



# 2015-2016 Mini Grant Application K-12 Environmental Education MWEE Narrative Form *Example*

[www.chesapeakebaytrust.org](http://www.chesapeakebaytrust.org) / 410-974-2941

## Background:

<b>Grade Level(s)</b>	6th
<b>Specific Date(s) of Field Experience (if applicable)</b>	Schoolyard Habitat Tour: April 1, 2014 Canoe Trip: April 15, 2014 Skipjack Trip: April 30, 2014
<b>Specific Date(s) of Student-Led Action Project (if applicable)</b>	May 15, 2014
<b>Other Environmental Activities at School (MD Green School?)</b>	Recycling Program Composting Program Energy Efficiency Project (LightsOff)
<b>Professional Development Workshops of Project Leader that support the proposed experience</b>	Project WET Training CBF PD Training
<b>Project Participants:</b> Please provide demographic information regarding the community or population benefiting from or served by the project.	The Chesapeake Bay School's student population consists of: Caucasian: 75% African American: 15% Hispanic: 8% Other: 2%

## Project Description:

Please clearly and concisely answer each question. Use bulleted points when possible. The Trust highly encourages applicants to review the Mini K-12 Environmental Education RFP and Narrative Example before starting their application.

Phase	List of activities or tasks the educator will perform to support each Phase
<p><b>ISSUE DEFINITION</b>  <i>Initiates the learning task. The activity should make connections between past and present learning experience and anticipate activities and organize students' thinking toward the learning outcomes and current activities. Create an organizing question that allows for student investigation of a local and relevant environmental issue.</i></p>	
<p>What is your organizing question that will drive the students' issue investigation?</p>	<p>How does our school and land around it impact the Chesapeake Bay?  <i>This question will help lead to major concepts of the Bay as a system, a local community's impact on the local and larger environment and leading them to real-life problems and how to solve them.</i></p>
<p>How will you generate student interest and curiosity in the issue? What is the Hook?</p>	<p>Guest speaker to discuss major impacts on the Bay, video clip, audio clip of NPR's Environment in Focus.  <i>Idea: Take tour around schoolyard for students to make observations about their surroundings and facilitate discussion of specific problems at different sites on school's campus to develop thought-provoking questions (i.e overflow from gutters into parking lot creating pond in field, nearby stream erosion, dying ash trees in community).</i></p>
<p>How will you assist students in the development of supporting questions that help find answers to the organization question focused on your issue?</p>	<p>Students break into small groups to discuss the tour and generate supporting questions(s).            Each student group determines their top supporting question(s) and brainstorms how to find the answers.  <i>Idea: Have students create a web diagram with organizing question in the center and the students' top supporting questions radiating from the center.</i></p>

What materials and supplies will be needed to accomplish these tasks? (if applicable)	Audio clip. Organizing and supporting question worksheet.
What partners or providers will help you? (if applicable)	Guest Speaker. Local Watershed Group Professional.
<p><b>OUTDOOR FIELD EXPERIENCES &amp; ACTION PROJECTS: EXPLORE &amp; EXPLAIN</b>  <i>Provides students with a series of experiences within which current concepts, processes, and skills related to your issue are understood and developed.</i></p>	
How will you help to use students' previous experiences and knowledge to further understand the issue?	Writing activity for each student to describe a personal experience with a stream, river, the Bay, weather event, etc. Students sharing of previous experiences related to the question(s) and issue. At home students draw/write their prediction of where rainwater would travel after it hits their roof. Students then share with the class.
Provide a brief list of the series of experiences that will occur and an explanation of how students will work together during each experience to conduct both indoor and outdoor research (internet, literature, observations, data collection, etc.) on the organizing and supporting questions.	<ul style="list-style-type: none"> <li>○ Student directed research using various resources (internet, books, magazines, textbooks, maps, data) to research their supporting question(s). Use formatted worksheet to track resources.</li> <li>○ Guest Expert: Local Watershed Group Professional discusses successful small school or community projects implemented. Includes tour of successful projects (as local as possible) with explanation of what occurs during and after a rainstorm.</li> <li>○ Field Trip to Environmental Education Center with stream investigation and discussion on key negative impacts on stream and rivers including connection to how their school and local community impacts the River. Specific Activities include...</li> <li>○ Skipjack Field Trip in Bay with focus and discussion on key negative impacts on the Chesapeake Bay including that the Bay is a system and that actions of their home, school and community effects the streams, rivers and Bay. Specific Activities include...</li> </ul> <p><i>Idea: Before and during/after rainstorms have students observe different site son campus or in the community. Possible sites include parking lot, local stream, sloping field, park, business complex., existing rain garden, etc. With Art teacher the students draw their observations before and after a weather event. If age</i></p>

	<i>appropriate students will measure water flow, infiltration rates, water quality, etc immediately after weather event).</i>
How will students analyze/interpret data and information gathered during this phase? How will they explain their findings to fellow students?	Students break into small groups with designated supporting questions and develop evidence based answers to their respective questions. Students present answers to class, with Q & A encouraged and facilitated. Students improve their presentations based on feedback and then each group presents to a 4 <sup>th</sup> grade class.
What materials and supplies will be needed to accomplish these tasks? (if applicable)	Access to resources (computers, library). Formatted Resources worksheet. Journals for Writing Activity and then field data. Drawing supplies for sketches.
What partners or providers will help you? (if applicable)	1) Guest Expert: Local Watershed Group Professional 2) Education Center 3) Skipjack Program 4) Local Schoolyard Habitat Professional
<p><b>OUTDOOR FIELD EXPERIENCES &amp; ACTION PROJECTS: EXTEND</b>  <i>Challenges and extends students' conceptual understanding and skills through design and implementation of a student directed action project to address the issue of focus.</i></p>	
Please describe how the students will select and design solutions to address their chosen issue and choose a project(s)? How will you support this process?	Help students transform their solutions into a project that will address the problems identified in earlier investigations, such as rain barrel installation, rain garden, invasive removal followed by plantings or streamside cleanup and then buffer planting. Add chosen solutions to the web diagram. <i>Idea: Local Schoolyard Habitat Professional helps teacher and students with planning and design of selected project(s). Will come to school 3x to help students choose, design and implement project(s).</i> <i>Facilitate discussion on other types of solutions. With social studies teacher, students will expand their goal from restoration to civic engagement. As a class the students will analyze laws that impact the Bay negatively and tied to their supporting questions. Students will then explain who can create change, how and where they can be reached.</i>
Please describe the action project(s) or, if student-	Coordinate the logistics of each group project by the students including planting

<p>directed, potential action projects. How will you and others support the implementation of the student-led project?</p>	<p>days, media, equipment, maintenance plan. Only helping and checking to ensure students have sufficiently covered everything. Will have Schoolyard Habitat Professional also there to help ensure successful implementation. Ensure students take time to record their experience through writing and pictures. Ensure safety and proper installation is top priority (Miss Utility, permits).  <i>Idea: Students will write letters to their local elected officials detailing the knowledge they have learned on the negative impacts on the Bay and what laws are barriers to solutions. They will also discuss what they have done in their community (their projects) and request their presence on their Day of Dedication for their projects at the end of the year.</i></p>
<p>How will you ensure that implementation of the student-led project extends learning and investigation?</p>	<p>Students will investigate the impact of their projects on the schoolyard and collect data. With Art teacher they will draw their observations of the installed projects during and after a rainstorm. Students will also use technology to measure their impact whether it is waterflow and infiltration or, depending on their project, another measurement (i.e. use a water gage to see if there is a difference in a nearby stream, water quality testing, species increase, etc.)  Students will break out into their groups to analyze their data and write-up conclusions on whether their predictions were correct.  Facilitate discussion on entire experience and whether or not the organizing and supporting questions were answered. Illustrate the building of knowledge and reasoning throughout each phase. Bring in outside data on the same issue to compare with the collected data. Discuss results and whether or not they answer the issue on a larger scale.  Students will continue investigation to measure their project's impact.</p>
<p>What materials and supplies will be needed to accomplish these tasks? (if applicable)</p>	<p>1) Original Web Diagram 2) Journals 3) Native Plants 4) Mulch and other planting supplies 5) Signage 6) Paint and painting supplies 7) Rain Garden Design Workbook 8) Native Plant ID Booklet 9) Outreach materials for students to bring home 10) Printing and mailing supplies 11) Drawing supplies for sketches 12) Camera 13) Water gage &amp; other measurement tools</p>
<p>What partners or providers will help you? (if applicable)</p>	<p>1) Schoolyard Habitat Professional 2) Town Council 3) Local Nursery 4) Local Watershed Group 5) University of Maryland (soil analysis) 6) Miss Utility</p>

**SYNTHESIS & CONCLUSIONS**

*Encourage students to assess their understanding and abilities and provide opportunities for educators to evaluate student progress.*

Provide a list of post-project activities that will occur, how the activities will allow students to reflect on what they have learned, and how the students will share knowledge and experience with other students, parents, etc.	Create posters of projects to hang on school walls and for a number of presentations. Present projects at Town Council meeting & Local Watershed Group's Board Meeting Facilitate a Day of Dedication for projects with teachers, parents, PTA, school admins, partners and possibly representatives in attendance. Students will read from their journals, pictures shown, ribbon cutting, etc. Project Days & Day of Dedication on Morning Announcements. Also afterwards a story on the Morning Announcements and an article in the school paper on the projects.
What materials and supplies will be needed to accomplish these tasks? (if applicable)	1) Poster board 2) Drawing/Painting supplies 3) Pictures 4) Journals
What partners or providers will help you? (if applicable)	1) Town Council 2) Presentation opportunities (school fair, conferences) 3) Local Watershed Group

Please note, this is both an example and guide to provide you with a sample of what we are looking for in this grant program. Your application will be based on your facilitation of student-directed learning around a specific issue in your local context.