

Texas Stream Team

Newsletter

Houston-Galveston Area Chapter Working to Protect Our Waterways



Volume 2021, Issue 2: May 2021

Monitor's Corner

Skills Check: DO Titrations - One Drop at a Time

As temperatures climb and we get closer to the summer, dissolved oxygen levels at your monitoring sites might start to decrease - some of you have already started seeing lower DO levels this spring.

With the lower DO levels, it is even more important to be careful when performing your DO titrations. Adding more sodium thiosulfate than necessary can quickly help you reach a clear solution, but could result in your reported DO levels being greater than they actually are. To help get accurate DO results, remember:

- When filling the titrator syringe pull the plunger back slowly to help avoid air bubbles.
- Only add one drop from the syringe at a time, and mix well before adding another.
- Use the pink tip to release smaller drops for more accurate results.
- The diagram to the right shows what part of the plunger should be lined up at zero. This is the same part you will use to read the end amount.
- Unlike the diagram, your syringe measures in whole numbers with the smaller dashes between representing intervals of 0.2 - if your reading is between two of these dashes, they are your odd intervals.

The titration portion in the Texas Stream Team 2019 Core Water Quality Monitoring Manual starts on page 36. You can download digital versions of the 2012 and 2019 manuals on <u>H-GAC's Texas Stream</u> <u>Team web page</u>. Adapter Tip

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, watching the YouTube videos or rereading the manual are great ways to refresh your memory and double-check your monthly monitoring procedures.

STEP 7:

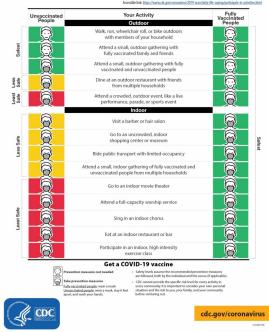
Safety Briefing: CDC Updates COVID-19 Guidelines

The CDC recently released new COVID-19 guidelines about staying safe during different indoor and outdoor activities for those who have and have not been vaccinated.

Relevant to Texas Stream Team monitoring is the guidance that fully vaccinated people can safely participate in outdoor activities and recreation without wearing a mask, except in certain crowded settings and venues. However, it is recommended to still monitor the COVID-19 situation in your area.

The infographic included here is from the CDC and shows what your risk level might be for different indoor and outdoor activities depending on your vaccination status. The infographic is available in several languages on the CDC website. For more information on the CDC guidance, visit their website.

Choosing Safer Activities



As always, 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: Northeast Texas Aquatic Turtle Surveys By: Mandi Gordon Environmental Institute of Houston at the University of Houston - Clear Lake

East Texas, including the greater Houston area, is home to numerous turtle species, including some currently under review for inclusion on the Endangered Species Act (ESA). These species include the western chicken turtle (*Deirochelys reticularia miaria*), for which a petition to list under the ESA was submitted to the U.S Fish and Wildlife Service with significant 90-Day Findings. Currently, the western chicken turtle holds no protection in Texas, though a final ESA listing decision is planned in 2024.

The Environmental Institute of Houston at the University of Houston - Clear Lake (EIH-UHCL) is currently developing partnerships with private landowners and stakeholders in East Texas to conduct surveys for the western chicken turtle throughout their historic range. These surveys are funded by the Texas Comptroller of Public Accounts Natural Resources Program and are aimed at providing the U.S. Fish and Wildlife Service with the most current and relevant data necessary for pending Species Status



These include trapping surveys, visual surveys, environmental DNA (eDNA) sampling, unmanned aerial vehicle (UAV) surveys, and candid scent surveys.

In 2020, sampling for western chicken turtles was conducted monthly at 27 sites from March through July. Four sites yielded positive detections of the species via eDNA, candid scent surveys, and visual surveys. The project will be expanding sampling efforts into northeast Texas, including areas around the greater Houston area in 2021 and 2022.

If you or someone you know are aware of western chicken turtles present on your (or their) property, EIH-UHCL would love to hear about it! Assessment (SSA) and ESA listing decisions.

Western chicken turtles are ephemeral wetland habitat dwellers associated with watersheds throughout east Texas. This cryptic species exhibits a seasonal activity pattern, with most activity occurring in the spring and early summer months. Due to their cryptic nature and narrow window of opportunity for observation, surveys for the species are aimed at testing a suite of traditional and novel sampling techniques. EIH-UHCL has developed a citizen science based online reporting tool for compilation of historic reports throughout the species range. The reporting tool will be active through early 2023 and can be accessed via the following link: <u>https://arcg.is/11yWyn</u> or by scanning the QR code in the image above with your smartphone or tablet.

For questions related to these ongoing surveys, please contact <u>Mandi Gordon</u>. More information about EIH-UHCL can be found <u>online</u>.

Monitor Spotlight: Student Conservation Association & Houston Parks & Rereation

Christina Brown and Jahnavi Schneider are the two newest Student Conservation Association interns conducting Texas Stream Team monitoring at sites along Sims Bayou. Their monitoring is part of a larger project with the Houston Parks and Recreation Department. Besides their monthly monitoring, Christina and Jahnavi are responsible for several tasks geared toward planting trees in the riparian areas along the bayou, including working at the tree farm and holding tree planting events.

Riparian areas along the bayous are traditionally wooded, and planting trees to restore riparian areas has many benefits for water quality and the bayou banks, including filtration, providing habitat, and reducing temperatures.



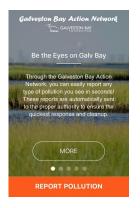
Christina and Jahnavi monitor at Stuart and Reveille Parks, though previous monitoring for the project has also included Milby Park. The monitoring is meant to supplement the other parts of the project by providing information on water quality before and after the ongoing planting efforts.

Monitor Resources

Water Quality Monitoring Form	Water Quality Monitoring Form
Vord nstructions Texas Stream Team Water Quality Vanual	(Tidal) POF Word Instructions Other Resources Cheat Sheet Hydrometer instructions and Charts (LaMote) Texas Stream Team Procedure Review Videos
2012 2019 Update	Hydrometer Instructions and Charts (LaMotte)

Resources on the H-GAC website

H-GAC's Texas Stream Team website has more than just information on the program - it has 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



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.

monitoring. Visit GBAN online Visit the website **Meadows Center Resources TWPD Kills & Spills** Texas Parks and Wildlife The Meadows Center for Water and Department's Kills and Spill Team the Environment has general Texas (KAST) investigates fish and wildlife Stream Team resources, a state-wide kills resulting from pollution and data map, and several publications natural events. To report a Kill or Spill that monitors might find interesting. call (512) 389-4848. Learn More Learn More

Upcoming Events



Texas Stream Team Core Water Quality Trainings

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

To view trainings held by partners across the state you can view the Meadow Center's calendar of events.

Learn More

Chocolate Bay Stakeholder Meeting Tuesday, May 18, 2:00 to 4:00 p.m.

H-GAC invites residents, local governments, businesses, and non-profits within the watersheds that make up Chocolate Bay - Chocolate Bayou, Mustang Bayou, and Halls Bayou in Galveston and Brazoria counties - to attend a stakeholder meeting.

Attendees will hear from H-GAC staff concerning the state of water quality in each bayou and actions being taken to improve them. H-GAC is forming a committee to develop an action plan to reduce fecal bacteria and will be asking for your assistance.

The event will be online. <u>Registration</u> is required. Contact <u>Steven Johnston</u> for more information.

San Jacinto Regional Flood Planning Group Pre-Planning Meeting Tuesday, May 18, 6:30 to 7:30 p.m.

The Texas Water Development Board Region 6's San Jacinto Flood Planning Group will hold a Pre-Planning Meeting to gather community concerns to aid with the development of the regional flood plan.

Find meeting materials at twdb.texas.gov. Registration is required.

Bacteria Implementation Group (BIG) Spring Meeting Tuesday, May 25, 1:00 to 3:00 p.m.

The <u>BIG</u> will review the status of the 2021 Annual Report and receive an update on the Implementation Plan Revision. The City of Houston will present on their Green Stormwater Incentives Program. The University of Houston at Clear Lake will present on their Targeted Monitoring Project. H-GAC staff will provide updates on local and regional projects that support BIG bacteria reduction strategies.

The event will be online and <u>registration</u> is required. For more information or to submit public comment, contact <u>Steven Johnston</u> at 832-681-2579.

Clean Rivers Program Basin Steering Committee Meeting Wednesday, June 2, 2:00 to 4:00 p.m.

H-GAC's Clean Rivers Program is hosting its semi-annual <u>Basin Steering Committee</u> Meeting. Presentations will include the 2021 Basin Summary Report (BSR), the FY2022 Coordinated Monitoring Schedule (CMS), the results of the Monitoring Efficiencies Study, the results of the Targeted Monitoring Project, and updates on the Bacteria Implementation Group and various TMDL and Watershed Protection Plan projects.

The event will be online, and <u>registration</u> is required. For more information, to submit public comment, or to receive call-in information, contact <u>Jean Wright</u>.

Spring Creek Watershed Protection Plan Public Meeting Thursday, June 3, 2:00 to 4:00 p.m.

H-GAC and the Spring Creek Watershed Partnership will hold a public meeting to discuss the incorporation of community-driven strategies for water quality into the first draft of a Watershed Protection Plan.

The event will be online, and <u>registration</u> is required. More information about this project is available <u>online</u> or by contacting <u>Rachel Windham</u>.

The Woodlands Township Virtual BioBlitz June 21 to June 27

The Woodlands Township is hosting a week-long "BioBlitz" - a community effort to identify as many species as possible during National Pollinators Week. The BioBlitz will make use of the iNaturalist app, and a separate virtual training on the app will be hosted on June 4.

Find more information about the BioBlitz and iNaturalist training on the Woodland Township's Environmental Services Department's <u>website</u>.

The Woodlands Township Watershed Project: The Pet Waste Problem Saturday, July 17, 8:00 a.m.

The Woodlands Township Environmental Services Department is working with community MUDs to remind residents of the need to put pet waste into the trash, because pet waste contributes to the continuing problem of high bacteria levels in local waterways. The department is offering informal discussions on the topic at Township parks, followed by opportunities to volunteer for installing storm drain markers that serve as on-site reminders that anything in those drains ends up in the water.

Find more information and a link to register on the <u>department's website</u>, and contact <u>Teri</u> <u>MacArthur</u> with questions.

Partner News

Trash Free Texas Adopt-A-Spot

H-GAC is partnering with the Meadows Center and the North Central Texas Council of Governments on a project to help prevent trash from entering our waterways. Part of this project includes promoting and expanding the <u>Trash Free</u> <u>Texas Adopt-A-Spot tool</u> into the Houston region to help connect volunteers with places that need litter cleanup.

TRASH FREE TEXAS

More Information

Water My Yard Website & App

Water My Yard is a free website and app that uses local weather data to help you water less, and keep your yard beautiful. Download WaterMyYard from your app store today and receive free customized weekly watering advice! Galveston Bay Foundation is working alongside partners at Texas A&M AgriLife Extension and the Harris-Galveston Subsidence District on this tool to increase water conservation, reduce subsidence, and improve water quality in our watershed.



More Information

Headwaters to Baywaters Interactive Story Map

Bayou Land Conservancy, Buffalo Bayou Partnership, Galveston Bay Foundation, Houston Audubon, and Katie Prairie Conservancy announce <u>Headwaters to</u> <u>Baywaters: A Story of Urban Resilience</u>, an interactive website that explains the scientific importance of riparian corridors and the organizations' conservation efforts to preserve them in the Houston-Galveston Region.



Get More Involved With Partners

Adopt-a-Beach Artist Boat Bayou Land Conservancy Bayou Preservation Association Buffalo Bayou Partnership Galveston Bay Foundation H-GAC Clean Waters Initiative Jesse H. Jones Park & Nature Center Keep American Beautiful Keep Texas Beautiful Cypress Creek Flood Control Coalition Exploration Green Conservancy Friends of the River San Bernard Galveston Bay Estuary Program <u>Take Care of Texas</u> <u>Trash Free Texas</u> <u>Turtle Island Restoration Network</u> <u>The Woodlands Township</u>

Water Quality Projects & Plans

Clean Rivers Program

Basin Highlights Reports

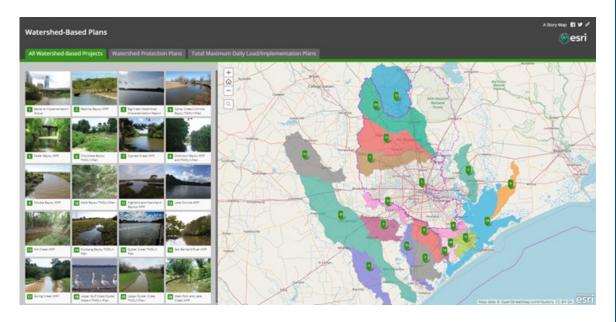
Each year the Clean Rivers Program produces a report outlining the state of water quality in the region that is submitted to the TCEQ. The <u>Basin Highlights Reports</u> include the status and trends of water quality, as well as a brief overview of the previous year's activities.

Contact Todd Running at 713-993-4549 for more information about the <u>Clean Rivers</u> <u>Program</u>.



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

- <u>Caney Creek/Linville Bayou watersheds</u>: H-GAC is working with stakeholders to develop a TMDL I-Plan to reduce fecal bacteria levels. Contact: <u>Steven Johnston</u>
- <u>Oyster Creek watershed</u>: H-GAC is working with stakeholders to develop a TMDL I-Plan to reduce fecal bacteria levels. Contact: <u>Steven Johnston</u>
- <u>Spring Creek watershed</u>: H-GAC is working with stakeholders to develop a Watershed Protection Plan. The next meeting is June 3. Contact: <u>Rachel Windham</u>

- <u>Cypress Creek watershed</u>: The Watershed Protection Plan was approved by the TCEQ and is awaiting EPA approval. Contact: <u>Justin Bower</u>
- 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: <u>Justin Bower</u>

About the Newsletter

Newsletter Content Survey: please complete this short <u>3-question survey</u> to let us know what you would like to see in the newsletter.

Email <u>stream.team@h-gac.com</u> or call 713-993-2469 with questions, comments, calendar items, or suggestions. You can also <u>view previous issues of our newsletter</u>.

Join the H-GAC Texas Stream Team 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 <u>Community</u> and <u>Environmental Update</u>, a monthly e-newsletter to keep you informed about the many community planning, economic development, and environmental planning programs at H-GAC.

<u>Texas Stream Team at The Meadows Center for Water and the Environment</u> at Texas State University is dedicated to understanding and protecting the 191,000 miles of Texas waterways. For more information, contact <u>TxStreamTeam@txstate.edu</u>.

Houston-Galveston Area Council <u>Stream.Team@h-gac.com</u> <u>www.H-GAC.com</u>