

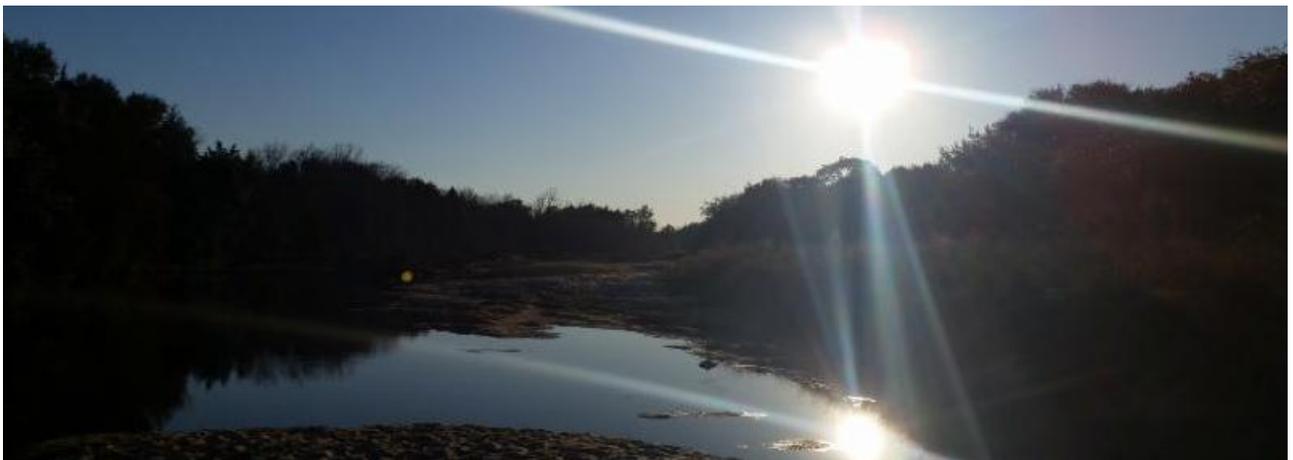
# Texas Stream Team

Houston-Galveston Area Council Chapter

Working to Protect Our Waterways

VOLUME 2018, ISSUE 1

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## MONITOR SPOTLIGHT

### San Bernard R.E.S.T.O.R.E. Act Funding Update

*By Jan and Roy Edwards*

Those who live, work, play on or just love the San Bernard River got a Christmas present in the form of a TCEQ (Texas Commission on Environmental Quality) press release dated December 19, 2017. TCEQ

Commissioner Toby Baker announced the US Treasury acceptance of Texas's Multi-Year Implementation Plan (MIP) for R.E.S.T.O.R.E. (Resources and Ecosystems Sustainability, Tourist Opportunities, and Revived Economies of the Gulf Coast States) Act funding. This is the next step in getting the mouth of the San Bernard re-opened. It means the US Treasury can now begin the process of funding the projects.

TCEQ Commissioner Toby Baker, Governor Abbott's appointee to administer R.E.S.T.O.R.E. Act funds in Texas, said that now the process of submitting grant applications for the projects based on available funding can begin. Currently, the 26 projects listed in the MIP total \$114.2 million dollars, but only approximately \$85 million is available to Texas under the Bucket 1 program. Some of the 26 projects included in the MIP will not be funded at this time.



So now what? What must happen before the dredge can start opening the San Bernard River mouth? On [www.restorethetexascoast.org](http://www.restorethetexascoast.org), TCEQ notes the next step in the ongoing competitive process is to determine what projects will be applied for funding and ultimately which ones will receive funding through grant contracts with the TCEQ. Chris Sallèse of Dannenbaum Engineering, who has been working with Brazoria County on their three R.E.S.T.O.R.E. projects, offered the following next steps expectation:

1. TCEQ is developing a grant application for submission by the project's local sponsors. (For the San Bernard River mouth, local sponsors would be the Brazoria County Commissioner's Court.) Applications are expected to be available to local sponsors in the February/March 2018 timeframe.
2. Local sponsors then complete and return grant applications to TCEQ. The date for this is yet to be determined.
3. Next, TCEQ reviews the applications.
4. TCEQ then awards the grant to the local sponsors, once the US Treasury releases funding to the state.
5. Finally, the local sponsor can begin to develop their project. However, these steps are very fluid and are subject to change based on any additional TCEQ and federal rules.

The opening of the San Bernard River is a shovel-ready project, so the hope is funding for this project comes at the head of the list. Hurricane Harvey flood waters partially opened the mouth of the river and the historic pass at Cedar Lakes further down the coast. The opening allowed flood waters, which had been accumulating and flooding residents along the San Bernard River for days, to drop five feet in 24 hours. Unfortunately, the partial opening is quickly silting shut again. The dredge needs to go to work sooner rather than later. But unless the process moves more quickly than expected, another hurricane season will arrive with a restricted river mouth.

Get more information at [www.sanbernardtx.com](http://www.sanbernardtx.com) or [www.restorethetexascoast.org](http://www.restorethetexascoast.org).



## SAFETY BRIEFING

*By Rachel Fields, H-GAC Planner*

### Share Enthusiasm for the Water Safely

Some of our monitors bring children, grandchildren, or other family members with them when they go out to test the water at their monitoring stations. Some even invite an entire classroom of students. Whether the youth you bring are related; are in primary, middle or high school, or whether you bring one or fifteen, there

are some things you should keep in mind.

According to the [National Safety Council](http://www.nsc.org), drowning is the leading cause of death for young children but it is also the second leading cause of death for people age 5-24.

The children you bring need constant supervision around water, so avoid distractions and consider bringing other adults to watch them while you are focused on water quality testing activities near the water. You should know how to swim and strongly consider having CPR and first aid training. It is possible for young children to drown in less than two inches of water, so keep an eye on your bucket, too. Drowning can be a silent event; so don't expect a child in distress to yell or make a lot of noise to alert you. Don't assume that a child who knows how to swim isn't at risk for drowning. Even elite level swimmers have drowned. Don't expect cooler weather to discourage children from wanting to play in the water.

We are so happy that so many of you are sharing your passion for water quality and the environmental sciences with younger generations, but please be safe out there.

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## TEXAS STREAM TEAM PHASE I/II TRAININGS

Three Phase I/II trainings are scheduled for the first half of 2018. Help us spread the word by forwarding this email to anyone who might be interested in becoming a volunteer monitor with the program. Texas Stream Team volunteers complete three phases of training using a test kit that measures physical and chemical parameters in water. Learn more about Stream Team training [online](#) or contact [stream.team@h-gac.com](mailto:stream.team@h-gac.com) or 713-993-2410.

### February 16

9 a.m. - 4 p.m.

Sea Center Texas, 302 Medical Drive, Lake Jackson

This is a priority training for volunteers who wish to monitor in the [Brazos-Colorado River Basin](#), [San Jacinto-Brazos River Basin](#), or the [Bastrop Bayou Watershed Protection Plan](#) area. [Registration](#) is required and the class is limited to 20 volunteers.



### February 23

9 a.m. - 4 p.m.

Clear Lake, TX

Email [waterquality@galvbay.org](mailto:waterquality@galvbay.org) if you are interested.

This training is hosted by the Galveston Bay Foundation. Please visit their website to get more information about the [GBF Texas Stream Team program](#).



### May 4

9 a.m. - 4 p.m.

Buffalo Bayou Partnership, 1803 Memorial Parkway, Houston

This is a priority training for volunteers who wish to monitor in the greater Houston area. Registration will open in March.



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## TST OUTREACH WITH HOUSTON ISD

In November, [Texas Stream Team at the Meadows Center for Water and the Environment](#) sent Education and Outreach Specialist Meagan Lobban and Outreach and Communication Specialist Valerie Villarreal to Carnegie Vanguard High School (Houston ISD) as part of a US Environmental Protection Agency grant to the [Student Conservation Association](#) and the high school. The students saw a nonpoint source pollution demonstration and attended an all-school assembly. TST representatives and Houston Mayor Sylvester Turner attended and spoke at the assembly. Water conservation and pollution were discussed with the high schoolers.



In the weeks following the assembly, 100 students participated in two field trips hosted at [Japhet Creek](#), a tributary of Buffalo Bayou. H-GAC TST staff and volunteer monitors demonstrated each TST monitoring procedure with the students. [Bayou Preservation Association](#) staff taught the students how to identify and remove invasive plant species.

A great big thank you to the H-GAC volunteer monitors from Japhet Creek, Bayou Land Conservancy, and the Urban Nature Center who participated in the field trips.

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## TECHNICAL TERRITORY

*By Will Merrell, H-GAC Planner*

### Winter Monitoring and Dissolved Oxygen

In Phase I and II training, we cover how water quality parameters can fluctuate on a daily and seasonal basis. For example, during a sunny spring day as temperatures rise, dissolved oxygen (DO) will likely increase due to photosynthesis. DO will decrease at night as aquatic plants use oxygen for respiration.

As temperatures gradually increase as spring turns to summer, DO will decrease as warm water is less dense than cold water and cannot hold as much DO. Conversely, denser, cold water can hold higher amounts of DO.

Typically, during winter months DO values will be much higher (sometimes even twice as high) than in spring and summer months. That is to be expected. Aquatic organisms are adapted to withstand seasonal variation of temperature and DO.

If during the DO procedure you empty all 10 milliliters of thiosulfate from your titrator into the titration vial and the color is still purplish, please fill the titrator again and proceed. At the end, add the remainder of the second titrator to the first (which should be ten) and that will give you your total mg/L of DO.

If you have any questions please contact [Will Merrell](#).

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## GET MORE INVOLVED WITH PARTNERS

[Adopt-a-Beach](#)  
[Artist Boat](#)  
[Bayou Land Conservancy](#)  
[Bayou Preservation Association](#)  
[Buffalo Bayou Partnership](#)  
[Cypress Creek Flood Control Coalition](#)  
[Exploration Green Conservancy](#)  
[Friends of the River San Bernard](#)  
[Galveston Bay Estuary Program](#)  
[Galveston Bay Foundation](#)  
[H-GAC Clean Waters Initiative](#)  
[Japhet Creek](#)  
[Keep America Beautiful](#)  
[Keep Texas Beautiful](#)  
[Take Care of Texas](#)



## TEXAS STREAM TEAM TRAINING VIDEOS

Don't forget you can always quickly review TST testing procedures with [Texas Stream Team YouTube videos](#).



## REVIEW YOUR DATA ON THE H-GAC WRIM

The [Water Resources Information Map](#) (WRIM) displays H-GAC's Clean Rivers program water quality data. Data is available from Clean Rivers program professional monitors and TST volunteer monitors. A new "Advanced" tab allows for improved search functionality by specific site for monitoring, on-site sewage systems, and other water quality issues.

## CALENDAR OF EVENTS

### What's Going on in the Galveston Bay Watershed?

- Feb. 8** Texas Watershed Stewards Workshop, Don McLeod Recreation Center, Mont Belvieu. Register [online](#) or by calling 979-862-4457.
- Feb. 16** Texas Stream Team Phase I/II Training at Sea Center Texas, Lake Jackson  
[Register](#) now, space is limited.
- Feb. 23** Texas Stream Team Phase I/II Training in Clear Lake  
Email [waterquality@galvbay.org](mailto:waterquality@galvbay.org) for more information.
- Mar. 1** Texas Riparian and Stream Ecosystem Education Program, Lonestar Groundwater Conservation District, Conroe  
Details will be posted [online](#).
- Mar. 3** Nature Fest, Jesse H. Jones Park & Nature Center  
Get more information [online](#) or call 281-446-8588.
- Mar. 5** Galveston Bay Plan, 2nd Edition Open House, Texas A&M AgriLife Extension offices at 4102-B, Main Street, La Marque  
For more information, e-mail [Kathy.Janhsen@h-gac.com](mailto:Kathy.Janhsen@h-gac.com).
- Mar. 10** 46th Annual Buffalo Bayou Partnership Regatta  
Join Texas's largest canoe and kayak race. Get more information [online](#).
- Mar. 17** Buffalo Bayou Volunteer Workday  
Bring your own gloves and Buffalo Bayou Partnership will provide any needed tools. Get more information [online](#).
- Mar. 24** River, Lakes, Bays 'N Bayous Trash Bash  
Learn how to volunteer [online](#).
- Mar. 28** H-GAC Clean Waters Initiative Workshop  
Topic: The Intersection of Transportation Planning and Water Quality  
Get more information and register [online](#).
- Apr. 14** Buffalo Bayou Volunteer Workday  
Bring your own gloves and BBP will provide any needed tools.  
Get more information [online](#).
- Apr. 14** Nurture Nature Festival, Baytown Nature Center  
Get more information [online](#).
- Apr. 21** Bay Day at the Kemah Boardwalk, Galveston Bay Foundation  
Get more information [online](#).
- Apr. 22** Earth Day  
Learn more and find an event [online](#).
- May 4** Texas Stream Team Phase I/II Training at Buffalo Bayou Partnership, Houston  
Registration will open in March. Get more information [online](#).

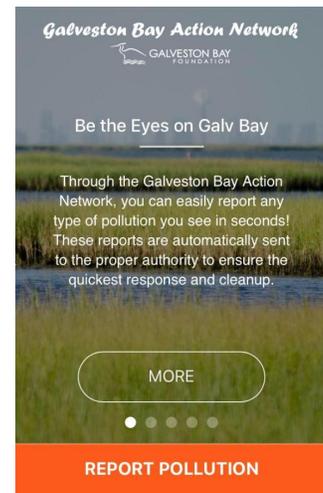
The Buffalo Bayou Partnership offers a regularly-scheduled assortment of walking tours, boat rides, history tours, and the famous Waugh Colony Bat Tour. Learn more about these events at [www.buffalobayou.org](http://www.buffalobayou.org).

## HAVE YOU DOWNLOADED GALVESTON BAY ACTION NETWORK PHONE APP?

Be the eyes on area waterways - alert the appropriate authorities to pollution using the Galveston Bay Action Network (G-BAN) smart phone app.

Reporting more than a dozen types of pollution while out in the field is so easy. Just download the app at the [Apple Store](#) or [Google Play](#).

Learn more about G-BAN at the Galveston Bay Foundation [website](#).



## NEWS FROM AROUND THE REGION



*Trash Bash volunteers at Sims Bayou (2017)*

### RIVER, LAKES, BAYS 'N BAYOUS TRASH BASH

On Saturday, March 24, the [River, Lakes, Bays 'N Bayous Trash Bash®](#), the largest, single-day waterway cleanup in Texas, will celebrate its 25th consecutive cleanup event.

In 2017, 3,242 volunteers collected 52 tons of trash, 1.5 tons for recycling, and 574 tires, while cleaning 150 shoreline miles at 14 locations. Over 24 years, the numbers are impressive, almost 106,000 volunteers have collected 2,189 tons of trash, 16 tons for recycling, and 10,709 tires. Trash Bash makes a big impact on Texas's waterways, especially given its location at the end of the trash stream, as it collects in the Galveston Bay watershed.

Volunteers receive cleaning supplies, lunch, t-shirts, and can win great door prizes. The 14 sites are located near work, home, or school.

This event is a great opportunity to get hands-on education about the effects of littering and to also learn more about simple ways to protect stormwater quality at home at educational exhibit areas. Get involved at [www.TrashBash.org](http://www.TrashBash.org) or email [waterresources@h-gac.com](mailto:waterresources@h-gac.com) for more information.

### GALVESTON BAY PLAN, 2ND EDITION OPEN HOUSE ON MARCH 5

The [Galveston Bay Estuary Program](#), with support from H-GAC, will host an open house to provide information on *The Galveston Bay Plan, 2nd Edition* draft, from 4 to 7 p.m. Monday, March 5, at the Texas A&M AgriLife Extension offices at 4102-B Main Street, La Marque. This plan offers strategies for sustaining and protecting the waters in the Galveston Bay watershed. Public comment will be open on the [project website](#) from March 5 through April 4.

For more information, e-mail [Kathy.Janhsen@h-gac.com](mailto:Kathy.Janhsen@h-gac.com)

### CLEAN RIVERS PROGRAM

Contact [Todd Running](#) at 713-993-4549 for information about the [Clean Rivers Program](#).

### CLEAN WATERS INITIATIVE WORKSHOPS

Save the date for the next Clean Waters Initiative workshop from 2 to 4 p.m. **Wednesday, March 28**, at H-GAC Conference Room B, Second Floor. The topic is Transportation Projects and Water Quality. Speakers from the Texas Department of Transportation, H-GAC, and Harris County Engineering Department will provide participants with greater understanding of how environmental factors, such as water quality, are incorporated into transportation project planning and implementation. [Registration](#) is requested.

The Clean Waters Initiative program offers workshops that help local governments, landowners, and residents develop effective strategies to reduce pollution in area waterways. Contact [Kathy Janhsen](#) at 713-993-2423 for information about [CWI workshops](#).

## **TOTAL MAXIMUM DAILY LOAD PROJECTS**

The Texas Commission on Environmental Quality adopted the [Jarbo Bayou TMDL](#) (Total Maximum Daily Load) and approved the stakeholders' decision to implement the [BIG-IPlan](#) on January 24, 2018. The goal of the [TMDL and Implementation projects](#) is to improve water quality to protect people who recreate in and along the bayou.

Contact [Steven Johnston](#) at 832-681-2579 for information about TMDL projects.

## **WATERSHED PROTECTION PLANS**

### ***West Fork San Jacinto and Lake Creek WPP***

The local stakeholders of the West Fork San Jacinto River and Lake Creek watersheds identifying voluntary solutions to water quality issues in these areas. Along with elevated levels of fecal waste in the water, stakeholders are evaluating various other pollutants, including excess levels of nutrients (nitrogen and phosphorus compounds), trash, and sediment in the water. Stakeholders are working to complete a watershed protection plan in the coming months, so additional feedback and participation is welcome and appreciated. For more information on the project, please visit [www.westforkwpp.com](http://www.westforkwpp.com).

### ***Cedar Bayou Watershed Partnership***

The Cedar Bayou Watershed Partnership is a group of local citizens, governments, businesses, and community groups who are implementing voluntary solutions to deal with water quality issues in the Cedar Bayou watershed. Located in eastern Harris County and western Chambers and Liberty Counties, the Cedar Bayou watershed passes through Dayton, Mont Belvieu, Baytown, and nearby areas, and its water quality can impact these local communities.

The partnership will be holding a variety of education and outreach opportunities in the coming months, starting with a **Texas Watershed Stewards Workshop** from 1 to 5 p.m. **Thursday, February 8**, at the Don McLeod Recreation Center 10717 Langston Drive, Mont Belvieu. For more information, visit [www.cedarbayouwatershed.com](http://www.cedarbayouwatershed.com).

Contact [Justin Bower](#) at 713-499-6653 for more information about [watershed protection plans](#).

## **COASTAL COMMUNITIES EDUCATION & OUTREACH PROGRAM**

H-GAC is kicking off a three-year project to help small communities in coastal watersheds inform residents about steps they can take to reduce pollution, specifically fecal bacteria levels, in local waterways. The project complements existing watershed protection plans and bacteria reduction projects in the region by supporting residential outreach and education.

The four areas of emphasis are pet waste; fats, oils and grease; on-site sewage facility maintenance; and litter/illegal dumping abatement. Contact [Becki Begley](#) at 713-993-2410 or visit [www.coastalcommunitiestx.com](http://www.coastalcommunitiestx.com) to see how to get your small coastal community involved.

## **HOUSTON AREA URBAN FORESTS**

Contact [Justin Bower](#) at 713-499-6653 or visit [www.houstonforests.com](http://www.houstonforests.com) for more information.

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# **NEWS FROM SAN MARCOS**



#### **ID CARDS**

TST identification cards are available for volunteer monitors. If you would like an ID card, please request it [via email](#). Once the request is logged, your monitor ID number will be checked against the state TST database, and address verified.

The ID card is mailed to your address.

#### **NEWSLETTER**

TST has a statewide newsletter, *Headwaters*. Be the first to know about the latest news, services, and volunteer opportunities. See past issues and sign up for [email delivery](#). [Submit](#) your events to the statewide TST calendar.

#### **PADDLERS PROGRAM**

[Paddlers](#) collect data from new or hard-to-reach locales. Kayakers and canoeists can collect higher quantities of data at more locations, improving understanding of water quality issues in lakes, rivers, streams, estuaries and bays. To learn how to get involved, call 512-245-1346, email [txstreamteam@txstate.edu](mailto:txstreamteam@txstate.edu), or complete an online form.

#### **RIPARIAN ASSESSMENT PROGRAM**

The [program](#) emphasizes the nature and function of stream and riparian zones and the benefits and direct impacts from healthy riparian zones. The riparian education programs cover an introduction to riparian principles, watershed processes, basic hydrology, erosion/deposition principles, and riparian vegetation, potential causes of degradation and possible resulting impairment(s), and available local resources including technical assistance and tools that can be employed to prevent and/or resolve degradation.

[Your Remarkable Riparian Field Guide and Owner's Manual](#) are now available through The Meadows Center for Water and the Environment for \$22 each + \$8 for shipping. [Contact Texas Stream Team for details and to order your book\(s\)](#).

#### **COMMUNITY FORUM**

TST has a [community forum](#), "Caring for Our Waters." This website provides a place to share valuable knowledge and experiences [online](#) by posting questions, sharing stories, photos and best practices, submitting wish lists, publicizing events, providing feedback and brainstorming with others. The main goal of the forum is to strengthen the TST community across the state and to harness the knowledge and valuable experience TST participants have gained over the past 25 years.

## **ABOUT THE NEWSLETTER**

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 H-GAC Texas Stream Team newsletters or to join the H-GAC Texas Stream Team Newsletter mailing list.

H-GAC 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).

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## **PHOTO CREDITS**

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