

B-WET BAY WATERSHED EDUCATION & TRAINING PROGRAM

The NOAA Bay Watershed Education and Training (B-WET) Program offers competitive grants to promote locally relevant environmental education opportunities to students in grades K through 12, as well as related professional development for educators. All B-WET funded projects emphasize sustained, hands-on, experimental activities that are aligned with academic learning standards.

B-WET activities show an increase in:

- Teachers' confidence in their ability and their intentions to implement experiential learning in their classroom
- Students' enjoyment of learning about the ocean and protecting the ocean
- Students' and teachers' ability to identify ways watersheds and the ocean become polluted and ways to prevent this pollution

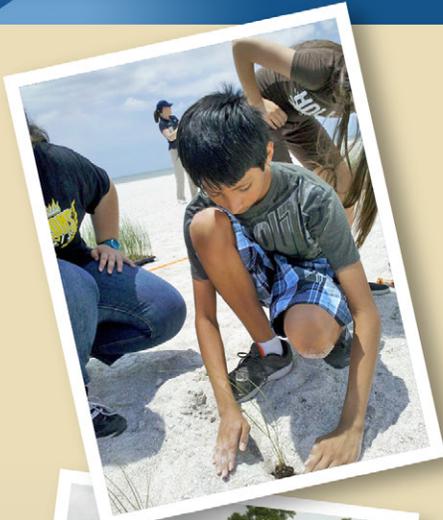
Priority Areas: NOAA B-WET responds to regional educational and environmental priorities through local implementation. The Gulf of Mexico B-WET Program is administered by the NOAA Fisheries Southeast Regional Office. Applicants are asked to employ meaningful watershed educational experiences (MWEs) that address the coastal resource priorities outlined by the Gulf of Mexico Alliance. The Gulf of Mexico Alliance is a partnership of the states of Alabama, Florida, Louisiana, Mississippi, and Texas, with the goal of significantly increasing regional collaboration to enhance the ecological and economic health of the Gulf of Mexico. Gulf of Mexico Alliance priority areas include:

- Water quality for healthy beaches and shellfish beds
- Wetland and coastal conservation and restoration
- Environmental education
- Identification and characterization of Gulf habitats
- Reducing nutrient inputs to coastal ecosystems
- Coastal community resiliency

Eligible Applicants: K through 12 public and independent schools and school systems, institutions of higher education, nonprofit organizations, state or local government agencies, interstate agencies, and Indian tribal governments.

Available funding: In general, the Gulf B-WET Program offers \$25,000-\$100,000 awards for projects one to two years in duration.

To learn more about the Gulf of Mexico B-WET Program contact Amy Clark at Amy.Clark@noaa.gov (228-688-1520), or visit our website at: http://sero.nmfs.noaa.gov/outreach_education/gulf_b_wet/



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Regional Highlight:

Gulf B-Wet Program Brings Florida Teachers Together to Explore and Experience Tampa Bay's Coastal Environments like a Scientist

Submitted by: Teresa Greely and Angela Lodge. Education and Outreach Programs, Wpkxgt ukj 'qh'Uqwj 'Hrqt kf c'College of Marine Science

The College of Marine Science's Education and Outreach Programs launched its Tampa Bay Watershed Education Teacher Professional Development Workshops, funded through a NOAA Gulf of Mexico B-WET grant, in the fall of 2012. Three components provide sustained professional development for teachers: Experiential Learning in Marine Science field course to engage teachers directly with watershed habitats; GLOBE Environmental Science Training to provide teachers with inquiry-based, watershed monitoring protocols; and, Classroom Integration to engage students in environmental wetland projects. The goal of the Experiential Learning in Marine Science field course is to engage teachers directly with watershed habitats. Teachers who participated were trained in GLOBE environmental science protocols to monitor Atmosphere, Hydrology and Soil characteristics of their watershed. Each teacher was GLOBE certified at the end of the trainings and could take the field equipment and sampling techniques learned back to their students. During the spring 2013 Semester teachers participated in field component of the professional development. Teachers were the field scientists as they 1) set sail aboard the RV Weatherbird II-- USF's flagship active in the Gulf of Mexico monitoring after the Deepwater horizon event, 2) measured geological and physical processes influencing a barrier island along eastern Gulf of Mexico, 3) compared three wetland habitats during a coastal ecology field trip, and 4) analyzed freshwater input to bay via kayaking from headwaters to river mouth. Via authentic research in natural settings, teachers practiced implementing the GLOBE sampling techniques that they learned at the beginning of the course while using and learning the instrumentation and techniques ocean scientists use to monitor the Gulf. It was a joy to see teachers having so much fun while learning new skills to enhance their science teaching and learning opportunities for their students. The consensus among teachers is that the program provided the authentic field based training that they required to be able to provide a similar learning experience for their students. As one teacher poignantly stated;

"Without content that is new, authentic and field based teachers will not be able to inspire students or teach them to think and acquire scientific literacy" (Elisabeth McCormack, 7th grade science teacher)

Our staff has maintained contact with each of the teachers, visited each school to access their progress with implementing the GLOBE program at their schools, and incorporating the watershed education lessons and research learned. We will continue to support their efforts by providing teaching resources and guest lectures as requested. Teachers are currently training their students to take atmosphere and hydrology measurements--- soon students as 'citizen scientists' will upload their data to the international GLOBE environmental data set. It is our hope students and teachers alike will benefit from a global perspective of science, especially the planet's one interconnected ocean.

