HANDS-ON SCHOOL- OR COMMUNITY-BASED PROJECT

The Ocean Guardian School program funds watershed and/or ocean stewardship projects. Schools propose hands-on projects that make a difference in the health and protection of their local watersheds and/or ocean. Below is a list of the five general pathways and examples of projects that are commonly funded by the Ocean Guardian School program. **A proposed project must have a connection to the health of the watershed and/or ocean.** If your project idea does not relate to this list, but meets the goals of the program, please contact the program director to discuss your idea before applying. For additional examples of past and presently funded Ocean Guardian School projects, please visit
http://sanctuaries.noaa.gov/education/ocean_guardian/examples.html *Remember; keep the proposal focused on a single project.*

> **Ocean Guardian Project Pathways and related projects**

> • **Restoration** - watershed/wetland restoration, fish habitat creation, shoreline/bank stabilization
> • **REFUSE/Reduce/Reuse/Recycle/Rot** - school-wide recycling/composting programs, redesign and implementation of school-based wastewater system, school-wide green purchasing program, zero waste lunch program
> • **Marine Debris** - reducing single-use plastics in school, promoting reusable bags in local community/stores
> • **Schoolyard Habitats/Gardens** - creating or improving school gardens/schoolyard habitats with an **emphasis** on native plants, low water use, rain catchment systems, etc. while *clearly connecting these activities to the health and preservation of the local watershed and/or ocean*
> • **Energy & Ocean Health** - school energy audits/carbon footprint calculations resulting in energy saving plans (i.e., "power down" campaign, "no idling" campaign, bike to school days, light bulb/computer energy saving plans, etc.), clean energy alternatives such as wind/solar projects, water savings projects, tree planting projects

OCEAN CONNECTION

Your proposed project must make a connection to the health and preservation of your local watershed, ocean and/or special ocean areas like national marine sanctuaries. **During your project period, you are required to incorporate the following into your project activities and/or supplemental lessons**:

> **National Marine Sanctuaries**: As a participant in the Ocean Guardian School grant program, you are required to educate your students about the national marine sanctuary system including at least one of the sanctuaries, preferably the one that is closest to your school and/or connected to your grant project.
> **Watershed Education**: All projects must include learning opportunities around watershed identification. By the end of the year, students should be able to identify in what watershed their school is located as well as some of the surrounding watersheds.

SCHOOL AND COMMUNITY OUTREACH

1. **School Outreach**
   a. **PROJECT INTRODUCTION PRESENTATION** – At the start of the school year, you are required to formally present/communicate your Ocean Guardian project to your school community. This requirement is referred to as **a Project Introduction Presentation**. This presentation must take place **within the first eight weeks of the school year**. There is no mandated format for this initial presentation. Please select the best means for your school to let your students, teachers, staff and even parents know about your Ocean Guardian project. Please note that it is unacceptable to use *only* your school website to communicate your project introduction. Recommended presentation formats include but are not limited to:
      - School-wide assembly
      - Individual classroom presentations given by teachers and/or students

- Series of morning announcements
- Series of email/newsletter articles

The following topics must be included in your Project Introduction Presentation:
- What does it mean to be an Ocean Guardian School? Brief summary of your school's funded project description, goals, and objectives. How your school's project will contribute to the protection and/or conservation of a local watersheds/ocean.
- Introductory information about the National Marine Sanctuary System and the land-ocean connection.

Funded schools will have access to an introductory PowerPoint presentation and an introductory short video. These resources are available to use only as needed for the Project Introduction Presentation.

> The **Project Introduction Presentation** is a grant program requirement and is included in the evaluation process for final Ocean Guardian recognition. You will be asked about your Project Introduction in the Final Report Survey at the end of the school year.

b. **PROJECT WRAP-UP -** At the end of the school year, students who have been involved with the Ocean Guardian project will present some aspect of the project to the entire student body (i.e., their project experiences, lessons learned, best practices, community outreach, etc.). Presentations can include but are not limited to: formal presentations, videos, readings, artwork, songs, plays, poems, etc.

> The **Project Wrap-up** is a grant program requirement and is included in the evaluation process for final Ocean Guardian recognition. You will be asked about your Project Wrap-up in the Final Report Survey at the end of the school year.

2. **Community Outreach:** Your Ocean Guardian School project must include some element of community outreach led by a group of students who are involved in the project. Do not limit your outreach to postings on your school website. Community outreach should not be limited to your school's website, Twitter or Facebook.

Examples of **Community Outreach** include, but are not limited to:
- STUDENT presentations to Parent-Teachers Association, School Board, City Council, other schools
- STUDENT presentations/participation in local community festivals/fairs/events
- STUDENT written letters to local papers, political representatives, business leaders, community organizations, etc.
- STUDENT created educational information distributed to community neighborhoods, businesses, etc.

> **Community Outreach** is a grant program requirement and is included in the evaluation process for final Ocean Guardian recognition. You will be asked about your Project Outreach in the Final Report Survey at the end of the school year.

> **Please note:** The Ocean Guardian School program does not typically fund projects that are focused only on web page development including social networking related web pages unless the applicant provides documentation as to how the development of the web page is an integral and necessary component of the project.

MEASURABLE DATA

Your project's quantitative data helps to tell not only your school's unique Ocean Guardian story, but together with all the other schools, your data helps to communicate the impact of the Ocean Guardian School program. The Ocean Guardian School program office will share your school's project data with our NOAA colleagues who in turn, work to shape federal priorities and programs around ocean stewardship.

Your Ocean Guardian School project application must include information about the quantitative data you plan to collect during your project period. You will be asked for your measurable data in the Final Report Survey. **It is important to keep track of your measurable data as your project unfolds.**

> **Measurable data** is a grant program requirement and is included in the evaluation process for final Ocean Guardian recognition. You will be asked about your measurable data h in the Final Report Survey at the end of the school year**.**

Below are examples of measurable data. This is not a complete list. You will be asked to submit any other quantitative data that is not listed below, but is specific to your project.

RESTORATION ACTIVITIES	OUTREACH ACTIVITIES
# of trees planted (designate native, fruit, etc.)	# of students reached outside your school
# of native perennials/annuals/grasses planted	# of teachers reached outside your school
# of rain barrels installed	# of parents reached within and/or outside your school community
Sq. meters of non-native invasive plants removed	# of community members reached
Sq. meters of turf removed	# of storm drains stenciled
Linear meters of bank stabilization	# of publications produced
# of wildlife habitat structures installed	# of articles, blogs, etc. uploaded to websites
REDUCE/REUSE/RECYCLE/ROT ACTIVITIES	# of presentations/workshops
# of recycling bins installed	# of videos/films/power points produced
# of composting bins installed	# of media hits (e.g., newspaper articles, TV and radio stories, etc.)
Kilograms of trash/debris removed from school and/or community sites	ENERGY & OCEAN HEALTH
# of reusable bottles distributed	# of trees planted
# of reusable bags distributed	# of LED light bulbs installed
# of single use plastic bottles NOT used due to reusable bottles used at water filtration system	# of Energy Smart power strips installed
Liters of water reclaimed from use of water catchment system	Total savings of carbon emissions
WATER QUALITY MONITORING	Increase in days of bike-to-school campaign
# of sites sampled	
# of times samples were taken and tested	
# of times samples read other than normal readings	

BUDGET

Grant funds are available for a variety of items including, but not limited to project supplies, field trip costs (transportation, entrance fees, etc.), teacher stipends, and technology equipment.

- **Field Trips:** The Ocean Guardian School grant will fund field trips. *Field trip costs are limited to 30% of the total project budget.* Field trips must supplement the project activities and learning opportunities. Field trip expenses may include entrance fees and transportation.

- **Stipends:** The Ocean Guardian School grant will fund stipends for teachers, staff, parents, and/or community partners. *Total stipend amounts are limited to 30% of the total project budget.* Stipends may also include payment for substitute teachers needed during project activities.

FINAL REPORT SURVEY

At the end of the school year, the project's lead teacher will be required to complete an online Final Report Survey.

BECOMING AN OCEAN GUARDIAN SCHOOL

At the end of your project period, after the Lead Teacher has submitted a Final Report Survey, the school will be evaluated for formal recognition as a NOAA Ocean Guardian School.

Recognition Rubric: The Recognition Rubric is the basis for determining final Ocean Guardian School status and awarding the official Ocean Guardian School banner. It is used to score how well your school meets the grant requirements. At the start of the school year, the Lead Teacher will receive an electronic copy of the Recognition Rubric to help track the school's progress towards becoming an Ocean Guardian School.

Examples of criteria items included in the Recognition Rubric

Project Outcomes   School Outreach   Community Outreach   Budget
Measureable Data   Final Report Survey   Project Communications

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OCEAN AND CLIMATE LITERACY: ESSENTIAL PRINCIPLES AND FUNDAMENTAL CONCEPTS

http://oceanservice.noaa.gov/education/literacy.html

Ocean and climate literacy are central to the mission of the Ocean Guardian School program. In an effort to define ocean and climate literacy, many scientists and educators have collaborated to produce two guides, *Ocean Essential Principles and Fundamental Concepts* and *Climate Essential Principals and Fundamental Concepts*. They are practical resources for educators, outlining the knowledge required to be considered ocean and climate literate in accordance with the National Science Education Standards (NSES).

Ocean literacy is an understanding of the ocean's influence on you—and your influence on the ocean.

An ocean-literate person:
- understands the Essential Principles and Fundamental Concepts about the functioning of the ocean;
- can communicate about the ocean in a meaningful way; and
- is able to make informed and responsible decisions regarding the ocean and its resources.

You are climate literate if you understand the influence of climate on yourself and society and your influence on climate.

A climate-literate person:
- understands the essential principles of all aspects of the Earth system governing climate patterns that are presented in this document;
- knows how to gather information about climate and weather, and how to distinguish credible from non-credible scientific sources on the subject;
- communicates about climate and climate change in a meaningful way;
- communicates about climate and climate change in a meaningful way;

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