



THE MEADOWS CENTER
FOR WATER AND THE ENVIRONMENT
TEXAS STATE UNIVERSITY

TEXAS STREAM TEAM

TEXAS STREAM TEAM TRAINER MEETING

- Welcome! We are glad you can join us for today's event. We will be starting at 9:00AM
- **Sign-In:** Open the link sent in the chat and sign-in
- **Introduce yourself:** Please introduce yourself in the chat to everyone by stating your Texas Stream Team group name (if any), if you are with an organization, and where you are located
- **Housekeeping:**
 - This meeting will be recording and posted on our website for future reference
 - Please mute your microphones and turn off your videos
 - Please direct all questions/comment to the chat feature

Funding for this meeting was provided in part by the USEPA through the Texas Commission on Environmental Quality

MEET OUR TEAM

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Texas Stream Team - The Meadows Center for Water
and the Environment



Jenna Walker

Program Manager



Sandra Arismendez

Water Quality
Monitoring
Coordinator



Laura Parchman

GIS and Data
Management
Associate



Aspen Navarro

Program Coordinator



Claudia Campos

Administrative
Coordinator



Meagan Lobban

Education Manager

AGENDA

- 1 **30th Anniversary**
- 2 **Texas Stream Team Updates**
- 3 **Reporting In-Kind Match**
- 4 **Waterways Dataviewer and Datamap**
- 5 **2021 Goals**
- 6 **Q&A**

30th
YEARS
ANNIVERSARY



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TEXAS STREAM TEAM

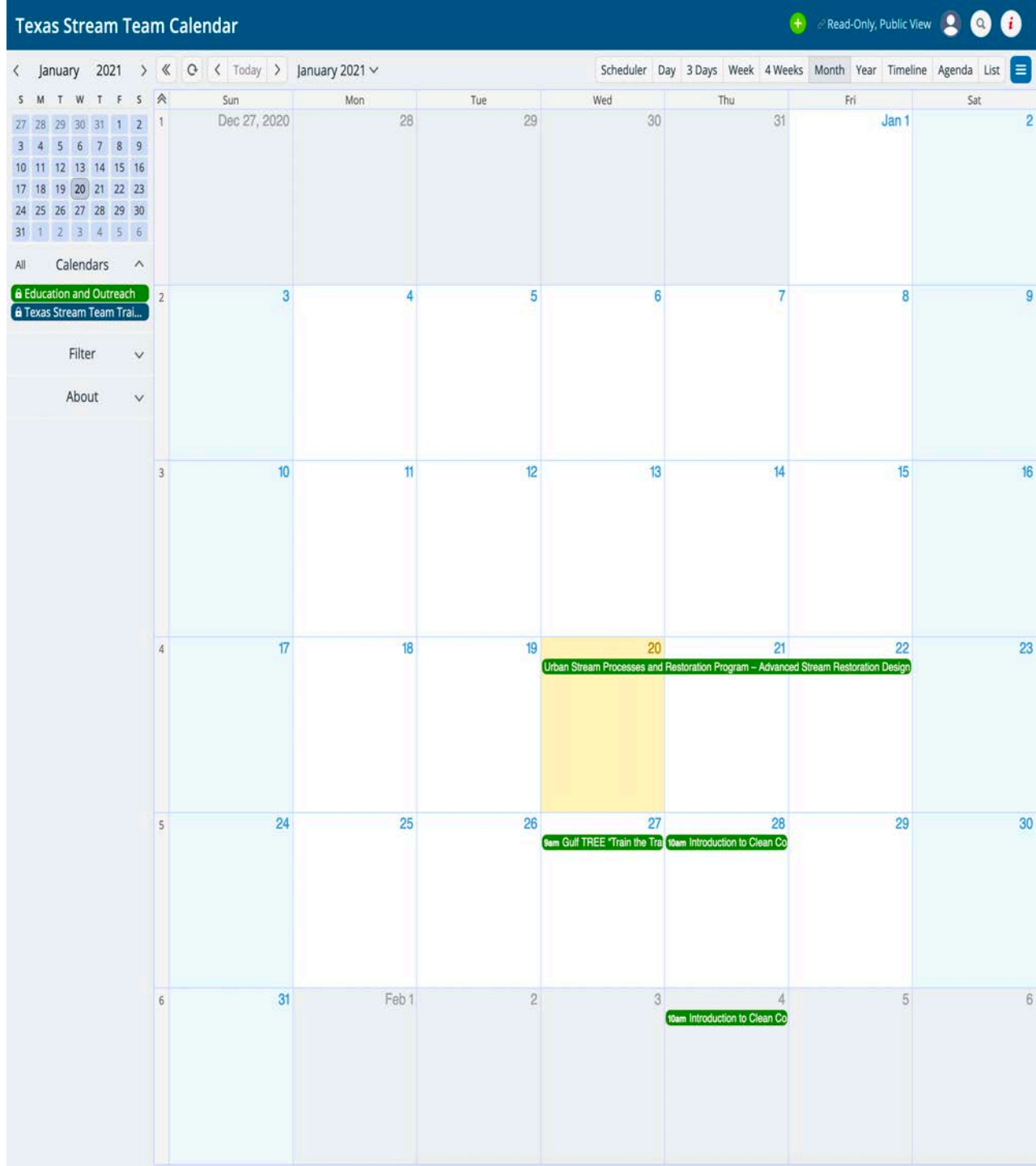


HELP US CELEBRATE: SOCIAL MEDIA KIT

TEXAS STREAM TEAM UPDATES

Trainer Resources

- Adding trainings to public [Online Calendar](#)
 - Submit Events calendar: <https://bit.ly/TSTSubmitEvents>
 - Resource guide available for [Submitting Events](#)



TEXAS STREAM TEAM UPDATES

Trainer Resources

- Training outreach materials and resources
 1. [Brand Guide](#)
 2. Flyer Templates
 3. [Handout](#)
 4. [Program Video](#)



JOIN THE RANKS!

TEXAS STREAM TEAM

STANDARD CORE WATER QUALITY CITIZEN SCIENTIST TRAINING

Training Date
Training Time

Training Address

Join the statewide program and become a **certified Texas Stream Team citizen scientist** at this free training! Citizen scientists can monitor at established sites and have the opportunity to create new sites at their favorite river, creek, or stream.

This training is also a **wonderful opportunity for teachers** wanting to get TEEAC credit hours!

Please dress accordingly for the outdoors.

To RSVP, please email
Enter contact email here

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TEXAS STREAM TEAM

www.TexasStreamTeam.org

TEXAS STREAM TEAM UPDATES

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Trainer Resources

The Meadows Center for Water and the Environment

Explore Spring Lake About Reserve Events & Access Research Education Stewardship Leadership Publications Donate

Texas State > The Meadows Center for Water and the Environment > Leadership > Texas Stream Team > Forms and Resources

Forms and Resources



Citizen Scientist Resources

Resources for future and current Texas Stream Team Citizen Scientists.



Trainer Resources

Resources for future and current Texas Stream Team Trainers.

Texas Stream Team

[About Us](#)

[Trainings and Programs](#)

[Dataviewer and Datamap](#)

[Data and Research](#)

[Forms and Resources](#)

[Partners](#)

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TEXAS STREAM TEAM TRAINER ENROLLMENT FORM

Trainer Prerequisites

All trainers should read the [Quality Assurance Project Plan](#), respective training manual (if available), respective Trainer Training Packet (if available), and watch the respective [YouTube Quality Control and Parameter Videos](#) (if available).

Trainer Certification

☐ Phase I – Trainer trainee must be a certified Texas Stream Team citizen scientist who has been actively monitoring for at least two years in the training they would like to be a trainer for.

☐ Phase II – Trainee assists a certified trainer in planning, coordination, and presenting at one citizen scientist training session.

☐ Phase III – Trainee plans, coordinates, and presents all phases of one citizen scientist training assisted by a certified Texas Stream trainer.

☐ Phase IV – Submit the completed Texas Stream Trainer Enrollment Form to Texas Stream Team. If approved, the newly certified trainer will receive a certificate as a certified Texas Stream Team Trainer.

Trainer Name: _____

Trainer Signature: _____

Date: _____

Trainer Name: _____

Trainer Signature: _____

Date: _____

Trainer Name: _____

Trainer Signature: _____

Date: _____

NEW [Trainer Resources](#) Page

- Leading a Training
- Becoming a Trainer
- Outreach Materials and Resources
- Additional Resources

NEW [Trainer Enrollment Form](#)

- Trainer Enrollment Form must be signed and submitted to TxStreamTeam@txstate.edu
- Trainings must be led by certified trainers
- Notify us if moving on

TEXAS STREAM TEAM UPDATES

Trainer Resources

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Training Enrollment Form

Please fill out this form below in order to participate in the scheduled Texas Stream Team training and to receive your certificate of completion. Please note, if you are a parent or legal guardian signing for a minor (under the age of 18), please list the full name of the minor in the "Participant Full Name" section. The parent or legal guardian should notate their name in the "Parent or Legal Guardian Full Name" section.

Participant Full Name *

Affiliation

City

State

Zip Code

Birthday (mm/dd/yy) *


Sex (check one)

Race

Phone

E-mail Address (For certificate) *

Trainer(s) *



TEXAS STREAM TEAM

TEXAS STREAM TEAM TRAINING SIGN-IN SHEET

Training Details (For trainer to fill out only)

Date: _____ Location: _____

Type of training:

☐ Core – Standard ☐ Core – Probe ☐ Riparian Evaluation
☐ Advanced ☐ E. coli Bacteria ☐ Macroinvertebrate Bioassessment

Total trained: _____ Group/Partner: _____

Trainer name(s): _____

Trainer(s) in training name(s): _____

Training Sign-In:

#	Name (First and Last)	Email Address
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		
11		
12		
13		
14		
15		
16		

- [NEW Training Enrollment Form](#) – Phasing Out Paper Training Packets
 1. Training Enrollment Form OR Hardcopy Training Packet (**Required**)
 - For Training Enrollment Form: send trainees trainer name(s), date, and training type
 2. [Training Sign-In Sheet](#) (**Required**)
 - How we verify who attended your training

TEXAS STREAM TEAM UPDATES

Training Supplies and Equipment

- [Texas Stream Team QAPP](#)
- Coliscan EasyGel (*E. coli* Bacteria)
 - Issues with media



TEXAS STREAM TEAM UPDATES

Training Supplies and Equipment

NEW [Equipment Form](#)

Texas Stream Team Monitoring Equipment

Below are detailed lists of equipment for Texas Stream Team citizen scientists to conduct water quality monitoring. Texas Stream Team is a federally recognized state-wide monitoring program with an approved [Quality Assurance Project Plan](#), therefore all monitoring must be conducted with the equipment listed in the sections below unless noted otherwise.

Texas Stream Team is entirely grant funded and is limited financially in our ability to help our growing state-wide citizen scientists of 11,000+. We highly encourage our citizen scientists and partners to seek alternate funding sources. To help guide our monitors to funding sources, we have created a [Funding Sources Document](#). New partners and citizen scientists are more likely to receive Texas Stream Team funds to help them get established.

All pricing listed below is subject to change at the vendors discretion. To order supplies, simply visit the vendor's website or call them directly. Some vendors may require you set up an account with a valid credit card. Also, please note, Weber Scientific only conducts transactions with major organizations. If you need supplies from this vendor, please fill out our [Supply Request Form](#) and notate you will be covering the supply costs so we can order the supplies for you and invoice your organization for reimbursement. Please note, this may add 2-3 weeks for delivery time.

- [Standard Core Water Quality Monitoring Equipment](#)
- [Probe Core Water Quality Monitoring Equipment](#)
- [E. coli Bacteria Monitoring Equipment](#)
- [Advanced Water Quality Monitoring Equipment](#)
- [Riparian Evaluation Monitoring Equipment](#)
- [Macroinvertebrate Bioassessment Monitoring Equipment](#)

Texas Stream Team Contact Information:

Phone: 512.245.1326
Email: TxStreamTeam@txstate.edu
Website: www.TexasStreamTeam.org

Standard Core Water Quality Monitoring Equipment

Standard Core monitoring involves performing tests for parameters such as conductivity/salinity, dissolved oxygen, pH, total depth, water and air temperature, and water transparency using a chemical Standard Core kit. In addition to these parameters, Standard Core citizen scientists also conduct various field observations.

Standard Core Monitoring Supplies

The supplies listed in the table below are necessary for starting your monitoring program. Please note, buckets, DI bottles, waste containers, goggles, and gloves can be upcycled or purchased from the vendor of your choice. The conductivity meter should be calibrated to a value closest to the observed values in the water body you will be monitoring. Purchase the conductivity standard closest to the values observed. Most water bodies in Central Texas will be around 600 µS/cm, however if you are unsure of which conductivity standard solution to use, email us and we can assist you.

Item	Vendor	Part #	Quantity	Price
Standard Core Kit*	LaMotte	XX01364-01	1	\$549.99
120 cm Transparency Tube**	Lawrence Enterprises Inc.	TTG-120	1	\$58.00
Buckets	Home Depot	06GLHD2	1	\$3.25
D.I. water bottle	Capitol Sci.	B7444-500	6	\$52.50
Waste bottles	Capitol Sci.	B6542-32	24	\$4.33
Goggles	Capitol Sci.	S1600-1	12	\$123.54
Gloves- S	Capitol Sci.	G2741-1	1000	\$145.40
Gloves- M	Capitol Sci.	G2741-2	1000	\$145.40
Gloves- L	Capitol Sci.	G2741-3	1000	\$145.40
Conductivity Standard (600 µS, 1L) ***	Aqua Solutions	6927-1L	1	\$36.63
Conductivity Standard (1413 µS, 1L)	Fischer Scientific	NC9485319	1	\$29.03

TEXAS STREAM TEAM UPDATES

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Training Supplies and Equipment

Refractometer/Hydrometer



Conductivity Meters



TEXAS STREAM TEAM UPDATES

Quality Control Sessions

- *NEW* Frequency – every 2 years
- Updated Monitoring Forms & Training Documents
 - *NEW* Field QC Checklists
 - More details to come in 2021



TEXAS STREAM TEAM UPDATES

Quality Assurance Requirements

Monitoring Protocols and Documentation

- Dissolved Oxygen
- Conductivity Meter Pre-/Post-Calibrations
- pH – Meter and Colorimeter
- Refractometer Calibration
- Temperature Check



TEXAS STREAM TEAM UPDATES

Reporting In-Kind Match

- *What is match?*
 - Match is non-federal share of costs
 - Our TCEQ grants require matching funds and are reported quarterly
 - Let's us gather the value of volunteer time for our program!
 - Sources can include total time spent participating in the program, total distance traveled to your training / QC session / event location, staff time, and supplies (office supplies, kits, reagents, etc.)



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TEXAS STREAM TEAM

Texas Stream Team Partner Activity Report

The in-kind goods and services documented on **Partner Activity Reports (PAR)** are used by Texas Stream Team to match federal funds the program receives from the Federal 319 Program. This PAR covers activity in three months prior to the month the report is completed. Please report as much information as possible. You may forward the report to Texas Stream Team in the following ways:

Email: TxStreamTeam@txstate.edu

Postal: Texas Stream Team – The Meadows Center for Water and the Environment
Texas State University
601 University Drive
San Marcos, TX 78666

Name of Partner _____ Report Completed by _____

Reporting Period (check one) ☐ 1st Qtr ☐ 2nd Qtr ☐ 3rd Qtr ☐ 4th Qtr
1st Quarter (Sep-Nov) 2nd Quarter (Dec-Feb) 3rd Quarter (Mar-May) 4th Quarter (Jun-Aug)

TRAINING SESSIONS	# Sessions	Average length of Sessions (15 min. increments)	# Participants for all sessions	DOCUMENTATION
Certification Sessions				Sign-in sheet <input type="checkbox"/>
QC Sessions				Sign-in sheet <input type="checkbox"/>
NPS Environmental Education Presentations				Sign-in sheet <input type="checkbox"/>
SERVICES AND SUPPLIES		Indicate total non-federally supported expenses \$ _____		
<input type="checkbox"/> Monitoring Equipment <input type="checkbox"/> General Supplies (printing, postage, etc.)			DOCUMENTATION Attach records <input type="checkbox"/>	
NON- FEDERALLY SUPPORTED COORDINATOR TRAVEL			Indicate # Miles traveled	
Coordinator mileage			Attach record of dates and miles traveled <input type="checkbox"/>	
NON-FEDERALLY SUPPORTED COORDINATOR HOURS	Hourly rate (Actual rate or \$27.20, whichever is higher)	# Hours	DOCUMENTATION	
Coordinator hours	_____/hr.		Attach time sheets and dates of events <input type="checkbox"/>	
Approximate dates and location of activities planned for the next quarter:				
Amount raised/received from non-federal sources this quarter		\$ _____		
Comments:				

I certify to the best of my knowledge and belief that the hours being contributed are not being paid for by federal funds or are being used for in-kind support to another federal grant:

Coordinator Signature _____ Supervisor Signature _____ Date _____

TEXAS STREAM TEAM UPDATES

Reporting In-Kind Match

- *NEW* Electronic [Partner Activity Report Form](#)
- Reminders
 - Not required if **zero** activity/expenses to report
 - Not required to submit report if you plan to report your Texas Stream Team match to another federally-assisted project or program
 - Supporting documentation (**Required**)

Partner Activity Report Form

Please fill out the form to the best of your knowledge. The in-kind goods and services documented on Partner Activity Report (PAR) forms are used by Texas Stream Team to match federal funds the program receives from the Federal 319 Program. This PAR covers activity for the three months prior to the month the report is completed.

Email address *

Name of partner *

Report completed by *

Reporting period (choose one) *

☐ 1st quarter (Sep- Nov)

☐ 2nd quarter (Dec- Feb)

☐ 3rd quarter (Mar- May)

☐ 4th quarter (Jun- Aug)

Certification Sessions

Number of sessions

Average length of sessions (15 min. increments)

Number of participants for ALL sessions

Sign-in sheet (attach records)

No file chosen

Quality Control Sessions

TEXAS STREAM TEAM UPDATES

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Datamap Dashboard

Texas Stream Team Water Quality Data Water quality data last updated December 2, 2020

Active Inactive

Find address or place

All

Core: Site ID

Advanced: Site ID

Bookmarks

Default Map Extent

Northeast

Southeast

How to use this datamap:

- Hover your mouse in the upper right panel and click on the expand icon to view the panel full screen. Click on this icon again to return to the dashboard view.
- In the map panel, use the menu bar to search, select bookmarked map views, view the map legend, and choose the visible map layers.
- Toggle the visible layers to filter the sites by currently active testing type. Multiple tests may be conducted at each site.
- Click on a site to view detailed information.
- From the menu header, you can filter the view by active or inactive sites.

Notes:

- The water quality data can be sorted, filtered, and downloaded here: [Water Quality Data](#)
- Once data is available for a site, it will be included on the Datamap, which is updated with the previous month's data at the beginning of every month.
- Sites not sampled in the last 12 months for Riparian Evaluation and Macroinvertebrate Bioassessment are considered inactive and available for monitoring. Entering data for an inactive site will update its status to active.

Layers

Core

Advanced

SiteID	Latitude	Longitude	County	Basin	TEQI Stream Segment	Sample Date
80342	29.69274	-98.10789	Cornal	Guadalupe	1804	12/28/2020
80746	29.63941	-98.04614	Guadalupe	Guadalupe	1804	12/28/2020
80746	29.63941	-98.04614	Guadalupe	Guadalupe	1804	12/28/2020
80342	29.69274	-98.10789	Cornal	Guadalupe	1804	12/28/2020
81309	33.28594167	-94.17243167	Bowie	Sulphur		12/28/2020
15254	33.44111	-94.07417	Bowie	Sulphur	03048	12/28/2020
80154	33.44492	-94.0755	Bowie	Sulphur	409	12/28/2020
83100	33.35494441	-94.12703756	Bowie	Sulphur		12/28/2020

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TEXAS STREAM TEAM UPDATES

Updated Dataviewer Forms

- Core – Standard and Probe
- *E. coli* Bacteria
- Riparian Evaluation

☐ Core
Core Water Quality Monitoring tests for parameters such as water temperature, DO, conductivity, pH, water clarity, and total depth.

☐ Advanced
Advanced Water Quality Form involves performing tests for *E. coli* bacteria, nitrate-nitrogen, orthophosphate, turbidity, and streamflow.

☒ *E. Coli* Bacteria
Form to perform tests for *E. coli* bacteria.

Instrument Calibration: Conducted within 24 hours of sampling

Temperature
Calibration

Temperature Calibration

Thermometer
Reading

Meter Reading
(temp)

Conductivity/Sali
nity Calibration

Conductivity Calibration

* Date of
Calibration
(cond)

* Time of
Calibration
(cond)

* Standard Value
($\mu\text{S}/\text{cm}$)

* Standard Temp
($^{\circ}\text{C}$)

* Pre-Test
Calibration
($\mu\text{S}/\text{cm}$)

* Calibrated To
($\mu\text{S}/\text{cm}$)

Post-Test
Calibration
($\mu\text{S}/\text{cm}$)

* Core Monitoring
Type Conducted

--None--

TEXAS STREAM TEAM UPDATES

Waterways Dataviewer and Datamap

- Creating New Monitoring Sites
 - *NEW* [Monitoring Site Request Form](#)

New Monitoring Site Request Form

To begin monitoring, a Texas Stream Team trained citizen scientists can either reactivate an existing site that is not currently being monitored by looking for sites on the [Datamap](#), or they can request to have a new site created by submitting this form.

If you are part of a group and would like to add a site, please be sure to fill out an updated [Group Citizen Scientist Monitoring Plan](#) and submit it below.

Before submitting this form, please review the [Site Selection Guide](#) to ensure the proposed site meets all of the qualifications. Once the form is submitted with the new site information, a Texas Stream Team staff member will review it to make sure all of the criteria are met and will send confirmation once the site has been created.

First Name *

Last Name *

Email *

Monitoring group (if applicable)

Latitude *

Longitude *

TEXAS STREAM TEAM UPDATES

2021 Goals

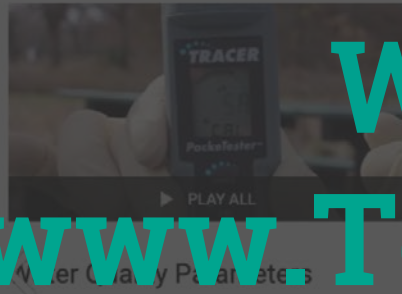
- Electronic Monitoring Forms
- Outreach Materials and Resources
- Monitoring Protocol Videos
- Training Checklists
- Updated Curriculum
- CPE Credit
- Virtual QC Sessions
- Training Manuals
- Equipment Maintenance Videos/Documents



The Meadows Center for Water and the Environment

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Texas Stream Team



Texas Stream Team Conductivity Water Testing

Texas Stream Team

Texas Stream Team Nitrate and Nitrogen Water Testing

Texas Stream Team

Texas Stream Team pH and Temperature

Texas Stream Team

Texas Stream Team Turbidity Water Testing

Texas Stream Team

Texas Stream Team Orthophosphate Water Testing

Texas Stream Team

6 videos • 75 views • Updated today



Texas Stream Team Parameter Videos and More

Need a monitoring parameter refresher or want to learn more about Texas Stream Team? Click here to visit our YouTube channel.

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Contact Information

Texas Stream Team

TxStreamTeam@txstate.edu

(512) 245-1346

www.TexasStreamTeam.org