



TEXAS STREAM TEAM NEWSLETTER

HOUSTON-GALVESTON AREA COUNCIL CHAPTER
WORKING TO PROTECT OUR WATERWAYS



Volume 2021, Issue 4: December 2021

Monitor's Corner

Skills Check: Conductivity Post-Calibration Check

The calibration record section of the Texas Stream Team Monitoring Form includes a space to record your conductivity meter's post-calibration reading. The post-cal check is an additional quality control check to help ensure your conductivity reading is accurate, and should be completed each time you monitor.

- The conductivity post-cal check should be completed after sampling and within 24 hours of the original calibration.
- Rinse the meter with deionized water between sampling and the post-cal check.
- Use the same conductivity standard for the post-cal check as you use for the initial calibration.
- To fall within QA requirements, your post-cal value must be within 10% of your initial calibration value. However, if your post-cal check is consistently more than 30 units from the standard value - a new meter may be necessary.

The conductivity calibration portion in the Texas Stream Team 2020 Core Water Quality Monitoring Manual starts on page 38, and post-cal checks are on page 40. You can download digital versions of the

[Email to: stream_team@h-gac.com](mailto:stream_team@h-gac.com)

THE MEADOWS CENTER FOR WATER AND THE ENVIRONMENT
TEXAS STATE UNIVERSITY
TEXAS STREAM TEAM

Send to: TStreamTeam@tstate.edu
Send to: Texas Stream Team
The Meadows Center - Texas State University
601 University Drive
San Marcos, TX 78666-4616

CORE ENVIRONMENTAL MONITORING FORM
PLEASE PRINT LEGIBLY

Sample Date: [] [] [] [] [] [] [] [] [] [] [] []
Sample Time (military): [] [] [] [] [] [] [] [] [] [] [] []
Site ID #: []
Sample Depth (meters): []

Instrument Calibration: Conducted within 24 hours of sampling. *Store and calibrate standard solutions at room temperature.*

Calibration	Date	Time	Standard Value	Standard Temp (°C)	Pre-Test Calibration Initial Reading	Calibrated	Post-Test Calibration Initial Reading
Conductivity/Salinity							
Dissolved Oxygen							
pH							

Field Observations:

FLOW SEVERITY: 1=no flow 2=low 3=normal 4=flood 5=high 6=dry

ALGAE: 1=absent 2=rare (<25%) 3=common (25-50%) 4=abundant (50-75%) 5=dominant (>75%)

WATER SURFACE: 1=clear 2=scum 3=foam 4=debris 5=sheen

WATER CONDITIONS: 1=alm 2=ripples 3=waves 4=white caps

PRESENT WEATHER: 1=clear 2=cloudy 3=overcast 4=rain

Field Quality Control: Was a QC session conducted for this sampling event? Yes No

Core Tests and Measurements:

AIR TEMPERATURE (°C) _____

TOTAL DEPTH (meters) _____

SECCHI DISK TRANSPARENCY (meters) _____

Average Appears _____ Disappears _____

As always you can review videos for monitoring procedures on the Texas Stream Team YouTube page.

[YouTube Review](#)

As we were unable to hold QA sessions in 2020 and 2021, watching the YouTube videos or re-reading the manual are great ways to refresh your memory and double-check your monthly monitoring procedures. The manual was updated in 2019 and 2020, and if you were trained on an earlier version, it is a good idea to review the new updated manuals for a refresher.

Safety Briefing: Monitoring with a Partner

The Buddy System might be something that is taught to children, but monitoring with a partner can be just as important a safety measure. Whether you bring your spouse, your friend, your children or grandchildren, having someone with you at your monitoring site provides several benefits.

- There is someone with you to help or call for help if there is an accident or emergency.
- Another set of eyes can help spot things like slippery surfaces or hazardous wildlife.
- A partner can help carry equipment so you are not over-burdened, or even carry extra items like water to stay hydrated.
- A partner can also help share monitoring tasks, whether conducting tests or recording readings on the field sheet.



Your partner does not need to be a certified Texas Stream Team Citizen Scientist to accompany you. Partners often attend trainings together intending to monitor together at one site or even two, but as long as you are certified you can instruct and supervise your partner so they can assist you. This can be particularly fun, and a great educational experience, with children and grandchildren.

For all of these reasons, it is recommended to sample with a partner or take someone with you for safety. If you do sample by yourself, tell someone where you are going and when you expect to return.

Technical Territory: Equipment Maintenance and Upkeep

The Texas Stream Team Standard Core Monitoring Kit has a lot of different pieces, and while the equipment in your kit might vary slightly based on the needs of your monitoring site, proper maintenance and upkeep of your equipment can help keep it in good working order. This in turn will help ensure that the results of your sampling are accurate.

While needed maintenance on some equipment, such as conductivity meters or thermometers, might be more obvious, there are also simple routine practices that can keep items like items like bottles, titrators, and even secchi disks clean and uncontaminated.

To help keep track of best practices for all items in your monitoring kit, the Meadows Center for Water and the Environment has put together a new Standard Core Equipment Maintenance Guide.



You can download and review the guide by clicking the button below. If you have any questions about equipment maintenance, or have issues with items and need replacements, please email stream.team@h-gac.com.

[Standard Core Equipment Maintenance Guide](#)

As 2021 winds down, H-GAC wants to thank all Texas Stream Team Citizen Scientists for the time and effort they continue to put into monitoring our waterways and promoting better water quality in our region. In particular, we would like to recognize the following monitoring milestones that were reached in 2021:

1 Year of Monitoring

Bernice Stroh
Denise Wolever
Jeanette Lambert
Tom Rommel

2 Years of Monitoring

Amina Baldwin
Bob Naegar
Regina Tippet
Rene Derewetzky
Robin Femmer

5 Years of Monitoring

Don Sabathier
Oron Atkins

10 Years of Monitoring

David Bulliner
Kerry Sauls

Monitor Resources

Information for Volunteers

Monitor Resources

The following links are resources for current H-GAC Texas Stream Team volunteers:

Core Water Quality Monitoring Form PDF
Texas Stream Team Water Quality Manual
Instructions 2012
2019 Update

Other Resources

Cheat Sheet
Hydrometer Instructions and Charts (LaMotte)
Texas Stream Team Procedure Review Videos (YouTube)

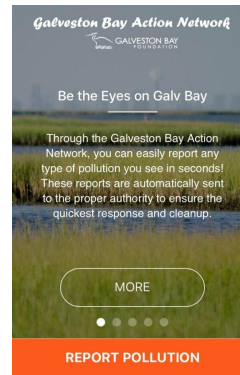
Data Submission

Data Viewing

Resources on the H-GAC website

H-GAC's Texas Stream Team website includes a section just for Monitor Resources, including downloadable data sheets, cheat sheets, links to video tutorials, and more. It is a great first place to check if you have any questions about your Texas Stream Team monitoring.

[Visit the website](#)



Report Pollution with GBAN

The Galveston Bay Action Network (GBAN) makes it easy to report pollution using a laptop, desktop, or mobile device. Download the mobile app or visit the Galveston Bay Foundation website.

[Visit GBAN online](#)

TWPD Kills & Spills

Texas Parks and Wildlife Department's Kills and Spill Team (KAST) investigates fish and wildlife kills resulting from pollution and natural events. To report a Kill or Spill call (512) 389-4848.

[Learn More](#)

Meadows Center Resources

The Meadows Center for Water and the Environment has general Texas Stream Team resources, a state-wide data map, and several publications that monitors might find interesting.

[Learn More](#)

Upcoming Events

Texas Stream Team Core Water Quality Trainings



Core Water Quality Citizen Science Training



All H-GAC Texas Stream Team trainings are currently on hold. Trainings will resume when it is safe for trainers and participants. Please contact stream.team@h-gac.com with any questions.

To view trainings held by partners across the state you can view the Meadows Center's [calendar of events](#).

[Learn More](#)

Audubon Christmas Bird Count December 14 - January 5

The [Audubon Christmas Bird Count](#) is December 14 through January 5 each year. Organized by the National Audubon Society, this global, all-volunteer effort collects data on local bird populations. Individual counts are open to birders of all levels, and there is no fee to participate.

Several [events](#) are scheduled across the region.

Bird Banding at the Gulf Coast Bird Observatory Saturday, December 18, 8:00 a.m. to 12:00 p.m.

On December 18, from 8:00 a.m. to noon, the Gulf Coast Bird Observatory will hold a free, in-person bird banding event at its headquarters at 299 Hwy 332 West, Lake Jackson, where licensed banders Robert and Kay Lookingbill will demonstrate banding birds. Come see birds in the hand and learn about the science of bird banding. The earlier you arrive the more birds you will see. For more information, visit gcho.org.

Birding 101 Hosted by Mercer Botanic Gardens Saturday, January 29, 9:00 a.m. to 12:00 p.m.

Longtime birder and photographer Paul Gregg shares four key tips to quickly identify common and migratory birds seen in the Houston area. This informative and family-friendly class is for beginners and intermediate birders, so bring a friend and learn insightful birding tips from a pro. This class concludes with a bird watching field excursion. Must be 12 or older and children under 16 must be accompanied by a parent or guardian.

The program is offsite at the Timber Lane Community Center, approximately 2 miles from Mercer at 1904 Naplechase Crest Drive in Spring. [Registration](#) is required.

Partner News

SPLASh Cleanups Help Remove Litter Along Shorelines

SPLASh (Stopping Plastics and Litter Along Shorelines) has been working to create a cleaner environment for people, birds, and other wildlife in the Houston-Galveston Region since August of 2020. In that time, SPLASh staff and volunteers

have removed almost 13,000 pounds of trash from Gulf of Mexico beaches, Galveston Bay shorelines, bayous and parks throughout the region! With at least one public trash cleanup per month, there are a lot of opportunities to get involved and help push that number even higher! Visit the calendar on the [SPLASh website](#) or sign up for the [SPLASh newsletter](#) to stay up to date on volunteer opportunities. SPLASh also offers educational programming for K-12 schools, youth groups, and more, so contact splashtx@abcbirds.org if you are interested in learning more about the programs and presentations they offer.



SPLASh

STOPPING PLASTICS AND
LITTER ALONG SHORELINES

Save the Date for Trash Bash 2022

The [River, Lakes, Bays 'N Bayous Trash Bash®](#), Texas's largest single-day waterway cleanup, is excited to welcome back volunteers to the 28th annual event on Saturday, March 26, 2022.

Since its inception, more than 114,000 volunteers have collected over 2,300 tons of trash, 20 tons of recyclable materials, and 11,629 tires. Register today for one of their many cleanup locations. Trash Bash hopes you will come out and help "Clean it like you mean it!" ®



RIVER, LAKES BAYS 'N BAYOUS TRASH BASH®

See *Time No Longer* in the Buffalo Bayou Park Cistern

Anri Sala's *Time No Longer* in the [Buffalo Bayou Park Cistern](#) has been extended through January 17, 2022! This spacious, multi-sensory art installation is an ode to music, space travel, and Houston's history. Woodwind instruments play as you walk the 360-degree perimeter of the Cistern viewing a massive holographic screen, transporting you to another space and time.

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](#)

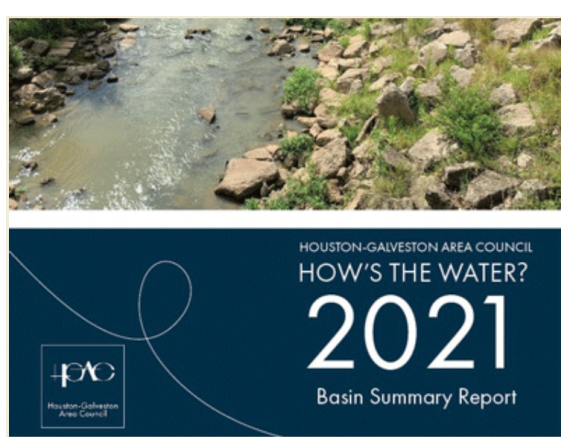
[Galveston Bay Foundation](#)
[H-GAC Clean Waters Initiative](#)
[Jesse H. Jones Park & Nature Center](#)
[Keep Texas Beautiful](#)
[SPLASh](#)
[Take Care of Texas](#)
[Trash Free Texas](#)
[Turtle Island Restoration Network](#)
[The Woodlands Township](#)

Water Quality Projects & Plans

Clean Rivers Program

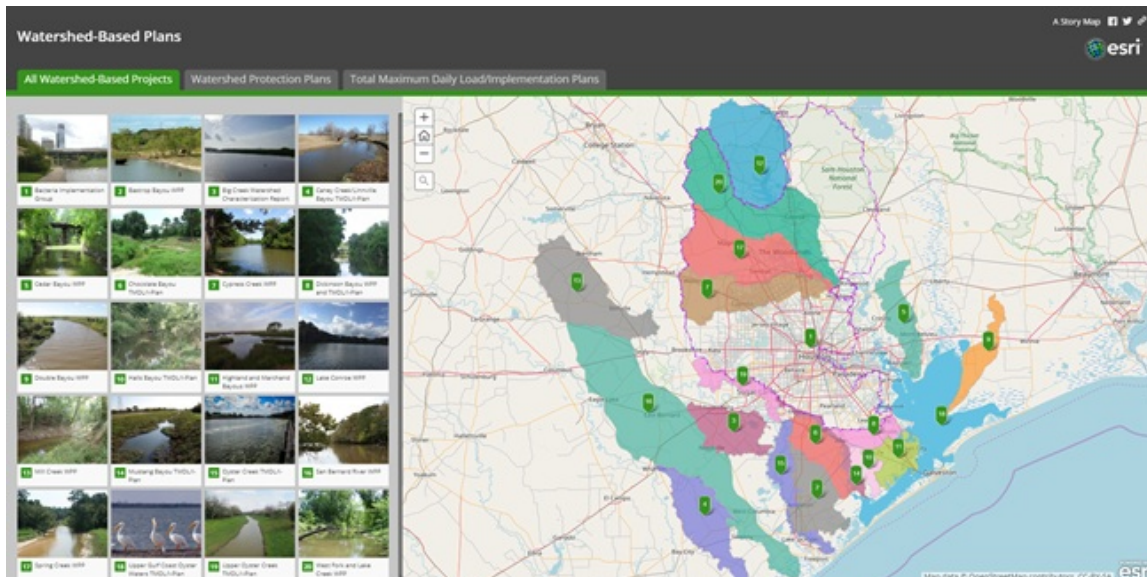
2021 Basin Summary Report Available
The [Basin Summary Report \(BSR\)](#), produced every five years, outlines water quality issues in the H-GAC Clean Rivers Program region based on technical analysis of historical and current trends. The BSR and the Basin Highlight Reports, which are produced in the years without a BSR, are available in PDF and interactive online formats.

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



Watershed Based Plans

H-GAC and other local partners help facilitate the development of watershed-based plans to improve water quality in the region, including both Total Maximum Daily Load (TMDL) Implementation Plans (I-Plans) and Watershed Protection Plans (WPPs). H-GAC has an interactive story map showing the locations of ongoing and completed projects in the region.



[View the Story Map](#)

Ongoing Project Updates

- [Caney Creek/Linville Bayou watersheds](#): H-GAC is working with stakeholders to develop a TMDL I-Plan to reduce fecal bacteria levels. Contact: [Steven Johnston](#)
- [Oyster Creek watershed](#): H-GAC is working with stakeholders to develop a TMDL I-Plan to reduce fecal bacteria levels. Contact: [Steven Johnston](#)
- [Spring Creek watershed](#): H-GAC worked with stakeholders to draft a WPP. The draft has been submitted for agency review. Contact: [Rachel Windham](#)
- [Cypress Creek watershed](#): The WPP was approved by the TCEQ and EPA, and H-GAC is working with stakeholders to move implementation projects forward. Contact: [Justin Bower](#)
- [Clear Creek watershed](#): H-GAC is beginning technical work that will help inform stakeholder decisions when the WPP development process begins later this year. Contact: [Justin Bower](#)

About the Newsletter

Newsletter Content Survey: please complete this short [3-question survey](#) to let us know what you would like to see in the newsletter.

Email stream.team@h-gac.com or call 713-993-2469 with questions, comments, calendar items, or suggestions. You can also [view previous issues of our newsletter](#).

[Join the H-GAC Texas Stream Team mailing list.](#)

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[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.

Houston-Galveston Area Council

Stream.Team@h-gac.com

www.H-GAC.com