Speakers about Energy Conservation

# **SOLID WASTE REDUCTION**

- Recycling activities (school-based and through recycling agency)
- Posters to remind each classroom about recycling
- Education/Awareness; Personnel from the recycling center to talk about recycling, reuse, and reduction of waste.
- Recycle materials into art projects
- Students hand in homework electronically or communicate via blogs

# **HABITAT RESTORATION**

- Create school yard habitat: i.e. native plant garden in schoolyard (pollinator garden)
- Plant trees, shrubs, and native plants.
- Education Awareness: DNR/Chesapeake Bay Foundation personnel to talk about habitat restoration.

# **STRUCTURES FOR ENVIRONMENTAL LEARNING**

- Interpretative Signage - Slogans, artworks, and environmental activities will be posted around the school premises.
- Tree ID tags activity at the Park
- Outdoor Environmental Art: involve Art students in designing an environmental mural downtown in cooperation with the living classroom.
- Climate Change research study of the trees in the schoolyard and at the park
- School yard Report Card

# HEALTHY SCHOOL ENVIRONMENT

- Test and analyze indoor air quality
- Test commonly touched surfaces for bacteria
- Indoor plants to enhance air quality
- Poster campaign to encourage hand-washing, catching sneeze prevention, and other preventive measures during flu season

# OBJECTIVE # 3: Community Partnerships

## 1. Fieldtrips:

- Chesapeake Bay Foundation

## 2. Curricula:

- Blue Water Baltimore
- Chesapeake Bay Foundation
- Alliance for Climate Education
- NOAA Environmental Science
- NASA Endeavor
- Chesapeake Bay National Estuarine Reserve

## 3. Tree Planting, Rain Garden, Recycling, Student Internship and Outdoor activities

- Blue Water Baltimore
- MD DNR

## 4. Funding, Professional Development, Symposium and Talks

- Baltimore City of Sustainability
- Chesapeake Bay Foundation
- Chesapeake Bay Trust Fund
- Alliance for Climate Education
- NOAA Environmental Science
- Target Field Trip
- BGE Grant

# **AWARDS AND SPECIAL RECOGNITION:**

(Not Required)

1. Green Classroom Award
2. Environment-related competition awards



# **ACTION PLAN:**

- **Year One (2012-2013) – Initial Implementation**

1. Proposal, Planning, grant writing and Building Connections
2. Tree Planting Activities and Field trips
3. Creating, advertising and launching of the “Green Club”
4. School-based recycling ( 2<sup>nd</sup> sem)

- **Year Two (2013-2014) – Full Implementation**

1. Implementation of environmental education curricula
2. Professional Developments
3. Full Implementation of Objectives 1 , 2, and 3(curriculum and instruction, celebration, and community partnerships)

- **Year Three (2014-2015)- Full Implementation/Sustaining**

# **TIMELINE/APPLICATION PROCESS:**

- **PART 1 by December 20, 2013**

File the intent to apply online at [www.maeoe.org](http://www.maeoe.org) \$50 application fee

- **PARTS 2,3, and 4 by April 1, 2014**

1. Information Summary Sheet
2. Curriculum and Instruction Documentation
3. Best Management Practices Documentation
4. Community Partnerships Documentation

## **SAMPLE DOCUMENTATIONS:**

- Baltimore to the Bay Field Trip  
(water quality testing and Watershed exploration)



## **SAMPLE DOCUMENTATIONS:**

- Tree Planting with Blue Water Baltimore



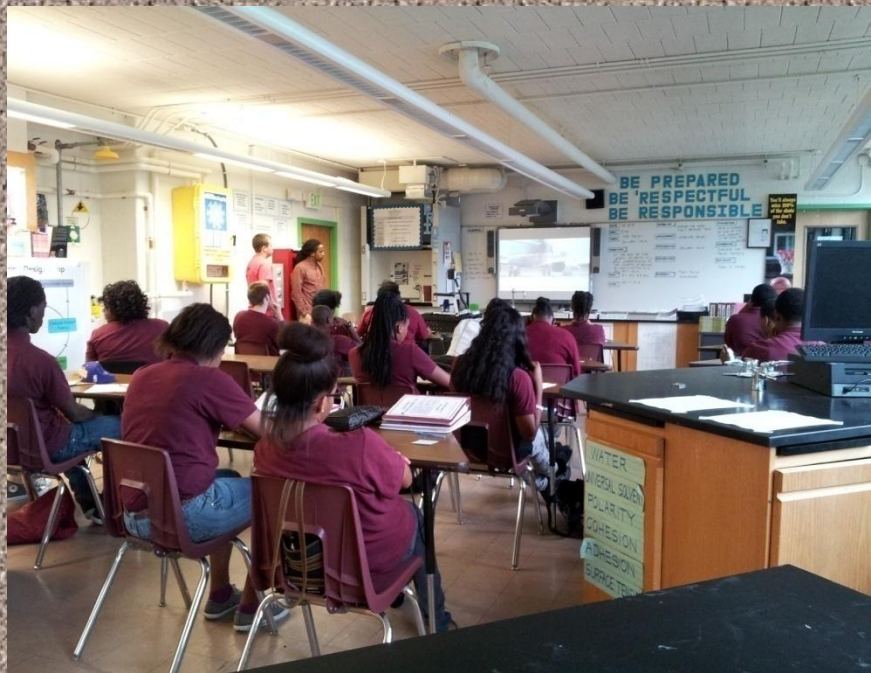


**SAMPLE OUTDOOR ACTIVITIES:** Philipp Merrill Environmental Center and Fox Island Environmental Study Center



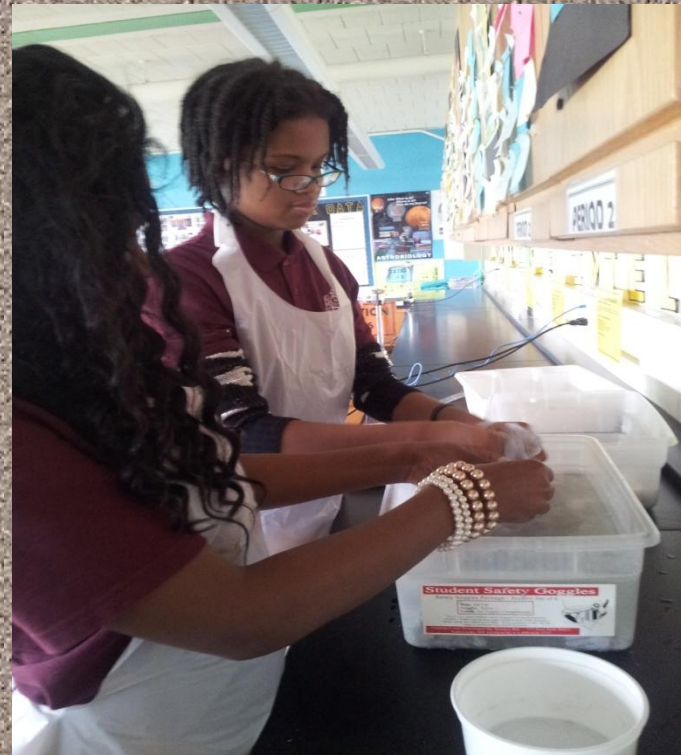
# Participation to International Sea turtle Biology and Conservation Symposium





RECYCLING  
PROJECT and  
Energy  
Conservation  
Lecture from  
Guest speakers.







# Chesapeake Bay Exploration:



# WHAT CAN YOU DO?

- Become a committee member (Email Ms. Wilson or Mr. Herrera if you want to be a committee member)
- Integrate Environmental Education in your lessons and classroom behaviors
- Participate in the environmental education initiatives/programs
- Share ideas! (funding, connections, or projects)

# **COMMITTEE:**

**Teacher/s:** Willy Herrera, Kiesha Wilson, Vilma Ramos

**Facility Manager:** Ms. Williams

**Students:** Nanyamka Anderson, Devontay Carter, Michelle  
Turner, Felicia Wooldridge

**Parents:** Daron Anderson, Dawn Euniece Mealy  
(prospective parents)

**Community Partners:** BWB, CBF, ACE, BES, National  
Aquarium, Cornell University, Towson University,  
Harvard University,