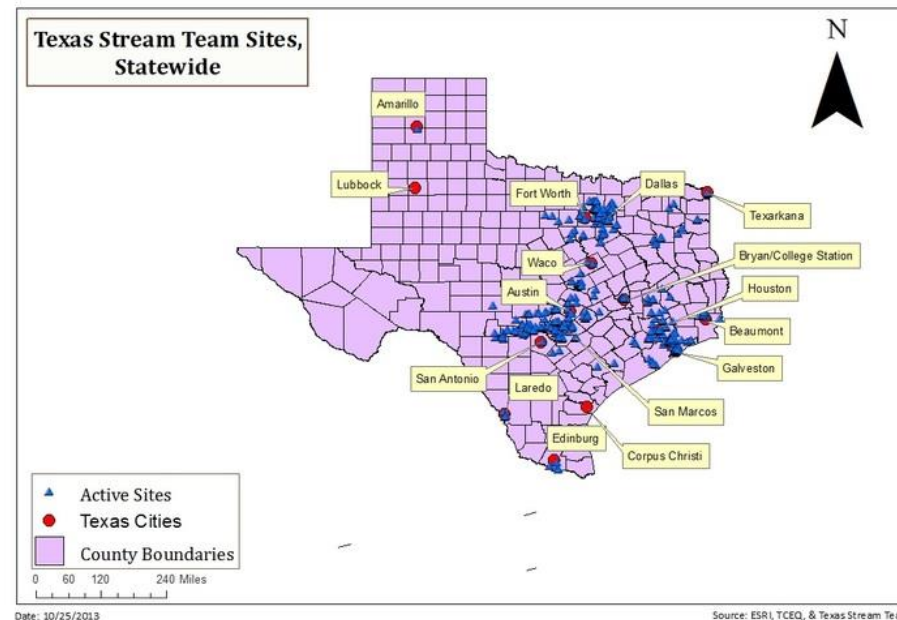


Texas Stream Team

Involvement with the UTRB 303(d) Vision Project

TST Background

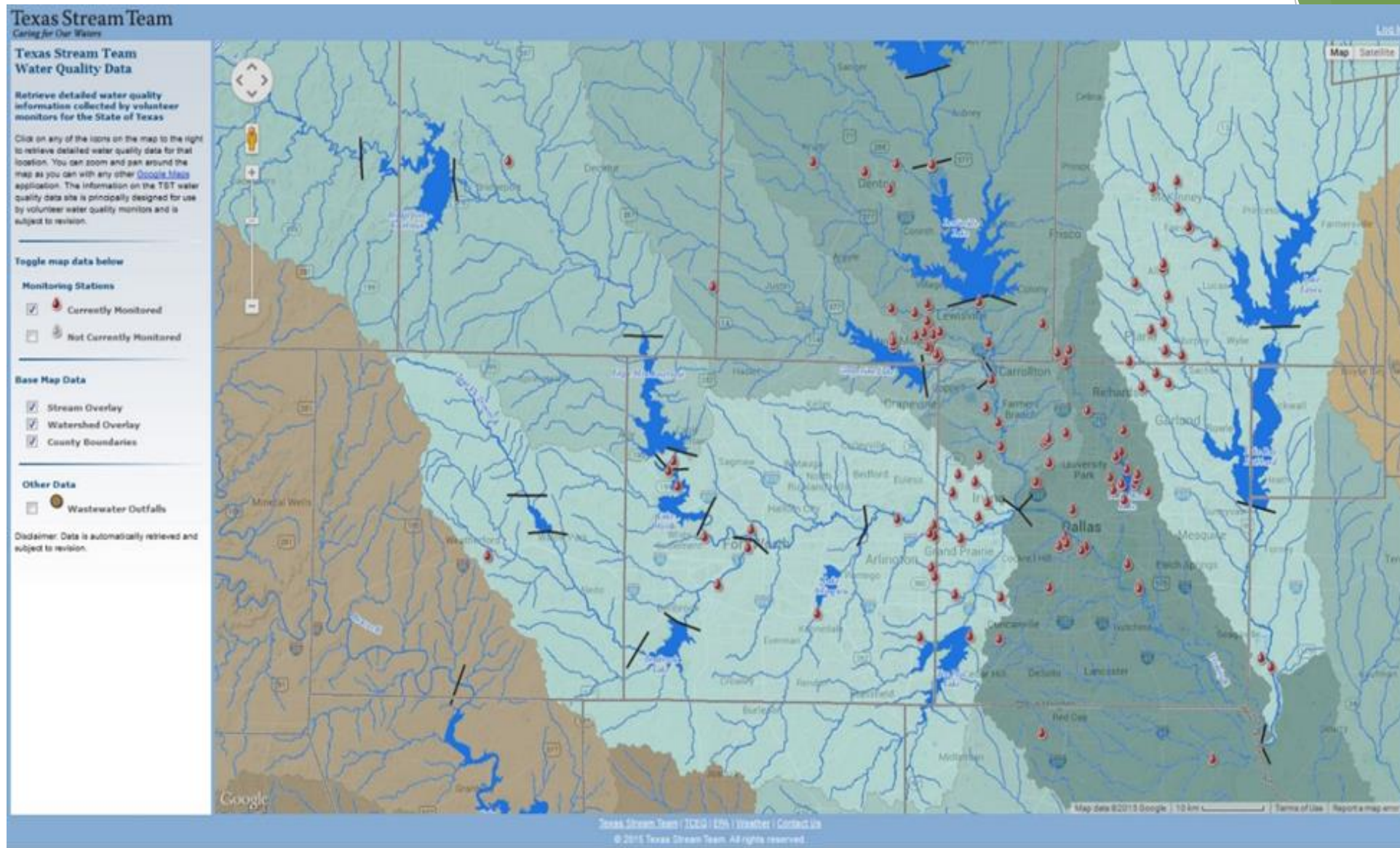
- ▶ The Texas Stream Team (TST) is a network of trained citizen scientists and supportive partners working together to gather information about the natural resources of Texas and to ensure the information is available to all Texans
- ▶ Established in 1991, TST is administered through a cooperative partnership between The Meadows Center for Water and the Environment at Texas State University, the Texas Commission on Environmental Quality (TCEQ), and the US Environmental Protection Agency (EPA)



Volunteers and Data Collection

- ▶ Currently, over 400 TST citizen scientists collect water quality data every month at over 150 different sites in Texas
- ▶ Data collected by TST is open source and can be used for public education and outreach purposes, research, and to supplement professional and other water quality monitoring. **However, TST data cannot be used for any official state assessment of water quality.**
- ▶ TST data is collected by citizen scientists through approved protocols and is quality assured via the TST Quality Assurance Project Plan (QAPP).
 - ▶ The QAPP, which is approved by TCEQ and the EPA ensures strict monitoring procedures are followed and that data are of a known, standard quality





[Interactive map](#) showing current and past monitoring sites in Trinity River Basin. Click on each site to see data collected there.

TST Monitoring Programs and Training

▶ ***Basic Water Quality Monitoring***

- ▶ Concepts of watershed awareness as well as point source and non-point source (NPS) pollution.
- ▶ Water temperature, dissolved oxygen, conductivity, pH, water clarity, total depth, as well as conducting various field observations

▶ ***Advanced Water Quality Monitoring***

- ▶ All citizen scientists that are certified as “core” water quality monitors and wish to perform further citizen science NPS monitoring have the option to attend an “advanced” training course.
- ▶ Advanced Water Quality Monitoring involves performing tests for Escherichia coli (*E. coli*) bacteria, nitrate-nitrogen, orthophosphate, turbidity, and streamflow





THE MEADOWS CENTER
FOR WATER AND THE ENVIRONMENT

TEXAS STATE UNIVERSITY

TEXAS STREAM TEAM

Core Water Quality Monitoring Training

Date: February 25, 2017

Time: 9 AM - 2 PM

Location: Trinity River Audubon Center
6500 Great Trinity Forest Way
Dallas, TX

Sign up at

https://docs.google.com/forms/d/e/1FAIpQLSeQEbMhDK97fTJ4RDqRzTv5RJMBtBquLN_6G3Qcd-o2h6u8IA/viewform

or e-mail wstreamteam@txstate.edu

Prospective Partners

- ▶ Been in contact via email about kits, training and presenting at the upcoming training event
 - ▶ “Guest Speaker” on registration link
- ▶ If your organization is interested in becoming a TST Partner or getting involved with TST and have not been in contact with me, please send me an email stating your interest
 - ▶ Present at training event and discuss sampling sites of interest (5 min)
 - ▶ Volunteers more likely to show interest and sample at these sites if they understand the need for the data and what it will be used for
 - ▶ Increased retention of long-term volunteers if this relationship is ongoing
 - ▶ Groups already in place can also assist with sampling at additional sites



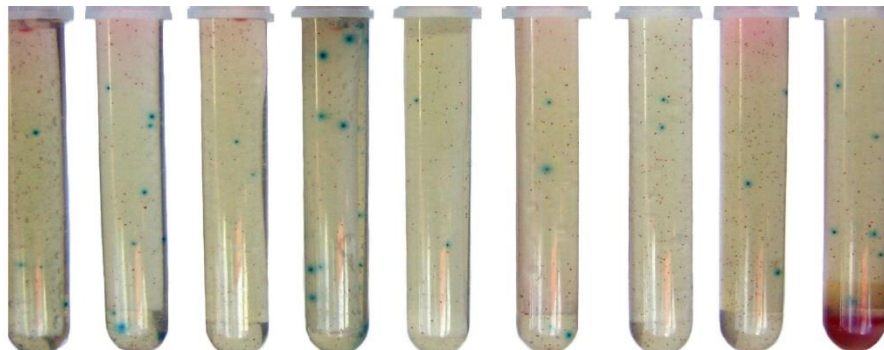
Upper Trinity River Basin Groups

(* indicates current TST relationship)

- CITY OF IRVING*
- AQUATIC ALLIANCE*
- FOR THE LOVE OF THE LAKE*
- PRESTON HOLLOW PRESBY SCHOOL CREEK CRITTERS
- PARISH EPISCOPAL MIDDLE SCHOOL SCIENCE DEP*
- ROCK FALLS
- AMERICAN ANIMAL HEALTH
- CITY OF GRAND PRAIRIE*
- CITY OF DALLAS*
- CHAMPIONS TRIBUTARY
- GLEN ROSE HIGH SCHOOL*
- CITY OF DENTON*
- FRIENDS OF JOE CREEK
- BLUE FAIR LAKE ASSOCIATION
- DALLAS STORMWATER MANAGEMENT
- BRYAN A DALLAS STORMWATER MANAGEMENT MS ENVIRONMENTAL CLUB
- W&M Environmental Group*
- INDIAN TRAIL/BIG LAKE/ TEXAS* WATCHERS MASTER NATURALISTS*
- NORTH TEXAS MASTER NATURALISTS*
- ALLEN HIGH SCHOOL ENVIRONMENTAL AWARENESS TEAM*
- TOWN OF FLOWER MOUND*
- FORT WORTH NATURE CENTER AND REFUGE*
- THE RIVER LEGACY*
- JOHN BUNKER SANDS WETLAND CENTER*

E. coli Sampling Capacity

- ▶ Texas Stream Team citizen scientists currently possess the capacity to collect and process samples for *E. coli* testing, but more citizen scientists need to be trained to provide adequate testing coverage both within the Upper Trinity River Basin and statewide
- ▶ It is estimated that approximately 36 TST citizen scientists are currently trained
- ▶ Second ADVANCED training will be held in March, if there is enough interest



Next Steps

- ▶ Texas Stream Team is able to provide services tailored to the needs of each impaired segment and potential partner
 - ▶ Training of partner organization staff regarding use incubator and *E. Coli* testing supplies or protocols for specialized data collection.
 - ▶ Assist with grant writing for support of TST program activities and supplies, including watershed protection planning, citizen science, education and outreach
 - ▶ Identify and track match for EPA 319 funding requirements
 - ▶ Report data trends, changes in water quality and potential watershed threats
 - ▶ Assist with watershed services
 - ▶ Recruit citizen scientists
- ▶ Training events - get the word out, and attend/present if you are interested in getting more sampling on your segments

Contact Info:

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