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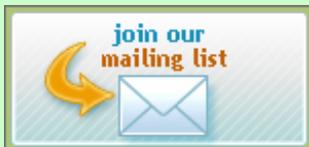
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# Texas Stream Team

Houston-Galveston Area Council

Working to Protect Our Waterways

Volume 2016 Issue 2



## SKILLS CHECK



### MEASURING pH

This video shows the step by step process for measuring the pH of a water sample using the color comparator method.

[Review the procedure on YouTube.](#)

## Spotlight Photo

## MONITOR SPOTLIGHT VALROY MAULDIN



Valroy Mauldin grew up in New Mexico with no real water in sight. After graduating from New Mexico State University, he was hired as a chemical engineer at Dow Chemical in Freeport. He soon discovered he liked being near water and appreciated its beauty.

The Mauldins purchased a weekend-type home on the San Bernard River nearly 30 years ago, and Valroy became an active member of the [Friends of the River San Bernard](#), a nonprofit organization set up by citizens who live on or around the river. The mission of the organization is to restore, protect, promote, and ensure a clean, healthy, flowing San Bernard River for the sanity and enjoyment of present and future



**Mouth of the San Bernard River in late 2015.**

## Texas Stream Team Training Sessions



### Phase I & II Training

When: Friday, June 3

Where: San Jacinto River Authority  
Lake Conroe Division, 1577 Dam  
Site Road, Conroe, TX 77304

Time: 9 am-4 pm. (1 hour lunch)

How: Contact [Will Merrell](#) or 713-993-4594 to register.

[Learn more](#) about becoming a volunteer monitor.



## Calendar of Events

generations.

Some of the Friends were volunteer monitors and Mauldin decided he would like to join the Texas Stream Team volunteer monitoring program. He has been sampling the San Bernard River from his pier off Brazoria County Road 496 since July 2010.

Of interest to him while monitoring is how salinity is affected by tides, winds, and rainfall (or lack thereof). His river house is in an area that is normally brackish but can vary from essentially fresh water to salinity equal to the bays. (See *Technical Territory* below).

"Being a monitor is really not hard or time consuming," Mauldin said. "I am not really sure if it helps any environmental efforts but surely does not hurt."

In his spare time, Mauldin has tried to become the oldest water skier on the San Bernard River.

## TST REPORTING FORM UPDATE

### New forms now available for download

Many H-GAC monitors have been monitoring a long time and may still be using older versions of the Texas Stream Team reporting form that are no longer accurate or efficient.

Forms have been revised and converted to a fillable PDF format. There are now two forms. The **Tidal Form** has fields for salinity. The **Fresh Water Form** has fields for bacteria (*E.coli*) testing. If you are unsure which form to use, contact [Will Merrell](#) at 713-993-4594.

The [H-GAC Texas Stream Team web page](#) has been updated and links are provided there for downloading the updated reporting forms. No changes or alterations should be done to the form. If you do other testing, you may include the results in the measurement and field observations comments section.

**Please begin to use the appropriate new form with your next monitoring report.** Cheat sheets for each new form are

May 14

[Bay Day Festival](#)

Kemah Boardwalk

Galveston Bay Foundation

May 20

[Low Impact Development Workshop](#)

H-GAC Conference Room B, 2nd Fl.

8:30 am - 12:15 pm

Contact [Mary Martha Gaiennie](#) (713-993-2468) to be added to the registration waiting list.

May 21

[Rain Barrel Workshop](#)

Houston Zoo

Galveston Bay Foundation

June 18

[Rain Barrel Workshop](#)

Seabrook Community House

Galveston Bay Foundation

July 23

[Ladies Casting for Conservation](#)

Crystal Beach, Bolivar Peninsula

Galveston Bay Foundation

Deadline for inclusion in the next issue is June 25. Contact [Becki Begley](#) with information about your events.

**QUICK LINKS**  
to our partners  
and friends. . .



[Take Care of Texas](#)

also included on the web page.

To ensure that your report is handled in a timely manner, please copy [stream.team@h-gac.com](mailto:stream.team@h-gac.com) in your email when you send your results.

Other items on the web page include the training manual, general information about the program, dates for training and QAPP sessions as available, and links to past newsletters.

A screenshot of the H-GAC website. The header includes the H-GAC logo and navigation links for Residents, Business, and Government. A search bar is present. The main content area features the 'Texas Stream Team' title, an 'In the News' section with a link to a magazine article, and a 'What Is Texas Stream Team?' section with a detailed description of the program. A sidebar on the right contains a 'Texas Stream Team Contact' section with contact information for Will Merrell and a 'What's New' section.

## TECHNICAL TERRITORY

By Paniz Bighash Meisen, H-GAC Senior Environmental Planner

### Relating Conductivity and Salinity

Ever wonder what the connection between conductivity and salinity is?

Conductivity measures water's capability to pass electrical flow while salinity is simply a measure of the salt content in water. Conductivity levels rise as the concentration of ions (including salts) increases in water, hence the strong correlation between conductivity and salinity in nature.

Fluctuations in conductivity and salinity can indicate a lot about what is going on in a waterway. One of the more obvious factors influencing conductivity and salinity is air temperature. When temperatures rise and evaporation rates increase, dissolved ion and salt molecules do not evaporate and eventually become more concentrated. The result is spikes in conductivity and salinity levels during the summer months.

[Keep Texas Beautiful](#)  
[Galveston Bay Foundation](#)  
[Galveston Bay Estuary Program](#)  
[Bayou Preservation Association](#)  
[Scenic Galveston, Inc.](#)  
[Buffalo Bayou Partnership](#)  
[Houston Parks Board](#)  
[Texas Stream Team](#)



With the Galveston Bay Action Network pollution reporting tool, you can be the #EyesOnGalvBay. Easily report pollution events you encounter at [www.galvbay.org/GBAN](http://www.galvbay.org/GBAN) or view previous reports on an interactive map.



**RIVER, LAKES  
BAYS 'N BAYOUS TRASH BASH.**

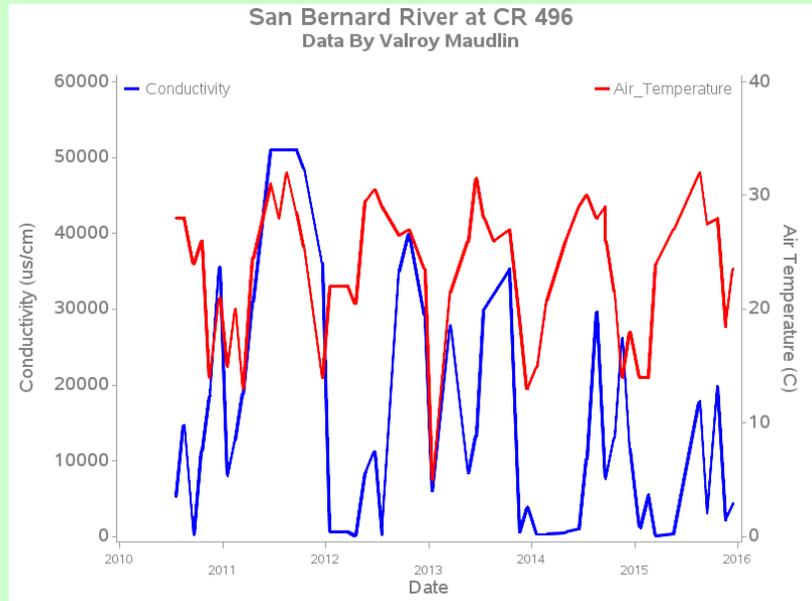
### Trash Bash® Volunteers Achieve Stellar Results in 2016

The 23rd annual River, Lakes, Bays N' Bayous Trash Bash®, a volunteer-based waterway cleanup event was held on April 2 at 15 locations across the Houston-Galveston region.

#### This year's results:

- 4,578 volunteers
- 2,234 under 18 years of age
- 1,344 Scouts
- 177 miles of shoreline
- approximately 54 tons of trash
- about 2,800 lbs. for recycling

When reviewing water quality data over time, a spike in conductivity or salinity during periods of lower temperatures should raise concern. For example, severe drought conditions, like the 2011 Texas drought, resulted in extended evaporation rates which caused conductivity levels to rise even during moderate to low air temperatures (see graph).



Other factors that may cause conductivity and salinity spikes during lower temperatures include tidal influences, surface runoff, effluent and illicit discharges. Testing for conductivity isn't done in tidal water bodies as the salinity levels are too high.

## Texas Land Trends Tools

Texas' working lands are undergoing fundamental changes due to fragmentation and conversion. Use the 'Go To Trends' tool to explore trends for a county, multiple counties, river basins, ecoregions or various regions of interest. Use the 'Compare' tool to explore comparisons between these areas.

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**Trends**

View trends for a county, multiple counties, river basin, ecoregion, or region of interest from 1997 to 2012.

[Go to trends](#)

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**Compare**

Compare summary statistics among counties, river basins, and ecoregions.

[Compare](#)

Texas Land Trends  
© 2014 IRNR

The [Texas Land Trends](#) website was developed to help quantify the fundamental changes to Texas' working lands

- 518 tires

Since 1994, about 102,000 volunteers have gathered 2,137 tons of trash, 10,135 tires, and nearly 15 tons of recyclable materials while cleaning almost 1,300 miles of shoreline.

Join us for the next Trash Bash® on **Saturday, March 25, 2017**. Learn more about volunteering or sponsoring Trash Bash® at [www.TrashBash.org](http://www.TrashBash.org).

and analyze implications for rural economies, national and food security, and conservation of water and other natural resources.

Resources on the site included interactive maps and data sets, fact sheets, the [2014 Texas Land Trends Report](#), and a land trends presentation.

Texas Land Trends was developed by the Texas A&M Institute of Renewable Natural Resources in cooperation with Texas A&M AgriLife Research, Texas A&M AgriLife Extension Service, and Texas Agricultural Land Trust.

Email [Becki.Begley@h-gac.com](mailto:Becki.Begley@h-gac.com) or call (713) 993-2410 with questions, comments, calendar items or suggestions for future newsletters.

The Houston-Galveston Area Council is the regional organization through which local governments consider issues and cooperate in solving area wide problems. We invite you to subscribe to the [Community and Environmental Update](#), a monthly e-newsletter to keep you informed about the many community planning, economic development and environmental planning programs going on at H-GAC.

[Texas Stream Team at The Meadows Center for Water and the Environment at Texas State University](#) is dedicated to understanding and protecting the 191,000 miles of Texas waterways. For more information, contact [TxStreamTeam@txstate.edu](mailto:TxStreamTeam@txstate.edu).