



GALVESTON BAY
FOUNDATION

Methods for Engaging Teachers about Estuarine Lessons Learned for providing Teacher Workshops



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RAE 2016

Galveston Bay Foundation

Mission: To preserve, protect, and enhance the natural resources of the Galveston Bay estuarine system and its tributaries for present users and for posterity

Four target areas:

► Advocacy

- Water quantity
- Water quality
- Wetland impacts
- Oil spill response

► Conservation

- Conservation properties and easements
- Habitat enhancements and clean-
- Habitat restoration

► Education

- Environmental Education K-12
- Public events and programs for involvement
- Public Official awareness of issues
- Provide resources and guidance

► Research

- Support allocation of resources



Do you know Galveston Bay?

- Largest bay in Texas (660 square miles) and 7th largest in U.S.
- Averages 8 feet deep
- 4 major sub-bays: Galveston, Trinity, East, West
- 4 counties: Brazoria, Harris, Chambers, Galveston
- Freshwater inflows from San Jacinto (28%) and Trinity (54%) Rivers and local bayous and creeks (18%)
- 2nd Largest port in the US – Port of Houston
- Most productive bay in Texas
- Wetland replacement value estimated at \$5.7 billion



What's the attraction

What's in it for me

- Provide the personal experience to the bay
- Understand the amount of committed time
 - How many days
 - Number of hours each day
- Create levels of incentives
 - CPE hours from state education agency
 - Stipend
 - Education tool
 - Credits towards a masters



GET wet! Galveston Bay Education for Teachers

Dates:
April 30, 2016 (Classroom)
May 7, 2016 (Field)

Time: 8:30 am-3:30 pm
(both days)

Location:
Day 1: University of Houston Clear Lake, Houston, TX*
Day 2: Sweetwater Lake, Galveston, TX*
location subject to change

SIGN UP!
www.galvbay.org

Galveston Bay Education for Teachers (GET wet!) is a two-day professional development introduction to the Get Hip to Habitat school year program. GET wet! includes:

- Background information on Galveston Bay
- Classroom curriculum for focusing on Galveston Bay
- Issues facing Galveston Bay
- Outdoor learning experiences in Galveston Bay

Presented by

www.galvbay.org

LEARN MORE!
To learn more about GET wet! OR
Get Hip to Habitat, contact:
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This is a FREE teacher workshop. Participants will receive a stipend & continuing education credit hours. Attendance required on BOTH days to receive stipend & credit.

All materials will be provided by Galveston Bay Foundation. Lunch will NOT be provided, please bring your lunch. Space is limited, and priority is given to teachers participating in the Get Hip to Habitat school year program. Detailed information can be found on the website, www.galvbay.org.

When to deliver program?

- Understand holidays, state testing, and in-service days
 - Summer – vacation, in-service training
 - Fall – football, school events
 - Winter – holidays
 - Spring – Focus on state standards
- Provide multiple workshop dates to choose from
- Be flexible



What does a successful day look like?

- Consider the hours of school time
- Working lunch?
- Starting content later
- Plan for Unplanned time
- Consider travel time of field day
as part of the hours
- Food?
- Provide for the necessary comforts

GET Wet!

Itinerary Day 1

UHCL Science Education Room

8:30 – 9:00

Check-In, Introductions, and Expectation

9:00 – 9:15

GBF Overview

9:15 – 10:30

Living Shorelines

Living Shoreline Model activity

Bay Report Card with Activity

10:30 – 12:00

Lunch

12:00 – 12:30

Get Hip to Habitat Program Introduction

12:20 – 12:30

Plankton with Lesson – Guest Speaker,

12:30 – 1:30

Jamie Steichen

1:30 – 3:30

Regional Mapping Activity

Bathymetry Map Activity

Galveston Bay Timeline

Itinerary Day 2

Galveston Island – Sweetwater Lake

8:30 – 9:30

Wetland and Site Introduction

Wetland Functions Model

Plant Dissection

Wetland Value Lesson

Plant Marsh and Build Reef

9:30 – 11:00

Seining

11:00 – 11:30

Lunch (Sack lunch provided)

11:30 – 12:00

Oysters Dissection and Reef Exploration

12:00 – 1:30

Water Quality – Guest, Sarah Gosset

1:30 – 3:00

Wrap-up and Dismissal

3:00 – 3:30

Wow Factors

- Find the magic!
- Find engaging local scientist as a guest speaker and help them design a lesson
- Keep the teachers hands-on




Important Lessons Learned

- Be prepared for all material to be handed over
- Write everything up in lesson format
- Perform the activities you want them to do



How to Continue Supporting after the Workshop

- Priority into education programs
- E-news
- Discounts on education programs



The screenshot shows an email newsletter interface. At the top, there are navigation links for 'Subscribe', 'Share', and 'Print Issues'. Below this is a header image with the text 'GET HIP TO HABITAT' and 'CALIFORNIA BAY WETLANDS'. The main content area features a section titled 'Get Hip to Habitat February eNews' with a short paragraph of text. Below that is a section titled 'Environmental Education Supported in the Every Student Succeeds Act' with another paragraph. The final section is 'Classroom Activities', which includes two sub-sections: 'Galveston Bay: Bathymetry' and 'Balance in the Bay', each with a brief description of an activity.

Get Hip to Habitat February eNews

Environmental Education Supported in the Every Student Succeeds Act

Classroom Activities

Galveston Bay: Bathymetry

Balance in the Bay

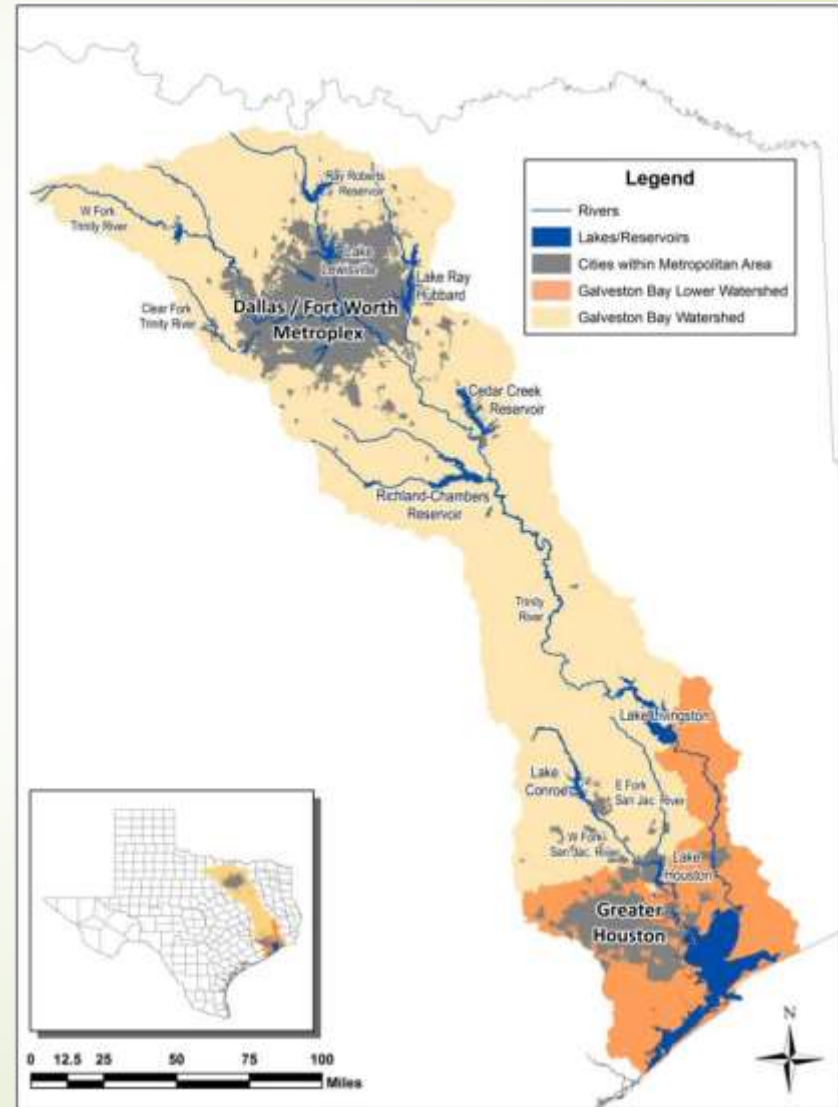
When evaluating

- Benefits of Informal evaluation
 - End of day
 - During periods of personal exploration
- Online simple Formal evaluation



Next Steps

- Partnerships
 - Local organizations
 - Universities
- Immersion courses
- Watershed approach





Questions?

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Thank you!

