



Initial Mini-Grant Form Application 2008 - 2009

1. Contact Information

*Teacher(s)	Marianne Haughwout and Christine Egan, David Hammond	
*School Name	Bowdoin Central School	
*School Address	1460 Main Street, Bowdoin, Maine 04287	
*Phone	(207) 666-5779	*Your email: haughwoutm@link75.org; eganc@link75.org

2. Project Information

*Project Name	Bowdoin Central School's Stream Team	
*Grade Level	4 th	*Number of Students Implementing Project: 30
*Subject(s)	Ecology	
*Project Dates	December 2008-June 2009 and beyond	

Project Descriptions

a. * Describe your project in one to three sentences, each one addressing:

1. Need/Problem.

1. Need: There needs to be *continued* evaluation of the stream in front of Bowdoin Central School which is a small part of the Cathance River Watershed and Merrymeeting Bay drainage. Each incoming fourth grader should be educated to become a 'steward of the stream'. Understanding stream ecology, watershed concepts and ecosystem health cannot be limited to one class for only one year but needs to be a continuing project. Students observed riparian zone destruction during stream studies that will need to be addressed by the incoming fourth grade classes.

2. Community Partners

2. Maine Department of Environmental Protection, Maine Project Learning Tree, CREA, Maine Forest Service, state and wildlife biologists were involved in the first year of this project and will continue to be educational partners. Contact with Friends of Merrymeeting Bay have already been initiated in hopes that students can be involved in their board meeting and outreach programs. This year, we hope to involve Brunswick-Topsham Land Trust, Peter Lea of Bowdoin College, John Rensenbrink, former Bowdoin professor and one of the founders of CREA, plus local citizens involved in land use. Marianne Haughwout took part in Project Wet making all of those resources available to us, also.

3. How will students address the problem

3. Students will continue to test the stream and plant additional trees, bushes, and perennials to provide an even better buffer. However, an additional problem, that will confront this year's fourth graders, is how to access the stream without destroying habitat. Ultimately, they will decide to construct a pathway to the stream to guide foot traffic and reduce soil erosion.

b. * Academic Integrity: Identify the knowledge and skills addressed by the project. Identify relevant state/local standards to be met.

A1 Systems: Students explain interactions between parts that make up whole man-made & natural things

A2 Models: Students use models to represent objects & events in physical setting

A3 Constancy & Change: Students identify & represent basic patterns of change in physical setting

A4 Scale: Students use mathematics to describe scale for man-made & natural things

B1 Skills & Traits of Scientific Inquiry: Students plan, conduct, and analyze data

B2 Skills & Traits of Technological Design: Students use a design process, simple tools, & a variety of materials to solve a problem or create a product

C2 Understandings about Science & Technology: Students describe why people use science & technology and how scientists & engineers work

C3 Science, Technology & Society: Students identify & describe the influences of science and technology on people and the environment

E1 Biodiversity: Students compare living things based on their behaviors & environmental needs

E2 Ecosystems: Students describe ways organisms depend upon, interact within, & change the living and non-living environment as well as ways the environment affects organisms

c. * Student Ownership: Describe how students will be involved in selecting the idea and planning/ implementing the project.

Again, we will rely on many of our community partners to assist us in identifying the multiple problems that can contribute to a stream's health. Inquiry and fact-finding lessons plus nonfiction readings will be shared between the fourth grade teachers and the librarian.

Students will choose from the identified problems, find solutions and begin planning the project making connections with others.

d. * Apprentice Citizenship: Describe the community need to be met by the project. List the community partners who will be involved.

Clean water benefits the school environment, local citizens and the ponds, bays and gulf that this water reaches. These efforts on the part of students will result in a greater understanding of stream ecology and how behavior upstream can influence water quality downstream. Our school district emphasizes producing lifelong learners; this project produces lifelong 'stewards of the earth'.

Limited access, with idea of a closer look at stream habitats, will be accomplished when the students decide to work on a pathway to the water.

3. Project Budget

Money Requested for Project:	\$618.00
-------------------------------------	----------

List Budget Requested	Item *	Amount *	Description
	1. Crushed stone-delivered	\$220 (est.)	For pathway
	2. Ice cube trays	\$10	For insect collection
	3. 3 bushes; 10 plants	\$150	For buffer
	4. Field trip	\$150	Follow stream
	5. Ice cream, chocolate milk	\$60	For celebration "Water We Eating?"
	6. gloves and 2 toolboxes	\$28	
	7.		
	8.		

* Please attach quote/documentation from vendor or source

4. Documentation of the Project

Upon completion of your project you will be asked to submit a report entitled, "Fully Documenting a Service-Learning Project. http://www.kidsconsortium.org/images/tools/forms/sec2_progress_reporting/ful_doc_proj.doc (It has been suggested that the process will be easier by filling it in as you go along in the project, instead of doing it all at the end.)

You will also have a short consultation with your District Service Learning Coordinator to discuss the outcomes of the project.

5. Documenting the Project as you Proceed

Number of Volunteers involved in the Project? Hours? Mileage?

Can you provide us with:

- Copies of press releases or newsletters? YES NO
- Photographs, digital pictures, or other documentation? YES NO
- Examples of classroom materials, such as reflection activities, rubrics, or other types of work created for the project? YES NO

c. Are you willing to put your project on the district's website? YES NO

6. Project Wrap-up Information (to be completed at end of a Project) (Please attach curriculum materials and student assessments developed for this project)

Describe the culminating assessment, product, performance, celebration, etc. that took place as part of the project.

You and your community partner(s) will be asked to take an electronic survey about your experience.

For the Fall semester and year-long projects we will need you to send us a list of names and email addresses by January 9, 2009 and by April 10, 2009 for second semester projects.