



Sabine River Basin Program Update 2025

*Prepared in Cooperation with the Texas Commission on Environmental Quality
under the Authorization of the Texas Clean Rivers Act*



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Introduction

Through the Texas Clean Rivers Program (CRP), the Texas Commission on Environmental Quality (TCEQ) forms partnerships with regional water authorities to coordinate and conduct water quality monitoring and promote stakeholder interest in improving the water quality of Texas surface waters. The Sabine River Authority of Texas (SRA-TX) serves as the CRP planning agency within the Sabine River Basin.

The Sabine River Basin Program Update 2025 provides stakeholders with a summary of CRP activities and water quality within the Sabine Basin over the past fiscal year (FY 2024: 1 September 2023 – 31 August 2024). This report includes highlights of water quality monitoring, public outreach activities, and a list of Sabine Basin water quality impairments and concerns from the [2024 Texas Integrated Report of Surface Water Quality for Clean Water Act Sections 305\(b\) and 303\(d\)](#)¹. A more thorough discussion of water quality can be found in the [Sabine River Basin Summary Report 2024](#)².

This Year's Highlights

In FY 2024, the SRA-TX advanced its mission under the CRP, delivering insights into the Sabine River Basin's water quality despite a dynamic environmental landscape. The majority of water quality data continues to meet Texas Surface Water Quality Standards (TSWQS) and screening criteria, affirming the basin's overall environmental health. However, bacteria—specifically *Enterococcus* in tidal reaches and *Escherichia coli* (*E. coli*) in freshwater segments—remained the most frequently exceeded TSWQS parameter. Elevated bacteria levels were consistently recorded during significant rainfall events, such as a May 2024 storm that produced 9-inches of precipitation over East Texas, increasing stream turbidity across several stations. These spikes are primarily linked to non-point sources, including stormwater runoff from urban hubs, rural agricultural zones, and natural landscapes, with wildlife (e.g., waterfowl) playing a notable role. Secondary contributors include industrial and municipal point-source discharges, aging on-site treatment systems, sanitary sewer overflows during floods, and minor effluents from permitted package plants.

Monitoring efforts faced a few hurdles in FY 2024, with low lake levels from a dry winter, severe weather (e.g., a July 2024 thunderstorm series), and spillway releases from the Toledo Bend Reservoir restricting access to several sites. SRA-TX adapted by rescheduling sampling where possible, though the City of Longview, a CRP sub-participant, missed seven planned visits to Lake Cherokee due to equipment and personnel challenges. Despite these setbacks, the [Sabine Basin FY 2024 Coordinated Monitoring Schedule](#)³ guided an effort across 38 SRA-TX sites, complemented by 10 TCEQ Region 5 quarterly sites and Longview's station (Table 1). The current [Sabine](#)

¹ <https://www.tceq.texas.gov/waterquality/assessment/2024-integrated-report/24txir>

² https://www.sratx.org/wp-content/uploads/SRA-TX-2024-Basin-Summary_final_8-20-24.pdf

³ <https://cms.lcra.org/schedule.aspx?basin=5&FY=2024>

[Basin FY 2025 Coordinated Monitoring Schedule](#)⁴, finalized in June 2024, provides a detailed list of the planned CRP monitoring activities within the basin. This proactive scheduling ensures continued coverage of the basin's 9,800-square-mile expanse.

The 2024 Texas Integrated Report (IR) 303(d) list, released late in FY 2024, marked two pivotal updates. The Upper Lake Fork Creek arm (Segment 0512_05) near FM 2946 was newly listed for high pH, with readings averaging 8.8 (above the TSWQS threshold of 8.5). High pH readings in the upper reaches of East Texas reservoirs are often tied to increased algal blooms. Nichols Creek (Segment 0502A_01) was removed from the 303(d) list after eight years due to a change in Recreational Use-Attainability Analysis (RUAA). TCEQ recommended Nichols Creek's RUAA status be revised to secondary contact recreation one use which changed the TSWQS and removed it from the 303(d) list. These shifts highlight the CRP's role in both identifying and addressing emerging concerns and recognizing long-term improvements.

The Orange County Total Maximum Daily Load (OCTMDL) Project remains an active initiative in the southern Sabine Basin, targeting impairments in the Adams Bayou (0508) and Cow Bayou (0511) watersheds. First flagged in 1992 and 1994, respectively, these water bodies continue to experience ongoing impairments with bacteria, dissolved oxygen (DO), and pH issues. TCEQ adopted TMDLs for these parameters on June 13, 2007, followed by the implementation plan (I-Plan) on August 5, 2015. Since then, SRA-TX has sustained routine CRP monitoring at two stations—Adams Bayou at FM 1006 (10441) and Cow Bayou at Roundbunch Road (10449)—continuously collecting data. Beginning in FY 2021, SRA-TX's OCTMDL program has been sampling at 14 additional historic OCTMDL stations, yielding the following result: DO in Adams Bayou Tidal improved by 0.6 mg/L on average since 2021, possibly due to a reduced organic loading from I-Plan measures like upgraded wastewater controls.

Beyond data collection, SRA-TX continued to inform the public in FY 2024 through stakeholder meetings. The annual Steering Committee meetings in Orange, TX, and Quitman, TX, doubled in attendance from FY 2023, reflecting growing public interest in water quality trends and environmental stewardship throughout the Sabine Basin. These efforts, paired with real-time data updates on the SRA-TX website, highlight a year of resilience, adaptation, and progress for the Sabine Basin under the CRP framework.

Public Involvement and How to Get Involved

SRA-TX provides opportunities for public involvement by holding stakeholder meetings. The 2024 Sabine Basin Steering Committee meetings were held in Orange, TX, and Quitman, TX. These meetings allow stakeholders to stay informed about water quality concerns and participate in planning water quality monitoring in the basin. For more

⁴ <https://cms.lcra.org/schedule.aspx?basin=5&FY=2025>

information about Sabine Basin Steering Committee meetings, please contact Kaleb McDade at (409) 746-3284 or kmcdade@sratx.org.

Coordinated monitoring meetings are held in conjunction with steering committee meetings, enabling stakeholders to coordinate monitoring efforts and provide input on sample event scheduling, sample site locations, and additional sampling needs.

SRA-TX partners with Texas Stream Team, a citizen science monitoring program of The Meadows Center for Water and the Environment at Texas State University. SRA-TX supports this program by providing sampling kits to volunteers throughout the Sabine Basin. While Texas Stream Team data is not directly utilized by the Clean Rivers Program, field observations by volunteers are a valuable resource for regulators to find and address water quality issues in areas that might otherwise be overlooked.

SRA-TX assisted in adopting the OCTMDL I-Plan by publicizing and facilitating stakeholder and focused stakeholder meetings. Additional information can be found on the [SRA-TX OCTMDL](#)³ page.

[Current and past water quality reports](#)⁴ and historical monitoring data are available to the public on SRA-TX's website.

SRA-TX engages in public outreach through civic groups, environmental events, and hosting tours of SRA-TX facilities. SRA-TX has participated in presentations at area schools, notably at West Sabine Elementary's Annual Outdoor Learning Day. In the Upper Basin, SRA-TX biologists demonstrated various field activities for students ranging from elementary to high school at the Lake Fork Division office in Quitman, TX. Seminars regarding water quality and other conservation issues were also delivered at various meetings and clubs within the Upper Basin.

³ <https://www.sratx.org/water-quality/tmdl/>

⁴ <https://www.sratx.org/water-quality/water-quality-monitoring/>



Figure 1. Coordinated Monitoring meeting in Quitman, TX.

Water Quality Monitoring

In FY 2024 and FY 2025, the SRA-TX monitored and continues to monitor thirty-eight sites monthly for CRP within the Sabine Basin. The City of Longview, an SRA-TX CRP sub-participant, has likewise conducted monthly monitoring at one site for nine months. Outside of CRP, TCEQ Region 5 has maintained quarterly monitoring at 10 sites and continues this effort (Table 1).

Table 1. Planned Sabine River Basin Water Quality Monitoring Entities and Frequency for FY 2024 and FY 2025. No changes in site selection or monitoring frequency have been made between the two fiscal years.

Sabine River Basin Water Quality Monitoring (FYs 2024 and 2025)				
Sampling Entity	Field	Conventional	Bacteria	Metals in Water
Sabine River Authority of Texas (CRP)	38 sites monthly			32 sites annually
TCEQ Region 5	10 sites quarterly			
City of Longview	1 site, 9 months per year			1 site annually
Sabine River Authority of Texas (TMDL)	14 sites, monthly and quarterly			

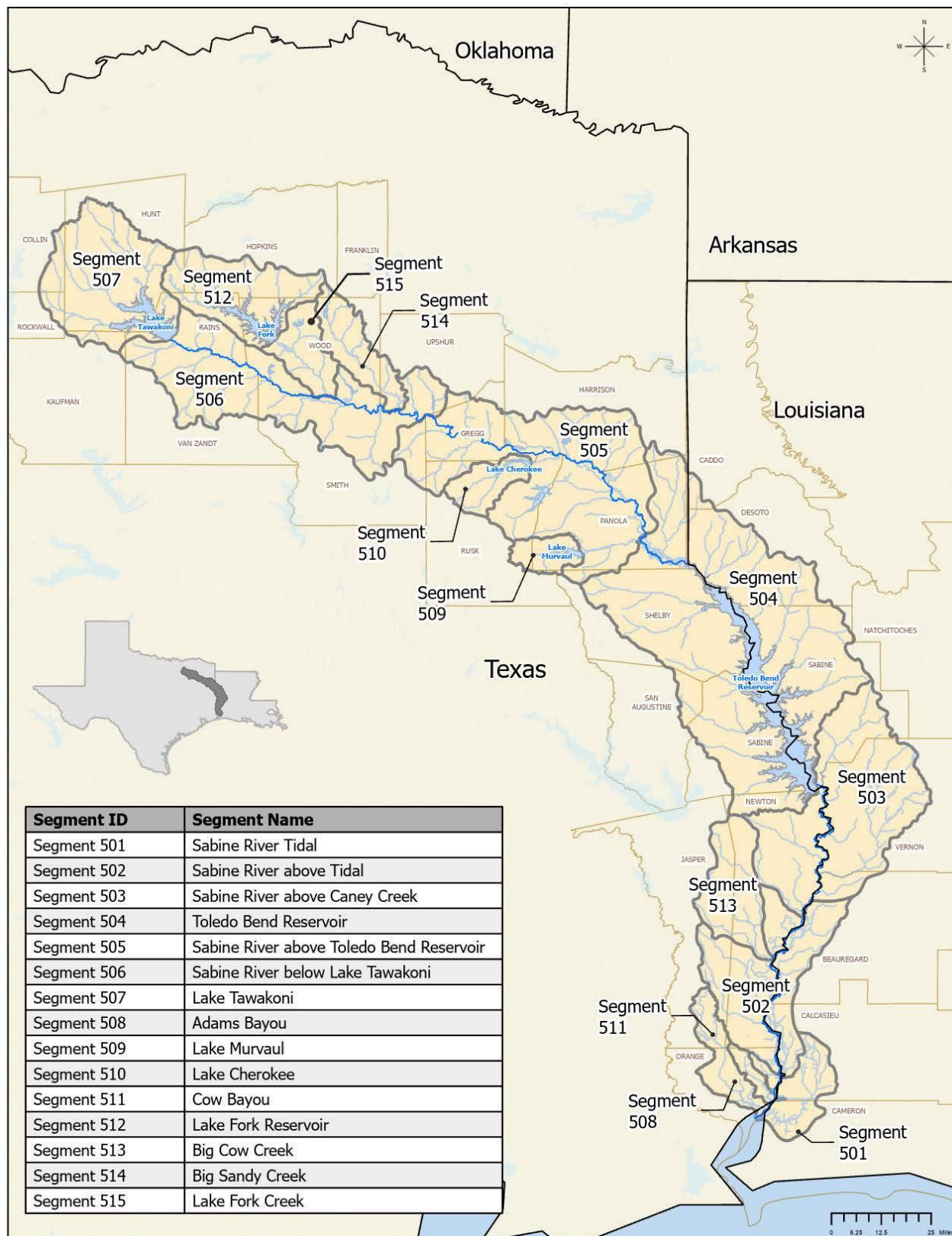


Figure 2. Sabine Basin Map with Classified Segments.

Table 2. SRA-TX CRP Fixed Monitoring Stations for FY 2024 and FY 2025.

Segment	Station TCEQ ID (SRA-TX ID)	Location
501	10391 (SRT1)	SABINE RIVER AT CHANNEL CAN 3
501	15654 (BB1)	BLACK BAYOU IN CAMERON PARISH
511	10449 (CB1)	COW BAYOU AT ROUND BUNCH ROAD
508	10441 (AB2)	ADAMS BAYOU AT FM 1006
501	15653 (ICW1)	INTERCOASTAL WATERWAY AT PERRY RIDGE
501	10394 (SRT2)	SABINE RIVER AT IH 10
501	10395 (SR1)	SABINE RIVER 12.00 KM UPSTREAM OF IH 10
502	10397 (SR2)	SABINE RIVER AT SH 12 NORTH OF DEWEYVILLE TX.
513	10465 (BCC1)	BIG COW CREEK AT FM 1416 SOUTH OF BON WIER
503	10398 (SR3)	SABINE RIVER AT US 190 EAST OF BON WIER TX.
503	10340 (BA4)	ANACOCO BAYOU AT LOUISIANA HWY 111 CROSSING SOUTHWEST OF KNIGHT LA.
503	10399 (SR5)	SABINE RIVER AT SH 63 EAST OF BURKEVILLE TX.
503	10401 (TB6S)	SABINE RIVER BELOW TOLEDO BEND RESERVOIR AT RIGHT ABUTMENT OF SPILLWAY FOR DAM
503	15660 (BT1)	BAYOU TORO AT LA SH 392 IN SABINE PARISH SW OF HORNBECK LA.
504	10404 (TB6A)	TOLEDO BEND RESERVOIR MAIN LAKE ABOVE THE DAM AT THE OLD RIVER CHANNEL
504	10406 (TB6C)	TOLEDO BEND RESERVOIR IN SIX MILE BOAT LANE 0.8KM EAST OF SH 87
504	18054 (TB6Q)	TOLEDO BEND RESERVOIR IN NEGREET BAYOU
504	10411 (TB6F)	TOLEDO BEND RESERVOIR IN SUNSHINE BAY NEAR FM 3121 BRIDGE
504	10402 (TB6H)	TOLEDO BEND RESERVOIR AT SH 21 NORTHEAST OF MILAM
504	15659 (TB6K)	TOLEDO BEND RESERVOIR IN LANANA BAYOU AT LOUISIANA SH 191 IN SABINE PARISH LOUISIANA WEST OF MANY
504	15655 (TB6J)	TOLEDO BEND RESERVOIR PATROON BAYOU BRANCH AT FM 276
504	18053 (TB6LN)	TOLEDO BEND RESERVOIR SAN MIGUEL ARM BOAT LANE
504	18052 (TB6R)	TOLEDO BEND RESERVOIR AT RAGTOWN
505	10415 (SR10)	SABINE RIVER AT FM 2517
505	13628 (SR11)	SABINE RIVER AT US 59
505	10427 (SR16)	SABINE RIVER AT SH 42
505	10423 (SR14)	SABINE RIVER AT SH 149 SOUTH OF LONGVIEW TX
506	10428 (SR17)	SABINE RIVER AT US 271
506	10429 (SR19)	SABINE RIVER AT SH 14 S. OF HAWKINS
506	10430 (SR21)	SABINE RIVER AT US 69

514	10468 (BS1)	BIG SANDY CREEK AT SH 155
515	10469 (LF20)	LAKE FORK CREEK AT US 80
512	10458 (LF2)	LAKE FORK RESERVOIR NEAR DAM IN CREEK CHANNEL
512	10462 (LF4)	LAKE FORK RESERVOIR MID-COVE IN LAKE FORK CREEK ARM AT FM 515
512	10461 (LF3)	LAKE FORK RESERVOIR MID-ARM IN CANEY CREEK ARM AT FM 515
507	10434 (LT23A)	LAKE TAWAKONI IN THE MAIN LAKE NEAR THE DAM
507	21173 (LT23DN)	LAKE TAWAKONI IN WACO BAY EQUIDISTANT FROM FINGER AND SPRING POINTS 1.17KM BEARING 18.61 DEGREES FROM IRON BRIDGE PUMPING STATION
507	10437 (LT23B)	LAKE TAWAKONI AT SH 276



Figure 3. SRA-TX biologist conducting monthly water quality surveys.

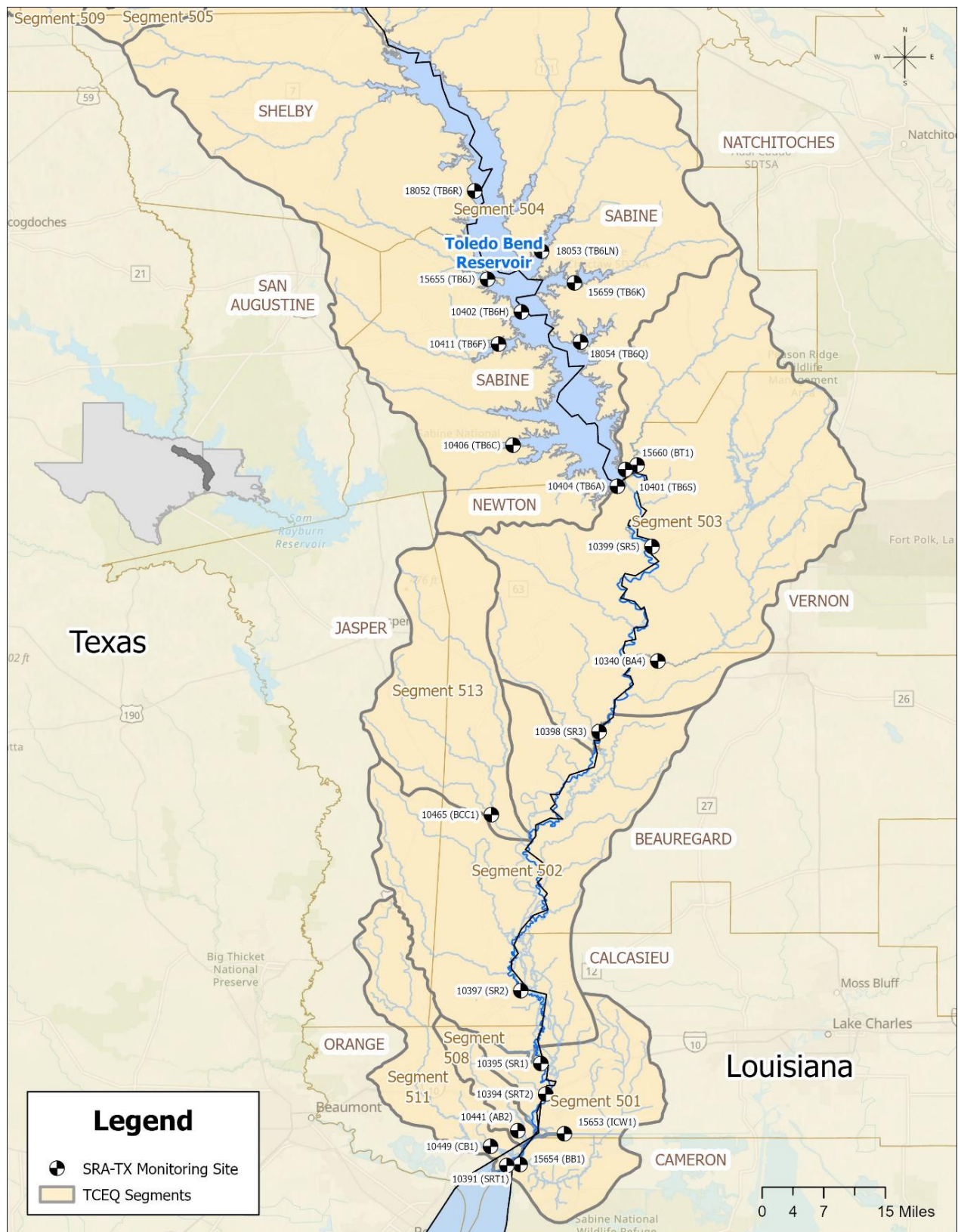


Figure 4. Lower Sabine Basin

Table 3. Tidal Sabine River Segment water quality impairments and concerns from the 2024 Texas Integrated Report for Clean Water Act Sections 305(b) and 303(d).

Segment Number	Description	Impairment	Concern	Importance
0501_01	Sabine Basin Tidal from confluence with Sabine Lake to West Bluff in Orange Co.	Bacteria, PCBs in edible tissue	None	Recreation use, Fish Consumption
0501_02	Sabine River tidal from Adams Bayou to Little Cypress Bayou	Bacteria, PCBs in edible tissue	None	Recreation use, Fish Consumption
0501_03	Sabine River tidal from Little Cypress to Old River at West Bluff	PCBs in edible tissue	Bacteria	Fish Consumption
0501B_01	Little Cypress Bayou from the Sabine River upstream to 340m downstream of 16 th street in Orange	Depressed Dissolved Oxygen, Bacteria, Toxicity in Water	None	Aquatic life use, Recreation use
0501B_02	Little Cypress Bayou from 340m downstream of 16 th street to an unnamed stream 100m downstream of Little Cypress Dr.	Depressed Dissolved Oxygen, Bacteria, Toxicity in Water	None	Aquatic life use, Recreation use
0501B_03	Little Cypress Bayou from the confluence of an unnamed stream 100m downstream of Little Cypress Dr. upstream to the headwater near the intersection of S Teal Rd and Dunromin Rd north of Orange	Depressed Dissolved Oxygen, Bacteria, Toxicity in Water	None	Aquatic life use, Recreation use

Table 3 details Segment 0501's tidal zone from Sabine Lake to West Bluff. Monitoring by SRA-TX continues to identify bacteria issues affecting both recreational and fish consumption issues. PCBs are man-made chemicals that make their way into the water supply and then into fish.

Table 4. Adams Bayou Segment water quality impairments and concerns from the 2024 Texas Integrated Report for Clean Water Act Sections 305(b) and 303(d).

Segment Number	Description	Impairment	Concern	Importance
0508_01	Adams Bayou Tidal* lower 3 miles of segment	Depressed Dissolved Oxygen, Bacteria	Depressed Dissolved Oxygen	Aquatic life use, Recreation use
0508_02	Adams Bayou Tidal* 2-mile reach near Western Avenue	Depressed Dissolved Oxygen, Bacteria	None	Aquatic life use, Recreation use
0508_03	Adams Bayou Tidal* 1-mile reach near Green Avenue	Depressed Dissolved Oxygen, Bacteria	None	Aquatic life use, Recreation use
0508_04	Adams Bayou Tidal* Upper 2 miles of segment	Depressed Dissolved Oxygen, Bacteria	Depressed Dissolved Oxygen, Low pH	Aquatic life use, Recreation use,
0508A_01	Adams Bayou* from 1.1 km upstream IH10 to Orange County Line Relief Ditch	Depressed Dissolved Oxygen	None	Aquatic life use
0508B_01	Gum Gully* from confluence of Adam Bayou to upstream perennial portion of the stream	Depressed Dissolved Oxygen, Bacteria	None	Aquatic life use, Recreation use
0508C_01	Hudson Gully* from confluence with Adams Bayou to headwaters near US 890 in Orange County	Depressed Dissolved Oxygen, Bacteria	Depressed Dissolved Oxygen	Aquatic life use, Recreation use

* Included in the OCTMDL Project

Table 4 focuses on Segment 0508's tidal and upstream reaches, monitored at Adams Bayou at FM 1006 (10441) in FY 2024. Collected data indicated ongoing depressed dissolved oxygen and bacteria impairments, with SRA-TX's OCTMDL efforts noting slight DO improvements since 2021. Impairments present in all segments may affect aquatic life and recreation.



Figure 5. Sabine River Tidal



Figure 6. Adams Bayou Tidal

Table 5. Cow Bayou Segment water quality impairments and concerns from the 2024 Texas Integrated Report for Clean Water Act Sections 305(b) and 303(d).

Segment Number	Description	Impairment	Concern	Importance
0511_01	Cow Bayou Tidal* lower 5 miles	Bacteria	Depressed Dissolved Oxygen	Recreation use
0511_02	Cow Bayou Tidal* 6-mile reach near FM 105	Depressed Dissolved Oxygen	None	Aquatic life use
0511_03	Cow Bayou Tidal* 5 miles reach near FM 1442 (north crossing)	Depressed Dissolved Oxygen, Bacteria	Low pH	Aquatic life use, Recreation use, General use
0511_04	Cow Bayou Tidal* upper 4 miles	Depressed Dissolved Oxygen, Bacteria, Low pH	Depressed Dissolved Oxygen	Aquatic life use, Recreation use, General use
0511A_02	Cow Bayou Above Tidal* upper 5.3 miles above tidal reach	Depressed Dissolved Oxygen	Depressed Dissolved Oxygen	Aquatic life use
0511B_01	Coon Bayou* from confluence with Cow Bayou up to extent of Tidal Limit in Orange County	Depressed Dissolved Oxygen, Bacteria	Depressed Dissolved Oxygen	Aquatic life use, Recreation use
0511C_01	Cole Creek* from confluence with Cow Bayou west of Orange to the upstream perennial portion of the stream south of Mauriceville in Orange County	Depressed Dissolved Oxygen	Depressed Dissolved Oxygen	Aquatic life use
0511E_01	Terry Gully* from the confluence with Cow Bayou to the headwaters northeast of Vidor in Orange County	Bacteria	Depressed Dissolved Oxygen	Recreation use

* Included in the OCTMDL Project

Table 5 details Segment 0511's tidal and upper reaches. Data collected from Cow Bayou at Roundbunch Road (10449) indicated bacteria and dissolved oxygen issues. SRA-TX continues to monitor many of these sites in the OCTMDL plan.

Table 6. Lower Sabine Basin Segments water quality impairments and concerns from the 2024 Texas Integrated Report for Clean Water Act Sections 305(b) and 303(d).

Segment Number	Description	Impairment	Concern	Importance
0502A_01	Nichols Creek* from the confluence of the Sabine River to the headwater at FM 1013 northwest of Kirbyville	Depressed Dissolved Oxygen, Bacteria	None	Aquatic life use, Recreation use
0502B_02	Caney Creek* from the Davidson Street crossing in Newton upstream to Martin Branch	Bacteria	None	Recreation use
0502E_01	Cypress Creek* from the confluence of the Sabine River to the headwater 500 m south of FM east of Kirbyville	Depressed Dissolved Oxygen	Impaired habitat and macrobenthic community	Aquatic life use
0513_01	Big Cow Creek from the confluence with Sabine River southeast of Kirbyville upstream to White Oak Creek west of Kirbyville	Bacteria	Lead in Water	Recreation use, Aquatic life use

* Included in the OCTMDL Project

Table 6 details lower basin tributaries Nichols Creek, Caney Creek, Cypress Creek, and Big Cow Creek. Nichols Creek (0502A_01) was delisted due to a change in RUAA status.



Figure 7. Big Cow Creek

Table 7. Toledo Bend Reservoir water quality impairments and concerns from the 2024 Texas Integrated Report for Clean Water Act Sections 305(b) and 303(d).

Segment Number	Description	Impairment	Concern	Importance
504	Toledo Bend (Texas Waters) from the dam up to Cypress Bend Golf Resort (LA) west to Alpine Marina (TX) includes nine assessment units	Mercury in edible tissue	None	Fish consumption use
0504E_01	Clear Lake, an oxbow lake, 12 miles northwest of Logansport, LA.	Mercury in edible tissue	None	Fish consumption use

Table 7 details Segment 504 which includes nine stations. Toledo Bend at the dam (10404) exhibited stable conditions despite spillway disruptions. A fish consumption advisory for mercury in edible tissue has continued to be issued for Toledo Bend based on historic data. Clear Lake (0504E_01), an oxbow also continues to be listed for mercury in edible fish tissue.

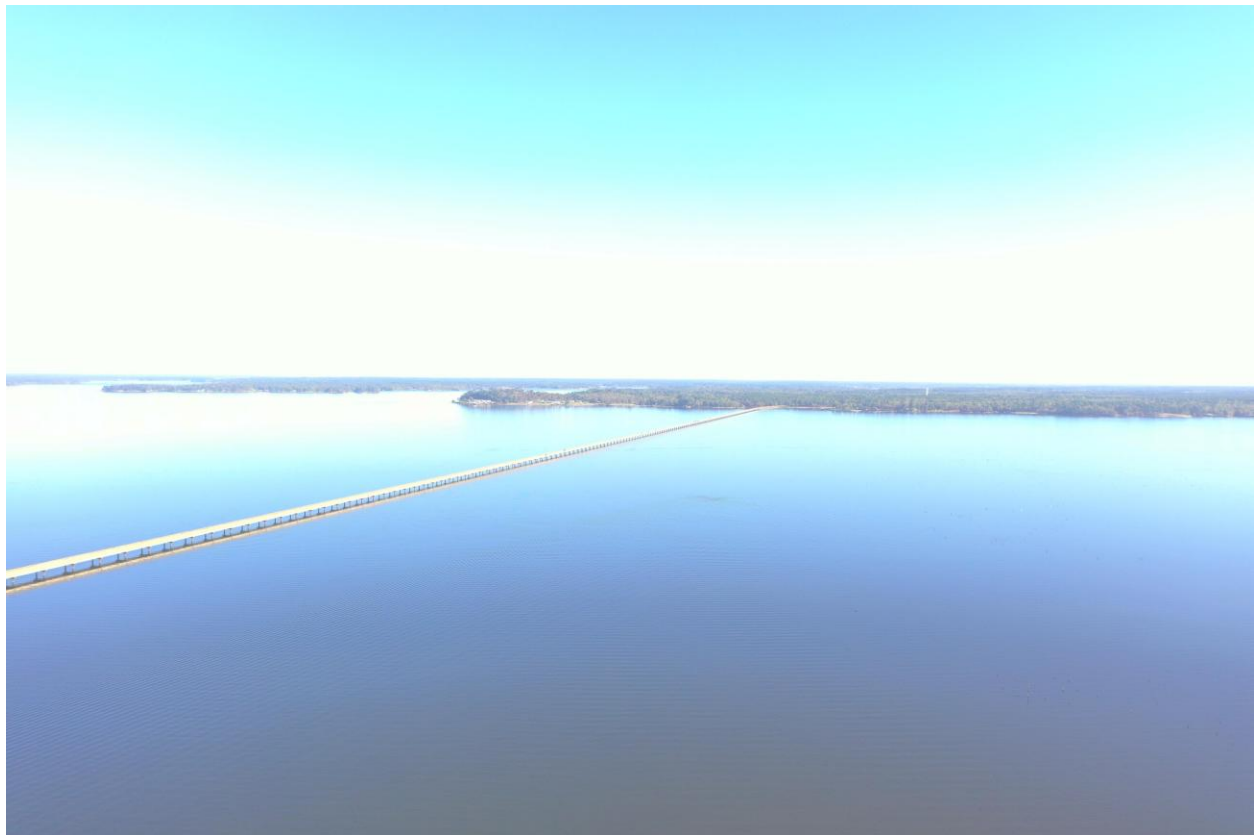


Figure 8. Pendleton Bridge across Toledo Bend Reservoir.

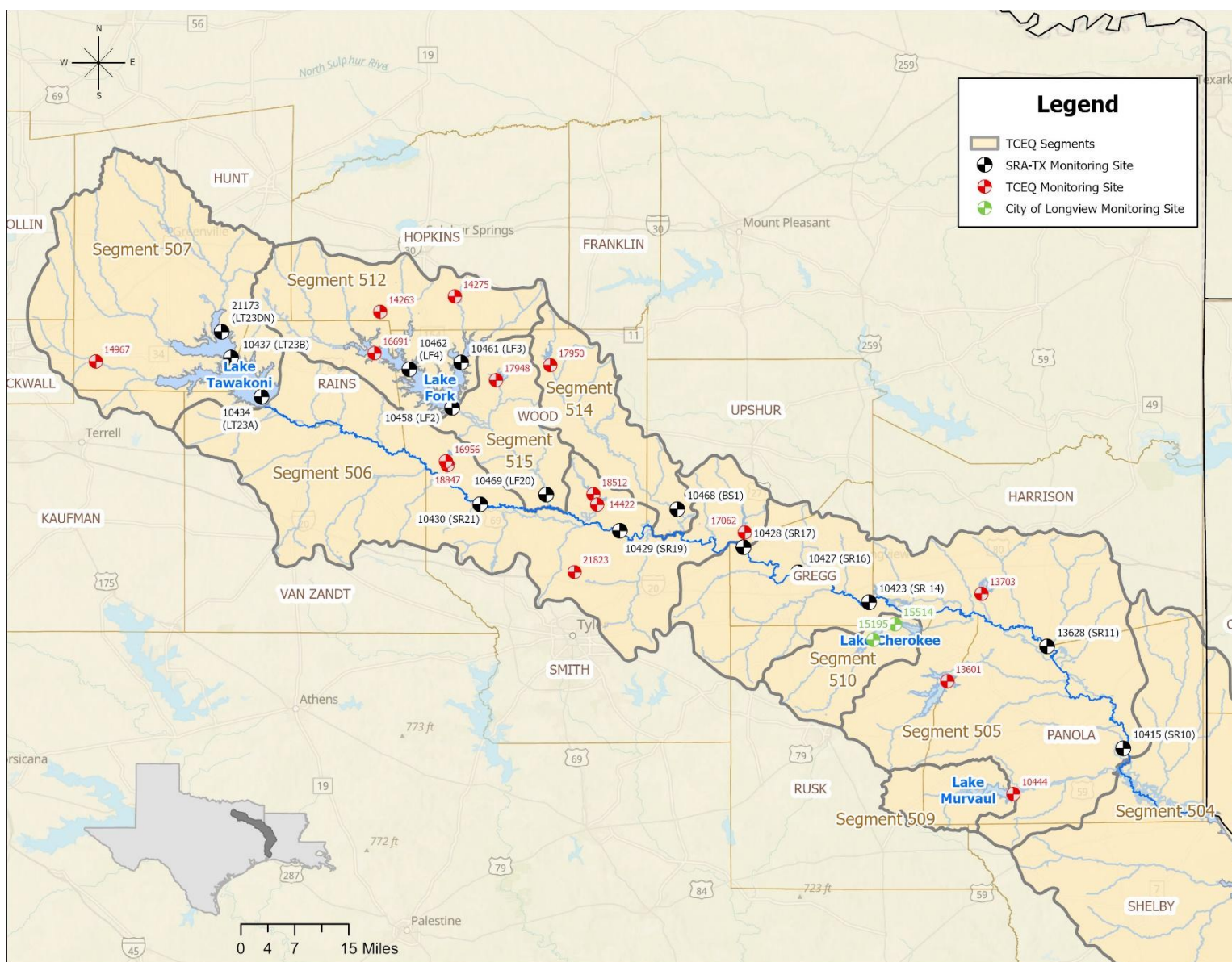


Figure 9. Upper Sabine Basin

Table 8. Upper Sabine Basin Segments water quality impairments and concerns from the 2024 Texas Integrated Report for Clean Water Act Sections 305(b) and 303(d).

Segment Number	Description	Impairment	Concern	Importance
0505_04	Sabine River Above Toledo Bend Reservoir from the confluence of Hatley Creek 7.7 km north of Tatum upstream to the confluence of Grace Creek near IH 20 west of Longview	Bacteria	None	Recreation use
0505B_01	Grace Creek from the Sabine River to unnamed Tributary from Longview WWTP South of Loop 281	Bacteria	None	Recreation use
0505B_02	Grace Creek from unnamed tributary from Longview WWTP south of Loop 281 to headwaters at FM 1844	Bacteria	None	Recreation use
0505D_01	Rabbit Creek from the confluence of the Sabine River upstream to the confluence of Bighead Creek	None	Bacteria	Recreation use
0505G_01	Wards Creek intermittent stream with perennial pools from confluence of Sewell Creek upstream to an unnamed second order tributary	Depressed Dissolved Oxygen	Impaired habitat	Aquatic life use
0505O_01	Hills Lake, an oxbow lake, 13 miles east of Carthage	Mercury in edible tissue	None	Fish consumption
0506A_01	Harris Creek from the confluence of the Sabine River 5.7 km north of Winona upstream to the headwaters near SH64 east of Tyler	Depressed Dissolved Oxygen	Bacteria	Recreation use, Aquatic life use
0506C_01	Wiggins Creek, a perennial stream, from confluence with Harris Creek upstream to dam impounding an unnamed reservoir 3.8 km upstream of FM 2015 northeast of Tyler	None	Depressed Dissolved Oxygen, Ammonia	Aquatic life use
0510_02	Lake Cherokee from the line at East Texas Regional Airport runway to normal pool elevation of 280 feet	None	Depressed Dissolved Oxygen	Aquatic life use
0514_01	Big Sandy Creek from confluence with Sabine River in Upshur County upstream to Lake Winnsboro Dam (Wood County Dam No.4)	Bacteria	None	Recreation use
0514_02	Big Sandy Creek from the Lake Winnsboro Dam (Wood County Dam No.4) to 2.6 km (1.6 mi) Upstream SH11 in Hopkins County	High pH	Chlorophyll -a	Recreation use, General Use, Nutrient criteria

Table 8 details Segments 0505-0514. Several of these sites only experience impairments in bacteria and low DO after a significant rainfall event. Lake Cherokee (0510_02) data indicated dissolved oxygen concerns, however seven sampling events during the year were missed.



Figure 10. Lake Tawakoni Spillway



Figure 11. Sabine River during high flows at U.S. 271 in Gladewater, TX.

Table 9. Lake Fork and Lake Tawakoni water quality impairments and concerns from the 2024 Texas Integrated Report for Clean Water Act Sections 305(b) and 303(d).

Segment Number	Description	Impairment	Concern	Importance
0507A_01	Cowleech Fork from confluence of Lake Tawakoni upstream to the confluence of Long Branch east of Greenville	None	Depressed Dissolved Oxygen, Nitrate	Aquatic life use, General use
0507A_02	Cowleech Fork from the confluence of Long Branch east of Greenville upstream to the headwater northwest of Celeste	None	Chlorophyll-a	General use
0507B_01	Long Branch from the confluence with Cowleech Fork Sabine River east of Greenville upstream to headwater northeast of Greenville	None	Nitrate	General use
0507G_01	South Fork of Sabine River from the confluence of Lake Tawakoni upstream to the confluence of Parker and Sabine Creeks	Bacteria	None	Recreation use
0507H_01	Caddo Creek from the confluence of Lake Tawakoni at Caddo Inlet upstream to the confluence of east Caddo and west Caddo Creeks	None	Depressed Dissolved Oxygen	Aquatic life use
0512_05	Upper Lake Fork Creek arm from the FM 2946 crossing up to normal pool elevation of 403 feet	High pH	None	General Use
0512A_01	Running Creek from the confluence of Lake Fork at the Hopkins /Wood County line upstream to the headwater 400 m south of SH 11 southeast of Sulphur Springs	Bacteria	Depressed Dissolved Oxygen, Nitrate, Ammonia	Recreation use
0512B_01	Elm Creek from the confluence of Lake Fork 375 m downstream of FM514 upstream to the headwaters at Hopkins CR 1110 southwest of Sulphur Springs	Bacteria	Depressed Dissolved Oxygen, Ammonia	Recreation use, General use

Table 9 summarizes Segments 0507 and 0512. Lake Tawakoni near the dam (10434) and Lake Fork near FM 515 (10462) showed nutrient concerns (e.g., nitrate). Upper Lake Fork Creek (0512_05) produced a new high pH listing in FY 2024.

Summary

Water quality in the Sabine River Basin largely met the Texas Surface Water Quality Standards (TSWQS) and applicable screening criteria during FY 2024. Bacteria concentrations—primarily *E. coli* in freshwater segments and *Enterococcus* in tidal waters—were the most common exceedances, often coinciding with storm events that increased runoff from urban, agricultural, and natural sources. Depressed dissolved oxygen was the second most frequent impairment. Both issues may be attributed to naturally occurring conditions in East Texas associated with high and low flow conditions, or they may also be the result of point source pollution events such as wastewater treatment overflows.

The 2024 IR 303(d) list reflected two key changes: the addition of Upper Lake Fork Creek (Segment 0512_05) for high pH, likely related to nutrient enrichment; and the removal of Nichols Creek (Segment 0502A_01) from the bacteria impairment list due to a change in RUAA status. These updates demonstrate changes in water quality conditions and support the continued need for focused monitoring and source assessment.



Figure 12. Lake Fork Dam