

Galveston Bay: How's it doing and what can you do?

Sarah Gossett
Water Quality Manager



The Galveston Bay Report Card is a scientific analysis of the health of the bay engaging the community for a sustainable future. Presented by the Galveston Bay Foundation and Houston Advanced Research Center.



GALVESTON BAY
FOUNDATION



HARC

HOUSTON ENDOWMENT
A PHILANTHROPY ENDOWED BY JESSE H. AND MARY GIBBS JONES



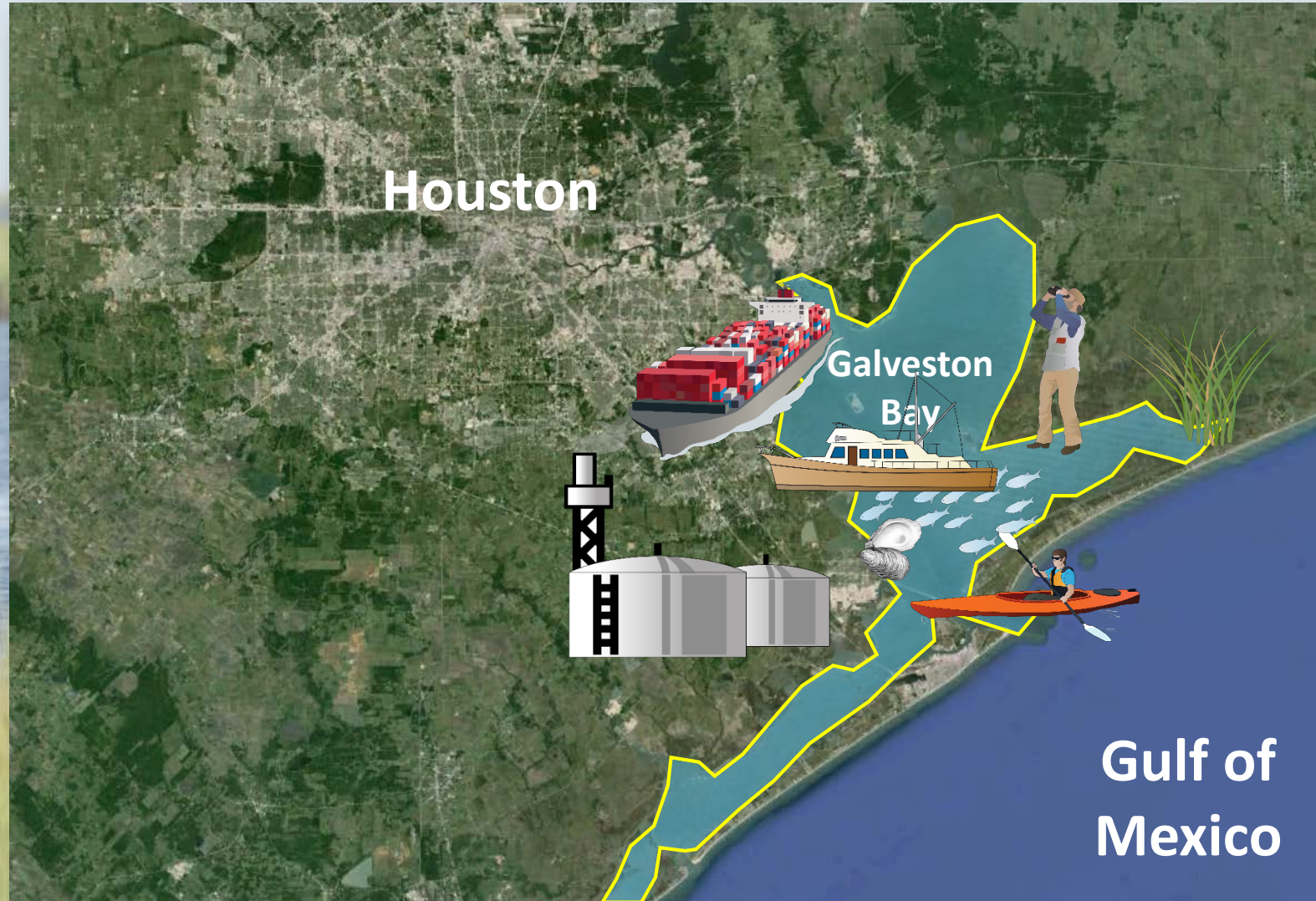
Photo by Niki Doyle

ABOUT THE REPORT CARD: www.GalvBayGrade.org



BODY OF WATER WITH A FREE CONNECTION WITH
THE OPEN SEA – AND IT STARTS IN YOUR

What does our Bay do for us?



Economic Benefits

- Shipping
- Petro-chem
- Commercial & recreational fishing, tourism

Ecosystem Services

- Flood protection
- Water quality
- Habitat/wildlife

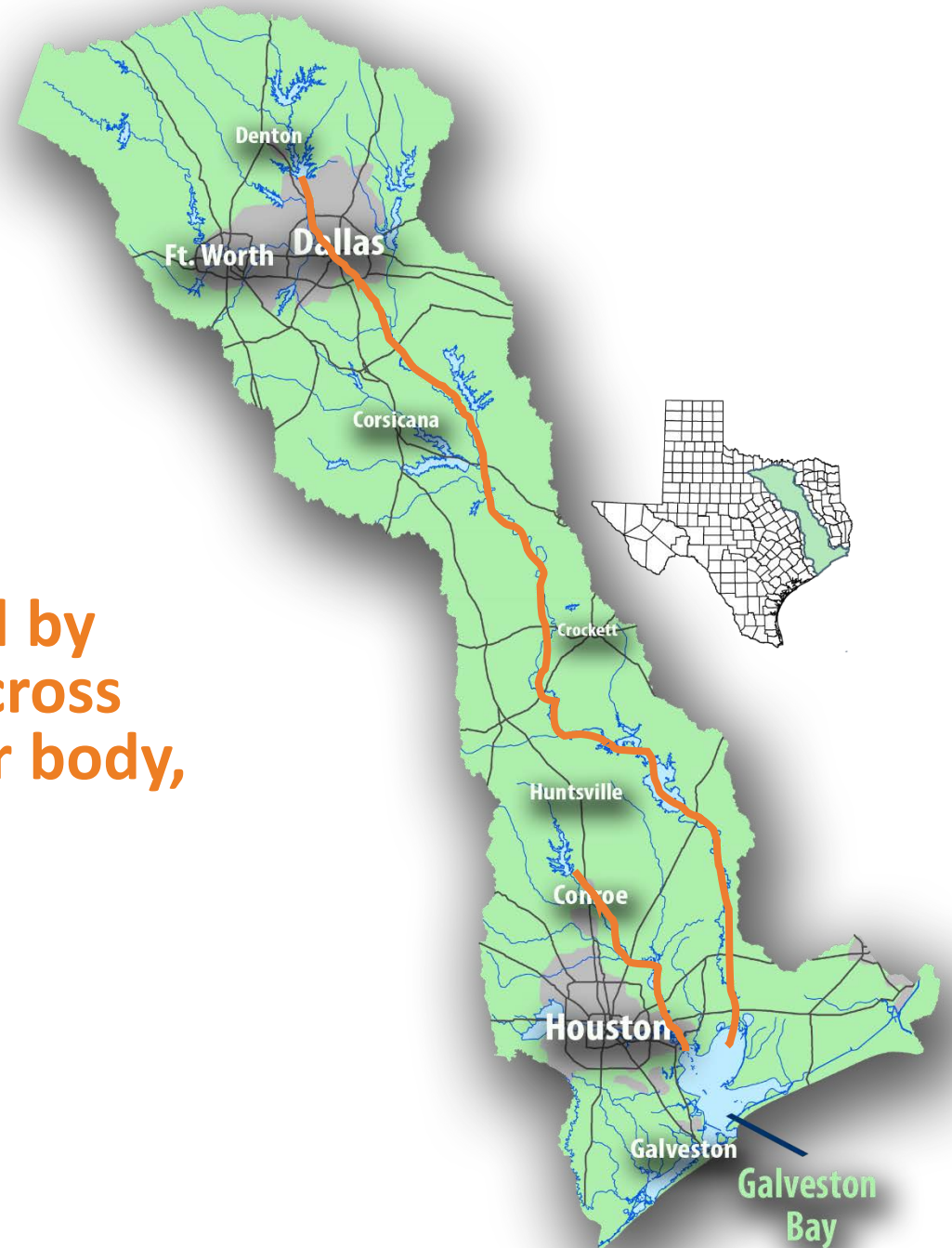


GALVESTON BAY STARTS IN OUR BACKYARD.



What is a watershed?

- Every square inch of land is part of a watershed.
- A watershed's borders are determined by how rivers, streams and rainfall run across the land and drain to a common water body, like Galveston Bay.
- Half of Texas' population lives in the Galveston Bay watershed.





EXCELLENT



GOOD



**ADEQUATE
FOR NOW**



**REQUIRES
ACTION**



CRITICAL



**INSUFFICIENT
DATA**

A silhouette of a child fishing in shallow water at sunset. The sun is low on the horizon, creating a warm, golden glow over the water. The child is on the left, holding a fishing rod. The background is a vast expanse of water meeting a cloudy sky at the horizon.

2017 GALVESTON BAY REPORT CARD

SUMMARY

A citizen-driven, scientific analysis
of the health of Galveston Bay

Galveston Bay is Texas' largest estuary. Whether you work in downtown Houston, live in Spring-Cypress, boat near Kemah, or fish at San Luis Pass, you are connected to the Galveston Bay ecosystem.

www.galvbaygrade.org



#GalvBay17

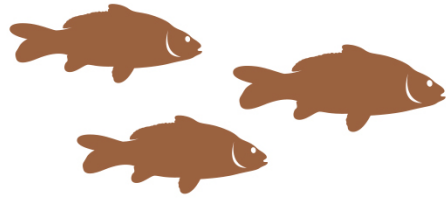
Photograph by Niki Doyle

A group of people, including children, are gathered near a body of water. In the foreground, there is a dense patch of tall, green grass. A young boy in a white shirt is looking down, and a person in a blue shirt is crouching near the water's edge. In the background, several other people are visible, some wearing orange shirts. The sky is overcast with grey clouds. The text "What can you do?" is overlaid on the image in a white, sans-serif font, with the word "you" highlighted in yellow.

What can you do?

WILDLIFE

C



INDICATORS	Galveston Bay	Rivers & Bayous
Shellfish	C	
Finfish	C	
Birds	C	
Invasive Species	B	D

What Can You Do?

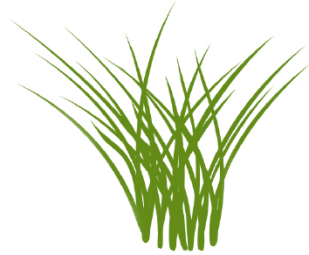
Take Care of Animals, Land and Sea

- Keep your distance from bird nesting areas. Don't walk or allow pets near these sensitive habitats.
- If you fish, it's important to know the rules and regulations regarding fishing seasons, size and daily limits. Catch and release when possible.
- If you don't know it, don't grow it. Never release unwanted pets into local habitats and waterways.



HABITAT

D



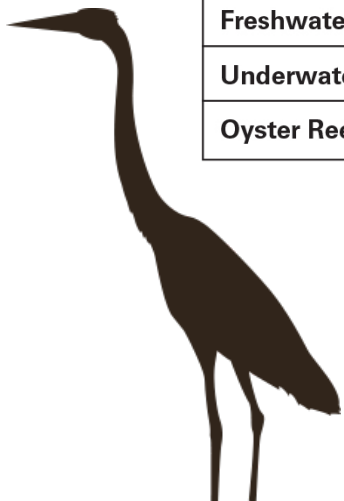
What Can You Do?

Save the Land We Love

- Volunteer to restore habitat around the Bay by participating in conservation projects.
- Conserve land by donating it to a land trust or by establishing a conservation easement.
- Use the Watershed Information Tool to learn about wetlands near your home, work and school. (harcresearch.org/wetlandplanningtool).

INDICATORS

Saltwater Wetlands	I
Freshwater Wetlands	I
Underwater Grasses	C
Oyster Reefs	I



WATER QUALITY

A



INDICATORS	Galveston Bay	Rivers & Bayous
Nitrogen	A	A
Phosphorous	A	B
Dissolved Oxygen	A	A

What Can You Do?

A Little Goes a Long Way

- Slow runoff by maintaining natural habitat, reducing paved areas and installing rain barrels.
- Apply lawn fertilizers sparingly, if at all, and avoid overuse near bodies of water. Properly dispose of pet waste.
- Help preserve and restore habitats that promote high oxygen levels like wetlands and forests near streams and rivers.



HUMAN HEALTH RISKS

C



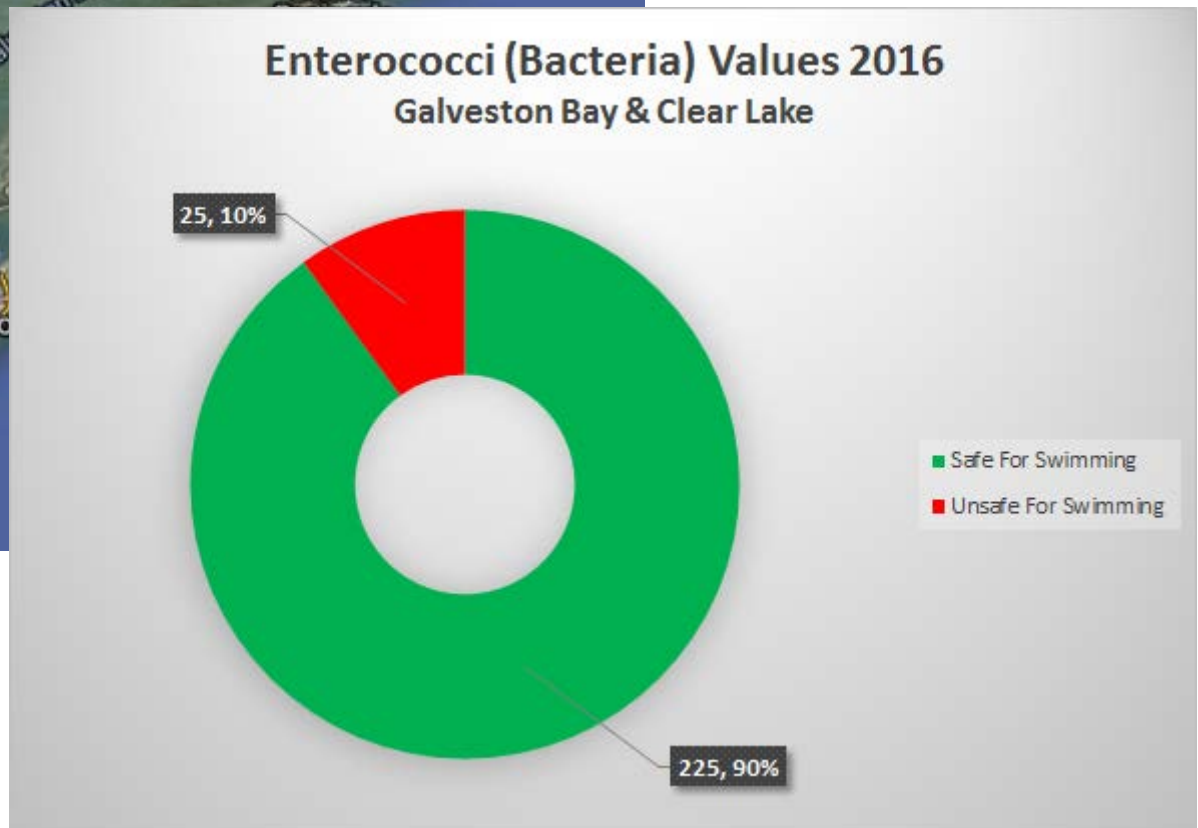
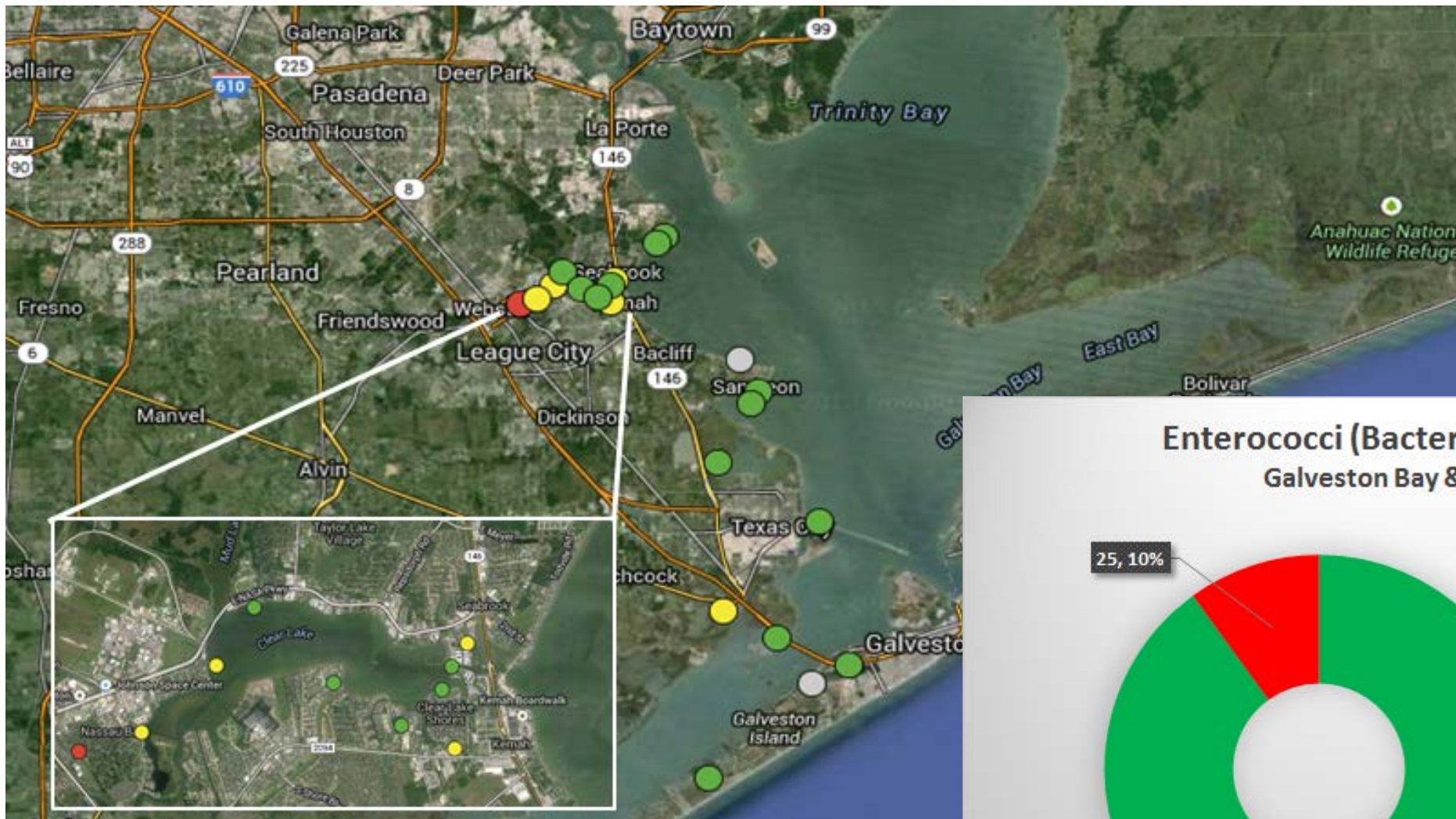
INDICATORS	Galveston Bay	Rivers & Bayous
Seafood Consumption Safety	C	D
Recreation Safety	A	B

What Can You Do?

Protect Family, Friends, and Yourself

- Check for seafood consumption advisories in effect for the areas where you fish or crab.
- Pump out boat sewage at designated facilities — not in the Bay. Properly dispose of pet waste.
- Contact your local officials about improving sewage infrastructure. Regularly maintain onsite septic systems so that they do not pollute the environment or pose health hazards to people.





www.galvbay.org/citizenscience

COASTAL CHANGE

C



What Can You Do?

Our Actions Impact Coastal Resilience

- Learn about floodplains and determine the proximity of your home or business to 100-year and 500-year floodplains. (harcresearch.org/wetlandplanningtool).
- Reduce greenhouse gas emissions by conserving electricity, purchasing green power (solar or wind), driving less and considering fuel efficiency when purchasing a vehicle.
- Recycle and use less stuff by reusing, repurposing; this conserves energy and reduces pollution and greenhouse gas emissions.

INDICATORS	
Freshwater Inflow	C
Sea Level Rise	F
Winter Water Temperature	A
Water PH	A



POLLUTION EVENTS & SOURCES

C

INDICATORS	Galveston Bay	Houston Ship Channel	Total No. of Spills	Total Volume of Spills
Toxic Metals in Sediment	A	B		
Organic Toxins in Sediment	I	B		
Dioxin in Sediment	I	D		
Oil Spills			C	F
Litter & Trash	I			



What Can You Do?

Prevent Pollution in Your Area

- Urge local officials to prioritize Bay cleanup and preservation.
- Report environmental emergencies, discharges, spills, or air releases at www.galvbay.org/GBAN.
- Protect bay habitats, and keep trash and debris out of the water.





POLLUTION REPORTING MADE EASY.

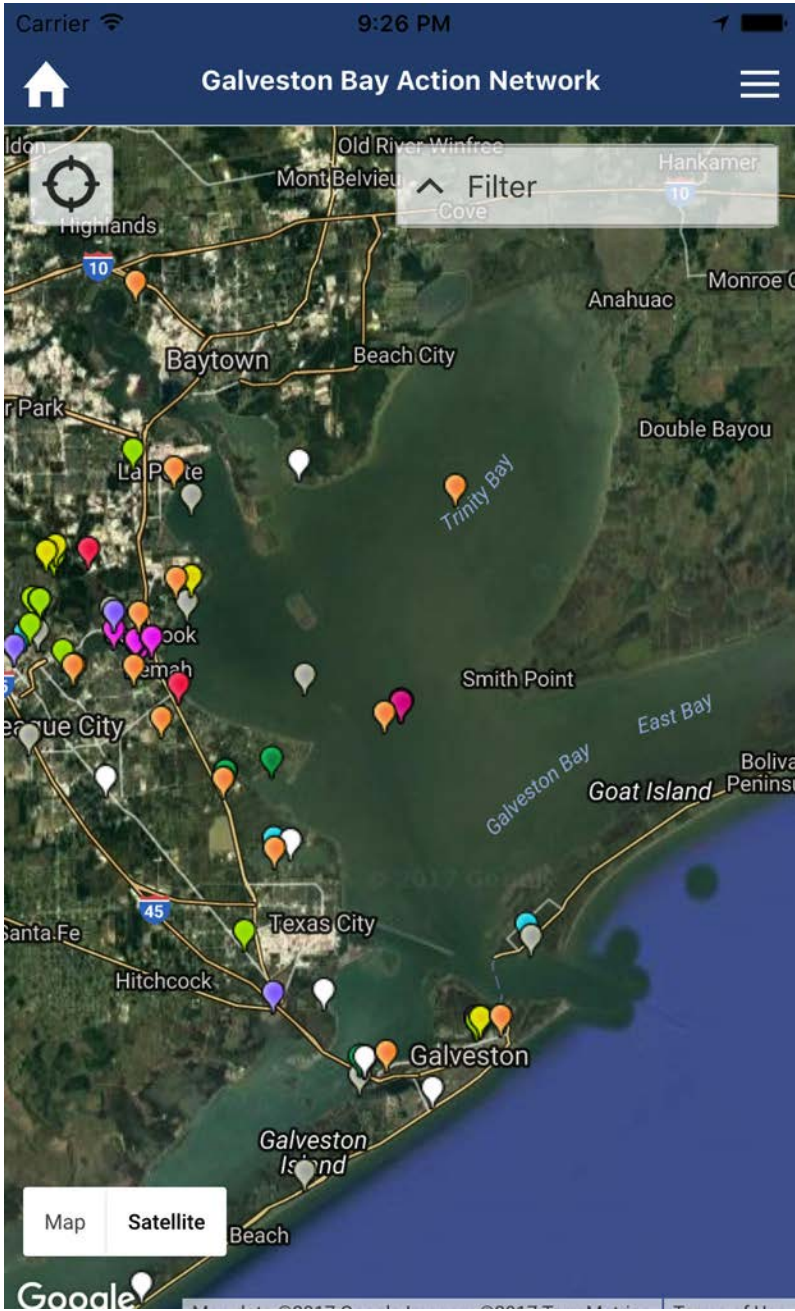


*Galveston Bay
Action Network*

 GALVESTON BAY
FOUNDATION

VISIT GALVBAY.ORG/GBAN OR
DOWNLOAD THE APP FOR FREE.


ENSURE THE FASTEST
POLLUTION CLEANUP.



* Location

You have to select a location.

* Incident Title

* Pollution Type

Select

* Municipality


Select

* Date of Incident

* Time of Incident

* Description (details of event, potential source, etc.)

Galveston Bay Action Network



Through the Galveston Bay Action Network, you can easily report any type of pollution you see in seconds! These reports are automatically sent to the proper authority to ensure the quickest response and cleanup.

MORE

REPORT POLLUTION



Chemicals & Discolored Water

Water that is cloudy, has a strange or uncharacteristic color or a foul odor is usually polluted.



Fish Kills

Fish Kills are large schools of fish that die at the same time. The fish will be floating in the water.



Boat Sewage

Boat Sewage is a stringy film of particles and waste on the water surface that is generally gray in color and smells bad. When sewage is dumped, this waste is expelled from the boat hull.



Algal Bloom

Harmful algal blooms usually look like scum or paint covering the surface of the water and can be green, blue, red or brown.



Storm Drain Pollution

Storm drain pollution often appears as litter, debris, fertilizers, paints, soaps and household chemicals, oil and grease, lawn clippings etc. that ends up in the storm drain.

See **SEWER OVERFLOW?**

Report it at

www.galvbay.org/GBAN



Sanitary Sewers

Sanitary sewer overflows look like they sound: sewage water spilling out of a sewer line or manhole.

Septic Systems

Septic System malfunctions often appear as drainage issues in your home, standing water, damp spots, bad odors, or bright green, spongy lush grass around the septic tank.

See **STORM DRAIN POLLUTION?**

Report it at

www.galvbay.org/GBAN

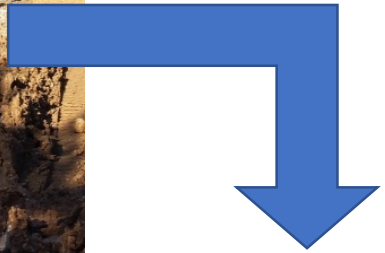


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A group of people, including children in baseball uniforms, are gathered near a body of water. In the foreground, there is a dense field of tall, green grass. The background shows a calm body of water under a cloudy sky. A young boy in a white baseball uniform is looking down, and another person in a blue uniform is crouching near the water's edge. A person in an orange jersey with 'PRINCE' and the number '4' is visible in the middle ground.

What can **you** do?

You can start right now!

1. Report Pollution: Download the GBAN app
2. Subscribe to Galveston Bay Report Card website
3. Follow GBF on Facebook for updates

Help us spread the word!

Take Action

Like 304



The Houston Zoo Blog

Be the Eyes on Your Bay!

by Ryan Draper

Written by Kim Sharkey

You can help save animals here in Texas and all over the world! Here are just a few ways to take action and protect wildlife. And remember, every time you visit the Houston Zoo a portion of your ticket proceeds go towards saving animals in the wild! So, a simple zoo visit is a great action to take to protect wildlife!



[Plastic Pollution](#)



[Ocean-Friendly Seafood](#)



[Paper Recycling](#)



[Recycle Cell Phones](#)



[Pollinators](#)



[Palm Oil](#)

1. Be the Eyes on your Bay!

Report pollution and trash to The Galveston Bay Foundation's Action Network (GBAN) which allows you to make reports through their website or on your mobile device. The website contains an interactive GPS enabled map that pinpoint's your exact location. The report is then sent on to the appropriate authorities in order for the situation to be resolved. It has never been easier to directly affect the health of your local beaches.

Use this handy tool created by @GBayFoundation to report #polluters for a clean & healthy #GalvestonBay! www.galvbay.org/GBAN



Thank you!



Photo by Andrew Hancock