











WHAT

We Back the Bay Project Description:

Artist Boat's *We Back the Bay* project will build awareness of the causes and consequences of poor water quality in Galveston Bay, develop critical thinking skills necessary to mitigate pollution of the Bay, and create action to increase water conservation and reduce storm run-off from school campuses. This project is made possible through funding from The Environmental Protection Agency (EPA) to Artist Boat.

Project Objectives:

- 1. Participants will be able to list the causes and consequences of poor water quality for Galveston Bay
- 2. Participants will be able to make informed decisions regarding water conservation and storm water run-off that will improve water quality of Galveston Bay.
- 3. Participants will be able to think critically, problem-solve, and make decisions about ways to conserve water and reduce storm water run-off from their campus
- 4. Participants will be able to take action on their campus by building their Water Smart landscape to conserve water and reduce storm water run-off from their campus.

Project Components Covered by Grant:

- 1. Professional Development (2-3 teachers)— Teacher teams will participate in 3 days of PD. During the PD we will model activities that address the causes and consequences of poor water quality for Galveston Bay. We will also introduce how Water Smart landscapes can mitigate surface run-off to the Bay, as well as the academic advantages to having an outdoor lab on campus. Teachers will be provided with a 'tool-kit' of landscapes that can be built on their campus including a school yard habitat such as prairie or meadow, rain catchment and retention systems (i.e. for a campus garden), a rain garden, or a wetland pond. Two teachers are required to attend all 3 days of PD. Teachers are eligible for CPE credits for attending all three days of PD. Up to \$200 of the mini-grant (see below) can be allocated toward teacher stipends, if desired.
- 2. Eco-Art Workshops and Adventures (5 classes, 125 students)— Each campus will receive 5-(2 Hour) Eco-Art Workshops and 5-(4 hour) Eco-Art Kayak Adventures. During the workshop we use a watershed model to introduce students to the connection between communities and Galveston Bay via surface water-run off and demonstrate non-point source pollution. In the second hour of the workshop, we introduce the basics of watercolor painting and students paint a species that is native to Galveston Bay. The inclusion of art into programming is advantageous because the mind uses three tools to acquire, store, and communicate knowledge: motor skills, perceptual representation, and language. By painting, students will interpret and translate what they learned in the first hour into their painting, which will increase retention of concepts and vocabulary introduced. Following the Eco-Art Workshop students will participate in the Eco-Art Adventure. Adventures are feet-in, minds-on, experiential learning opportunities via kayak. The Adventure reinforces topics covered during the Workshop and allows students to explore natural places while using scientific methods to measure water quality of the Bay. Students are also given the opportunity to reflect on their experience by painting a plein air watercolor while sitting in their kayak in the marsh. Value of \$6,250. Schools must cover the cost of buses and substitute teachers for Kayak Adventures.

3. Water Smart Landscape – Each campus will receive a \$4,549 mini-grant to build and publicize a Water Smart Landscape on their campus. The students will design and build their landscape, with assistance from their teacher(s) and the We Back the Bay Project Partners (see 'WHO' below). Students will select a landscape from a 'tool-kit.' which will be distributed during the PD. The 'tool-kit' will include planning tools to design a School Yard habitat, water collection system, rain garden, and wetland pond. Using these resources students will write their plan, which will be approved by the Project Partners before installation. Project Partners will mentor the students and teacher(s) along the way with campus visits and correspondence via email or telephone. When the plan is approved, the campus will begin building their landscape. Students will also plan a marketing or publicity campaign to bring awareness toward water quality issues in their community and how their Landscape addresses this issue. Students are required to allocate 10% of their mini-grant toward marketing using the "Back the Bay" materials. Possible uses of marketing money might be posters, social media, video, reusable bottles/cups/bags, etc. Visit https://backthebay.org to learn more about the Galveston Bay Council's outreach program and be creative! Please note that schools will have to purchase supplies for WaterSmart Landscapes upfront. Artist Boat will set up a contract with your Grants Office so that we can reimburse \$4,549 for expenses.

WHERE

- 1. Professional Development Workshop held at the University of Houston-Clear Lake at the Environmental Institute of Houston (EIH).
- 2. Students will participate in Eco-Art Workshops on the school campus and Eco-Art Kayak Adventures at the Coastal Heritage Preserve (Galveston, TX).
- 3. WaterSmart Landscapes will be installed on campus grounds.

WHEN

- 1. Application Due Date March 19, 2018 at 5pm (CST)
- 2. Professional Development Workshop July 16, September 14, and 15, 2018
- 3. Eco-Art Workshops & Adventures September October 2018
- 4. WaterSmart Landscapes
 - a. Students write plan for landscape October December. Plans due on Dec 21, 2018
 - b. Plans Approved Jan 4, 2019
 - c. Students build landscapes January April 2019
 - d. Ribbon cutting on campus May 2019

WHO

We will accept applications from teachers employed by schools located in Galveston, Harris, Brazoria, Chambers, Liberty, and Fort Bend County. Public, charter, and private schools are eligible to apply as long as the campus is designated as a 501(c)(3). Per EPA rules we must award 5 mini-grants to separate entities, therefore we can only accept one campus per school district, charter, or private school into the project.

The project is open to 6th-12th grade teachers, but preference will be given to 6th-8th grade. Students that participate in the program can be part of an academic class or an afterschool club/program. Each recipient must use all 5 workshops and 5 kayak adventures and these students must be involved in some capacity with the design, build, marketing, or use of the landscape.

We Back the Bay Project Partners: Artist Boat, UHCL-EIH, Asakura Robinson, Houston-Galveston Area Council, and Galveston Bay Estuary Program.

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WHY

Galveston Bay supports productive commercial fisheries, shipping, energy, and recreational industries, which support our economy at local and international scales. The healthy economy has therefore driven population growth of the region. As the population of the Galveston Bay Watershed grows, more impervious surfaces (i.e. roads, parking lots, buildings) are constructed. These impervious surfaces reduce the amount of water that can percolate into the soil. During storm events then, water moves across the watershed quickly, which creates flooding and transports pollution that could damage fisheries and recreational opportunities in Galveston Bay. We Back the Bay will create awareness of these issues and allow students to improve local surface-run off conditions by building a WaterSmart Landscape on their campus.

HOW

Each campus must apply to participate in *We Back the Bay*. The application can be found [here]. Only complete applications will be reviewed. Please see 'Application Rubric' for more information regarding selection criteria.

Each application should come from a team of <u>at least</u> two teachers. We encourage the involvement of more than two teachers in the project and PD, but not required.

Teachers must describe how they will integrate the design, build, and marketing of their landscape into their current and future curriculum to meet educational goals. Preferably the established Landscape will be used as a learning legacy for the entire campus. Please reach out to other teachers on your campus to find out how they might use the landscape in their curricula. Extra points will be given to applications with one or more signed letters of support (one-paragraph) from campus colleagues describing how they will use the Landscape.

To be considered for the project, please include a letter of support signed by your Principal and Superintendent. This letter outlines what is expected from the school, district, and Artist Boat. A draft of the support letter is included in the application package. Please copy and paste the text onto district/school letterhead before obtaining signatures.

Extra points will be given to applications that:

- 1. Can provide in-kind support through donation of goods or services to your project. For example, you might want to install a wetland pond and need to excavate or you might know a local greenhouse that would donate soil. To prove this in-kind support you will need to submit a Letter of Support that details the donation and value.
- 2. Provide a Letter of Support from their City or County official that demonstrates they are aware of your campus contribution to improving the health of Galveston Bay through water conservation, reduced run-off and non-point source pollution.

Application Checklist:
Application (filled out and signed by both teachers)
Administration Letter of Support (signed by Principal and Superintendent)
Letter of Support for in-kind donations or government official (optional)
Brief signed letter from other teachers that plan to use the Landscape (optional)
Contact Amanda Rinehart at 409-770-0722 or arinehart@artistboat.org with questions.