#### SABINE RIVER AUTHORITY OF TEXAS

**TO:** INTERESTED PARTIES

FROM: ENVIRONMENTAL SERVICES DIVISION

**RE:** JANUARY 2018 MONTHLY WATER QUALITY REPORT

The Environmental Services Field Offices conducted water quality monitoring in the Sabine Basin from January 8<sup>th</sup> through the 11<sup>th</sup>. The results of field monitoring are presented in this report and additional results can be found using the Texas Commission on Environmental Quality (TCEQ) Clean Rivers Program Data Tool: <a href="https://www80.tceq.texas.gov/SwqmisWeb/public/crpweb.faces">https://www80.tceq.texas.gov/SwqmisWeb/public/crpweb.faces</a>

#### **Sabine Basin Tidal (Including Tributaries)**

**Weather** – Air temperatures in the tidal basin were cool with highs in the low 40s to mid 60s. Low temperatures ranged in the mid 20s to upper 40s. The tidal stations received 1.60 inches of rainfall in the seven days prior to the sampling event.

**Tidal Conditions** – Surface salinity values were greater than 2 ppt at four of the six tidal stations. The highest salinity value of 14.7 ppt was recorded at station 10391 (SRT1) at a depth of 9.0 meters.

#### Lower Sabine Basin (Toledo Bend Reservoir and the Sabine River downstream to Tidal)

**Weather** – Air temperatures in the lower basin were cool with highs in the mid 30s to low 60s. Low temperatures ranged in the low 20s to mid 40s. Toledo Bend received 0.60 inches of rainfall during the seven days prior to the sampling event.

**Lake Level** - The level of Toledo Bend was 167.8 feet with a daily average discharge of 1,150 cfs on the day of sampling. Toledo Bend has a conservation pool level of 172 feet msl. Reservoir profiles indicated a mixed water column.

# Upper Sabine Basin (Lake Tawakoni, Lake Fork Reservoir, and the Sabine River upstream of Toledo Bend)

**Weather** - Air temperatures in the upper basin were cold with highs in the mid 20s to low 60s. Low temperatures were in the upper teens to low 40s. Lake Fork and Lake Tawakoni received 0.31 and 0.33 inches of rain during the seven days prior to the sampling event, respectively.

**Lake Level** - The level of Lake Tawakoni was 436.76 feet msl with a release of 6 cfs on the day of sampling. The level of Lake Fork was 401.88 feet msl with a 10 cfs release on the day of sampling. Lake Tawakoni and Lake Fork have conservation pool levels of 437.5 feet msl and 403 feet msl, respectively. Reservoir profiles at Lake Tawakoni and Lake Fork indicated a mixed water column.

This report and additional links to data for these monitoring stations are available at <a href="www.sratx.org">www.sratx.org</a>. If you have any questions or comments concerning this report, please contact:

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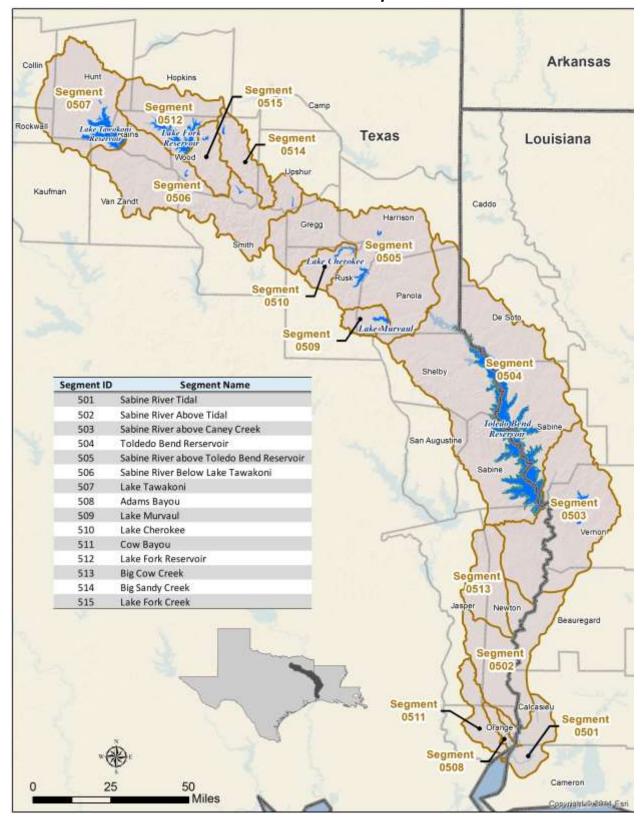
# SABINE RIVER AUTHORITY OF TEXAS

# Monthly Water Quality Report

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#### Sabine Basin Map



# **Current Fixed Monitoring Stations**

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 ROUNDBUNCH 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
502	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
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

### Segment 0501 - Sabine River Tidal

**Description:** The designated segment includes the Sabine River from the confluence with Sabine Lake in Orange County to West Bluff in Orange County. Although some areas are quite rural, this part of the Sabine Basin has two cities with populations greater than 5,000 and a variety of industries.

**Segment 0508** – Adams Bayou Tidal. The segment reaches from the confluence with the Sabine River in Orange County to a point 1.1 kilometers (0.7 miles) upstream of IH-10 in Orange County.

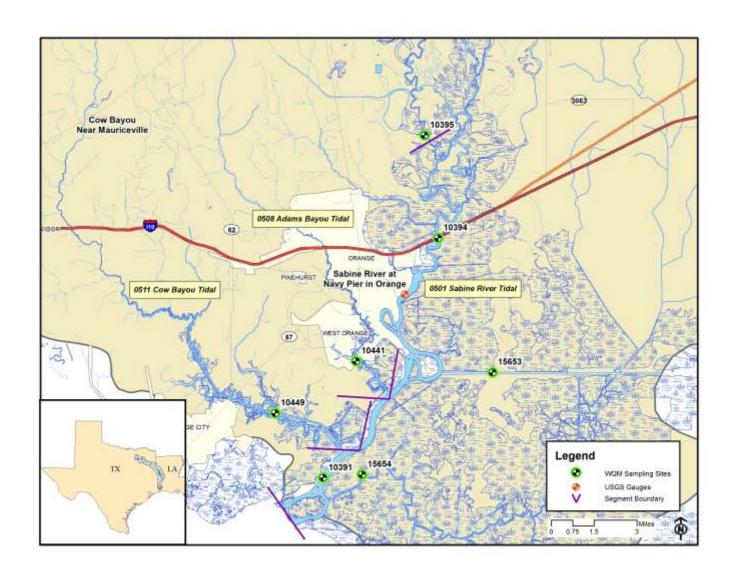
**Segment 0511** – Cow Bayou Tidal. The segment reaches from the confluence with the Sabine River in Orange County to a point 4.8 kilometers (3.0 miles) upstream of IH-10 in Orange County.

**Sampling Conditions:** The tidal stations received 1.60 inches of rainfall in the seven days prior to the sampling event. Surface salinity values were greater than 2 ppt at four of the six tidal stations. The highest salinity value of 14.7 ppt was recorded at station 10391 (SRT1) at a depth of 9.0 meters.

### **Segment 0501 Water Quality**

Date and Time	Station											
		Depth	Тетр	$H^d$	DO	% Sat	Cond	TDS	Salinity	Secchi	Turbidity	Enterococcus
		meters	°C	SU	mg/L		μS/cm	mg/L	ppt	meters	NTU	mpn/ 100mL
1/10/18 09:32	10391(SRT1)	0.3	10.8	7.5	10.2	95	9,716	6,217	5.5	0.7	11.4	3,973
		3.0	10.5	7.6	10.0	95	14,310	9,111	8.2			
		6.0	10.4	7.9	10.0	96	19,570	12,580	11.7			
		9.0	10.2	8.0	10.1	98	24,094	15,510	14.7			
1/10/18 09:20	15654(BB1)	0.3	10.8	7.6	9.6	99	12,476	8,004	7.2	0.55	10.4	1,454
		1.5	10.7	7.6	9.7	92	12,942	8,298	7.5			
		3.0	10.7	7.6	9.8	93	13,024	8,334	7.5			
Segmen	nt 0511											
1/10/18 09:00	10449(CB1)	0.3	11.6	7.3	9.6	90	5,898	3,731	3.0	0.31	34.8	>4,839
		2.0	11.1	7.3	9.6	90	9,316	5,967	5.3			
		4.0	10.7	7.4	9.3	87	10,834	6,935	6.2			
Segmen	nt 0508											
1/10/18 09:50	10441(AB2)	0.3	12.6	7.0	6.5	62	1,693	1,113	0.9	0.19	56.8	>4,839
		1.5	11.4	6.8	7.5	71	8,043	5,234	4.7			
		3.0	10.8	7.2	8.6	81	9,195	5,896	5.2			
1/10/18 10:10	15653(ICW1)	0.3	11.6	7.4	9.1	87	9,049	5,791	5.1	0.36	27.9	2,022
		2.5	11.6	7.4	9.2	87	9,049	5,791	5.1			
		5.0	11.6	7.4	9.1	87	9,045	5,790	5.1			
1/10/18 10:38	10394(SRT2)	0.3	10.4	7.4	10.3	92	1,263	811	0.7	0.32	17.6	775
		3.0	10.2	7.2	10.3	92	1,778	1,131	0.9			
		6.0	10.5	7.0	9.3	88	15,281	9,785	8.8			
		8.5	14.0	7.2	5.8	60	20,875	13,350	12.5			

# Segments 0501, 0508 & 0511



#### **Segment 0502 - Sabine River Above Tidal**

**Description:** The designated segment includes the Sabine River from West Bluff in Orange County to the confluence with Caney Creek in Newton County. The largest tributary is Big Cow Creek (Segment 0513). This is largely a rural area with no major industries or cities.

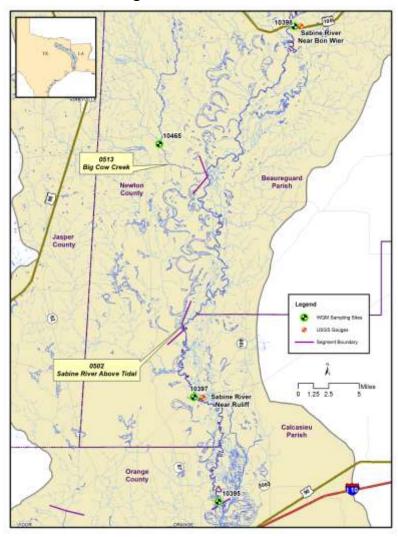
**Segment 0513** – Big Cow Creek from the confluence with the Sabine River in Newton County to a point 4.6 kilometers (2.9 miles) upstream of R 255 in Newton County.

**Sampling Conditions:** The USGS-recorded flow at Sabine River Station SR2 (USGS #08030500, Sabine River near Ruliff, TX) was 2,750 cfs when samples were collected.

#### **Segment 0502 Water Quality**

Date and Time	Station	Depth	Temp	pН	DO	%	Cond	TDS	Secchi	Turbidity	E.coli
		meters	°C	SU	mg/L	Sat	μS/cm	mg/L	meters	NTU	mpn/100mL
1/10/18 11:05	10395(SR1)	0.3	10.6	7.3	10.4	94	273	175	0.40	24.0	172
1/11/18 08:28	10397(SR2)	0.3	11.7	6.6	10.4	96	135	87	0.37	17.8	51
Segmen	nt 0513										
1/11/18 09:09	10465(BCC1)	0.3	11.5	6.7	10.2	93	43	28	0.36	20.2	244

#### Segments 0502 & 0513



#### **Segment 0503 - Sabine River Above Caney Creek**

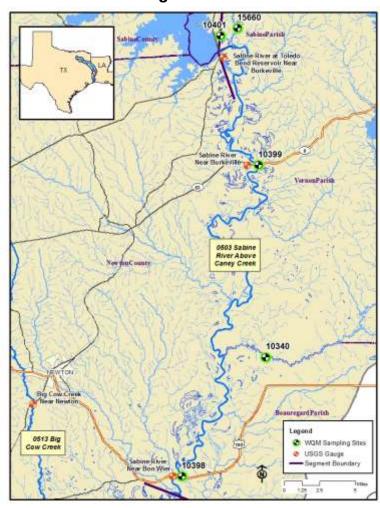
**Description:** The designated segment includes the Sabine River from a point immediately upstream of the confluence with Caney Creek in Newton County up to Toledo Bend Dam in Newton County. This is largely a rural area with one major city with a population greater than 5,000 and few industries. Two major tributaries that flow from Louisiana include Bayou Anacoco and Bayou Toro.

**Sampling Conditions:** The USGS-recorded flow at Sabine River Station SR3 (USGS #08028500 Sabine River near Bon Wier, TX) was 2,370 cfs and the USGS flow at Sabine River Station SR5 (USGS #08026000 Sabine River near Burkeville, TX) was 404 cfs when samples were collected.

### **Segment 0503 Water Quality**

Date and Time	Station	Depth	Temp	рН	DO	%	Cond	TDS	Secchi	Turbidity	E.coli
		meters	°C	SU	mg/L	Sat	μS/cm	mg/L	meters	NTU	mpn/100mL
1/11/18 11:00	10398(SR3)	0.3	12.4	7.0	10.3	96	151	96	0.39	21.8	52
1/11/18 10:38	10340(BA4)	0.3	12.4	7.1	8.1	76	375	241	0.21	42.9	36
1/11/18 10:05	10399(SR5)	0.3	11.7	7.3	10.6	97	123	79	0.93	5.46	9
1/8/18 12:57	10401(TB6S)	0.3	11.1	7.6	11.6	105	126	81	>1.2	2.80	2
1/8/18 12:40	15660(BT1)	0.3	7.4	7.4	12.0	99	90	57	0.45	15.1	101

#### Segment 0503



### Segment 0504 - Toledo Bend Reservoir

**Description:** The designated segment includes the Sabine River from Toledo Bend Dam in Newton County to a point immediately upstream of the confluence of Murvaul Creek in Panola County. Although this area is largely rural, it includes two cities with populations greater than 5,000. Murvaul Creek is a major tributary that enters upstream of the reservoir.

**Sampling Conditions:** Toledo Bend received 0.60 inches of rainfall during the seven days prior to the sampling event. The level of Toledo Bend was 167.8 feet with a daily average discharge of 1,150 cfs on the day of sampling. Toledo Bend has a conservation pool level of 172 feet msl. Reservoir profiles indicated a mixed water column.

## **Segment 0504 Water Quality**

Date and Time	Station	Depth	Temp	pН	DO	% Sat	Cond	TDS	Secchi	Turbidity	E.coli
		meters	°C	SU	mg/L		μS/cm	mg/L	meters	NTU	mpn/100mL
1/9/18 14:25	10404(TB6A)	0.3	10.7	7.6	10.4	94	126	81	1.8	2.27	<1
		1.0	10.7	7.5	10.4	94	126	81			
		2.0	10.7	7.5	10.4	93	127	81			
		3.0	10.7	7.5	10.4	93	127	81			
		4.0	10.7	7.4	10.4	93	127	81			
		5.0	10.7	7.4	10.3	93	127	81			
		6.0	10.7	7.3	10.4	93	127	81			
		7.0	10.7	7.3	10.4	93	127	81			
		10.0	10.7	7.3	10.3	93	127	81			
		13.0	10.6	7.3	10.3	93	127	81			
		16.0	10.6	7.2	10.2	92	127	81			
		19.0	9.9	7.2	10.1	88	126	81			
		22.0	9.8	7.1	9.6	84	126	81			
		25.0	9.7	7.0	9.4	82	126	81			
1/9/18 08:30	10406(TB6C)	0.3	8.7	7.7	11.6	100	125	80	1.4	4.16	<1
		1.0	8.7	7.6	11.6	100	125	80			
		2.0	8.6	7.5	11.6	100	125	80			
		2.9	8.6	7.5	11.6	100	125	80			
1/9/18 13:32	18054(TB6Q)	0.3	9.8	7.8	10.6	93	130	83	1.4	3.07	1
		1.0	9.7	7.7	10.5	92	130	83			
		2.0	9.6	7.6	10.5	92	131	84			
		3.0	9.5	7.5	10.4	91	131	84			
		4.0	9.5	7.4	10.2	90	131	84			
		5.0	9.5	7.4	10.2	90	131	84			
		6.0	9.5	7.4	10.2	90	131	84			
		7.0	9.5	7.3	10.3	90	131	84			

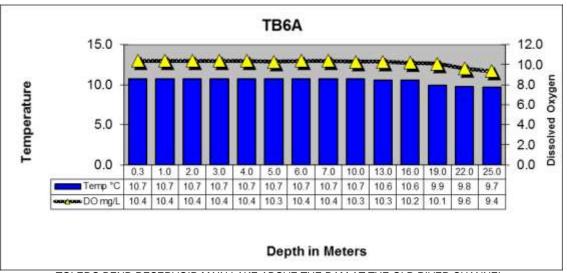
# Segment 0504 Water Quality Continued

meters   C   SU   mg/L   µS/cm   mg/L   meters   NTU   mpn/100	Date and Time	Station	Depth	Temp	pН	DO	% Sat	Cond	TDS	Secchi	Turbidity	E.coli
1.0			meters	°C	SU	mg/L		μS/cm	mg/L	meters	NTU	mpn/100mL
1.0												
2.0	1/8/18 10:48	10411(TB6F)								0.75	5.41	3
3.0			1.0		7.5	11.6	99	121	77			
1.9/18   11:00   10402(TB6H)   0.3   9.1   7.7   11.1   96   138   88   1.5   3.73   <1			2.0	8.3	7.4	11.6	98	121	77			
1/9/18   11:00   10402(TB6H)   0.3   9.1   7.7   11.1   96   138   88   1.5   3.73   < 1			3.0	8.3	7.4	11.6	99	120	77			
1.0   9.0   7.6   11.1   96   138   88			4.0	8.3	7.3	11.5	98	120	77			
2.0   9.0   7.6   11.1   96   138   88	1/9/18 11:00	10402(TB6H)	0.3	9.1	7.7	11.1	96	138	88	1.5	3.73	<1
3.0   9.0   7.5   11.1   96   138   88			1.0	9.0	7.6	11.1	96	138	88			
			2.0	9.0	7.6	11.1	96	138	88			
			3.0	9.0	7.5	11.1	96	138	88			
			4.0	9.0	7.5	11.0	96	138	88			
7.0   9.0   7.4   11.0   95   138   88			5.0	9.0	7.5	11.0	95	138	88			
10.0   8.9   7.4   11.0   95   138   88			6.0	9.0	7.4	11.0	95	138	88			
13.0   8.8   7.3   11.0   95   138   88			7.0	9.0	7.4	11.0	95	138	88			
16.0       8.8       7.3       11.1       95       139       89           19.0       8.7       7.3       11.1       95       139       89           1/8/18 11:13       15659(TB6K)       0.3       8.8       7.4       11.2       97       130       83       0.62       7.12       2         1/8/18 11:13       15659(TB6K)       0.3       8.8       7.4       11.2       97       130       83       0.62       7.12       2         1/8/18 11:13       15659(TB6K)       0.3       8.8       7.4       11.2       97       130       83       0.62       7.12       2         1/8/18 11:13       15659(TB6K)       0.3       8.8       7.4       11.2       97       130       83       0.62       7.12       2         1.0       8.8       7.3       11.3       97       131       84           3.0       8.2       7.2       11.3       95       132       84          4.0       8.2       7.2       11.2       95       132       85          5.0       8.2       7.2       <			10.0	8.9	7.4	11.0	95	138	88			
19.0   8.7   7.3   11.1   95   139   89			13.0	8.8	7.3	11.0	95	138	88			
1/8/18 11:13       15659(TB6K)       0.3       8.8       7.4       11.2       97       130       83       0.62       7.12       2         1/8/18 11:13       15659(TB6K)       0.3       8.8       7.4       11.2       97       130       83       0.62       7.12       2         1.0       8.8       7.3       11.2       97       130       83       84       83       84       83       84       83       84       83       84       84       84       84       84			16.0	8.8	7.3	11.1	95	139	89			
1/8/18 11:13       15659(TB6K)       0.3       8.8       7.4       11.2       97       130       83       0.62       7.12       2         1.0       8.8       7.3       11.2       97       130       83       3 <td></td> <td></td> <td>19.0</td> <td>8.7</td> <td>7.3</td> <td>11.1</td> <td>95</td> <td>139</td> <td>89</td> <td></td> <td></td> <td></td>			19.0	8.7	7.3	11.1	95	139	89			
1.0       8.8       7.3       11.2       97       130       83       84       83       84       85       85       85       85       85       85       85       85       85       85       85       85       85       85       85       85       85       85			21.0	8.6	7.2	10.7	91	139	89			
2.0       8.7       7.3       11.3       97       131       84       84         3.0       8.2       7.2       11.3       95       131       84       84         4.0       8.2       7.2       11.3       95       132       84       84         5.0       8.2       7.2       11.2       95       131       84       84         6.0       8.2       7.2       11.2       95       132       85       85         7.0       8.1       7.2       11.2       95       132       85       85         8.0       8.1       7.1       11.2       95       132       85       85         1/8/18 10:20       15655(TB6J)       0.3       8.1       7.6       12.0       102       141       91       0.61       6.75       1         1.0       8.0       7.5       12.0       101       142       91       0.61       6.75       1	1/8/18 11:13	15659(TB6K)	0.3	8.8	7.4	11.2	97	130	83	0.62	7.12	2
3.0       8.2       7.2       11.3       95       131       84       84         4.0       8.2       7.2       11.3       95       132       84       84         5.0       8.2       7.2       11.2       95       131       84       84         6.0       8.2       7.2       11.2       95       132       85       85         7.0       8.1       7.2       11.2       95       132       85       85         8.0       8.1       7.1       11.2       95       132       85       85         1/8/18 10:20       15655(TB6J)       0.3       8.1       7.6       12.0       102       141       91       0.61       6.75       1         1.0       8.0       7.5       12.0       101       142       91       0.61       6.75       1			1.0	8.8	7.3	11.2	97	130	83			
4.0       8.2       7.2       11.3       95       132       84       84         5.0       8.2       7.2       11.2       95       131       84       84         6.0       8.2       7.2       11.2       95       132       85       85         7.0       8.1       7.2       11.2       95       132       85       85         8.0       8.1       7.1       11.2       95       132       85       85         1/8/18 10:20       15655(TB6J)       0.3       8.1       7.6       12.0       102       141       91       0.61       6.75       1         1.0       8.0       7.5       12.0       101       142       91       0       6.75       1			2.0	8.7	7.3	11.3	97	131	84			
5.0     8.2     7.2     11.2     95     131     84     84       6.0     8.2     7.2     11.2     95     132     85     85       7.0     8.1     7.2     11.2     95     132     85     85       8.0     8.1     7.1     11.2     95     132     85     85       1/8/18 10:20     15655(TB6J)     0.3     8.1     7.6     12.0     102     141     91     0.61     6.75     1       1.0     8.0     7.5     12.0     101     142     91     91			3.0	8.2	7.2	11.3	95	131	84			
6.0     8.2     7.2     11.2     95     132     85       7.0     8.1     7.2     11.2     95     132     85       8.0     8.1     7.1     11.2     95     132     85       1/8/18 10:20     15655(TB6J)     0.3     8.1     7.6     12.0     102     141     91     0.61     6.75     1       1.0     8.0     7.5     12.0     101     142     91     91			4.0	8.2	7.2	11.3	95	132	84			
7.0     8.1     7.2     11.2     95     132     85       8.0     8.1     7.1     11.2     95     132     85       1/8/18 10:20     15655(TB6J)     0.3     8.1     7.6     12.0     102     141     91     0.61     6.75     1       1.0     8.0     7.5     12.0     101     142     91     91     1			5.0	8.2	7.2	11.2	95	131	84			
8.0     8.1     7.1     11.2     95     132     85     132       1/8/18 10:20     15655(TB6J)     0.3     8.1     7.6     12.0     102     141     91     0.61     6.75     1       1.0     8.0     7.5     12.0     101     142     91     101			6.0	8.2	7.2	11.2	95	132	85			
1/8/18 10:20     15655(TB6J)     0.3     8.1     7.6     12.0     102     141     91     0.61     6.75     1       1.0     8.0     7.5     12.0     101     142     91     91     1			7.0	8.1	7.2	11.2	95	132	85			
1.0 8.0 7.5 12.0 101 142 91			8.0	8.1	7.1	11.2	95	132	85			
	1/8/18 10:20	15655(TB6J)	0.3	8.1	7.6	12.0	102	141	91	0.61	6.75	1
2.0 7.9 7.4 12.0 101 141 91			1.0	8.0	7.5	12.0	101	142	91			
			2.0	7.9	7.4	12.0	101	141	91			
3.0 8.0 7.4 12.0 101 141 91			3.0	8.0	7.4	12.0	101	141	91			

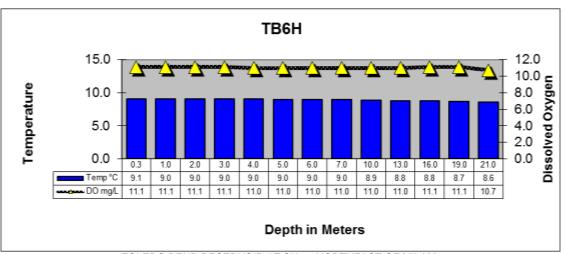
# Segment 0504 Water Quality Continued

Date and Time	Station	Depth	Temp	pН	DO	%	Cond	TDS	Secchi	Turbidity	E.coli
		meters	°C	SU	mg/L	Sat	μS/cm	mg/L	meters	NTU	mpn/100mL
1/9/18 12:32	18053(TB6LN)	0.3	8.9	7.8	11.8	101	134	86	0.95	6.05	1
		1.0	8.8	7.7	11.8	101	134	86			
		2.0	8.7	7.7	11.7	100	134	86			
		3.0	8.6	7.6	11.7	100	134	86			
		4.0	8.5	7.6	11.6	99	134	86			
		5.0	8.5	7.5	11.5	99	134	86			
1/9/18 09:48	18052(TB6R)	0.3	8.0	7.6	11.7	99	155	99	1.1	4.57	1
		1.0	7.9	7.6	11.7	99	155	99			
		2.0	7.9	7.6	11.7	99	155	99			
		3.0	7.9	7.6	11.7	99	155	99			
		4.0	7.9	7.6	11.7	99	155	99			
		5.0	7.9	7.6	11.7	99	155	99			
		6.0	7.9	7.6	11.7	98	155	99			
		7.0	7.9	7.5	11.7	98	155	99			
		8.0	7.8	7.5	11.7	98	156	100			
		9.0	7.8	7.5	11.7	98	156	100			
		10.0	7.7	7.5	11.7	98	156	100			
		11.0	7.7	7.5	11.7	98	158	101			
		12.0	7.7	7.5	11.7	98	158	101			

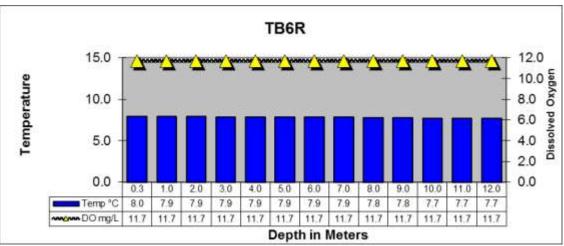
#### Toledo Bend Reservoir Profiles



TOLEDO BEND RESERVOIR MAIN LAKE ABOVE THE DAM AT THE OLD RIVER CHANNEL

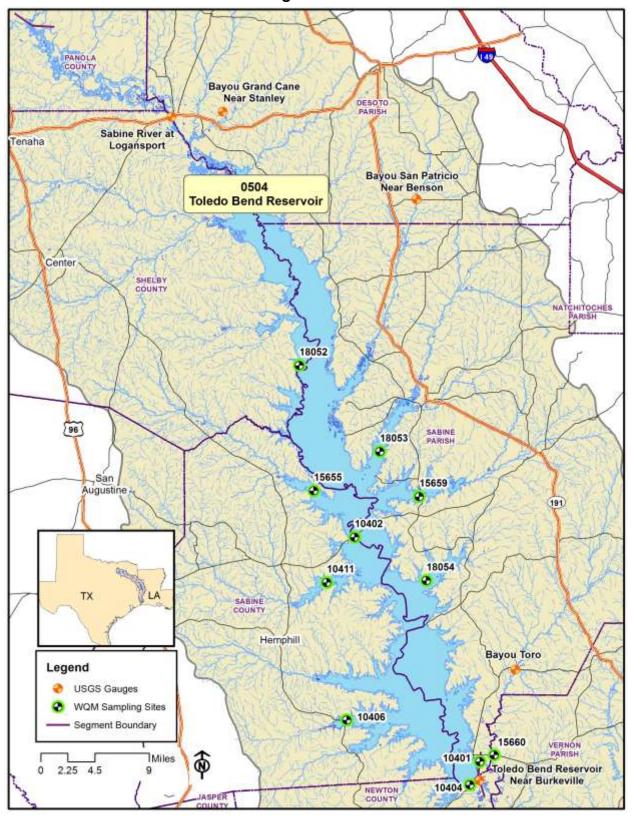


TOLEDO BEND RESERVOIR AT SH 21 NORTHEAST OF MILAM



TOLEDO BEND RESERVOIR AT RAGTOWN

### Segment 0504



## Segment 0505 - Sabine River Above Toledo Bend Reservoir

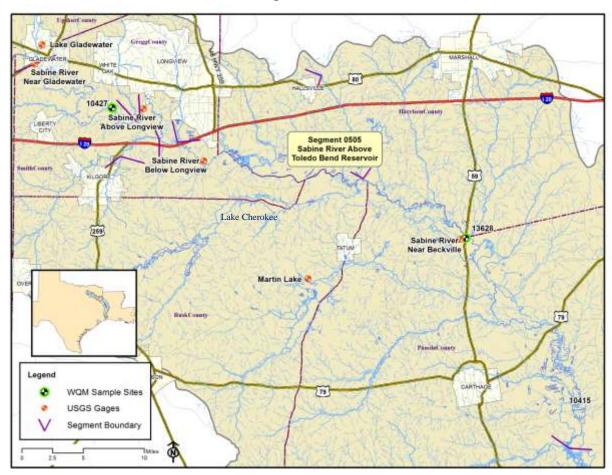
**Description:** The designated segment includes the Sabine River from a point immediately upstream of the confluence of Murvaul Creek in Panola County to a point 100 meters (110 yards) downstream of US 271 in Gregg County. Segment 0505 is used extensively for water supply and contains the highest concentration of population in the Sabine Basin with eight cities having populations greater than 5,000. Segment 0505 includes a large section of the East Texas Oilfield as well as numerous industries.

**Sampling Conditions:** The USGS-recorded flow at Sabine River Station SR11 (USGS #08022040 Sabine River near Beckville, TX) was 1,300 cfs when samples were collected.

#### **Segment 0505 Water Quality**

Date and Time	Station	Depth	Temp	pН	DO	%	Cond	TDS	Secchi	Turbidity	E.coli
		meters	°C	SU	mg/L	Sat	μS/cm	mg/L	meters	NTU	mpn/100mL
1/10/18 9:59	10415(SR10)	0.3	8.2	6.8	11.3	97	363	232	0.20	47.4	96
1/10/18 9:16	13628(SR11)	0.3	8.7	6.7	10.8	94	265	170	0.19	86.5	649
1/10/18 8:30	10427(SR16)	0.3	7.7	6.5	11.1	95	222	143	0.19	52.3	291

#### Segment 0505



#### **Segment 0506 - Sabine River Below Lake Tawakoni**

**Description:** The designated segment includes the Sabine River from a point 100 meters (110 yards) downstream of US 271 in Gregg County to Iron Bridge Dam in Rains County. This is largely a rural area with no cities having a population greater than 5,000. Oilfield activities, rural housing developments, and agriculture are in the watershed. The major tributaries include:

**Segment 0514 - Big Sandy Creek** from the confluence with the Sabine River in Upshur County to a point 2.6 kilometers (1.6 miles) upstream of SH 11 in Hopkins County.

**Segment 0515 - Lake Fork Creek** from the confluence with the Sabine River in Wood County to Lake Fork Dam in Wood County.

**Segment 0512 - Lake Fork Reservoir** from Lake Fork Dam in Wood County up to the normal pool elevation of 403 feet.

**Sampling Conditions:** Lake Fork received 0.31 inches of rainfall during the seven days prior to sampling. The level of Lake Fork Reservoir was 401.88 feet msl with a release of 10 cfs at the time of sampling. Reservoir profiles indicated a mixed water column.

The USGS-recorded flows were 620 cfs at Sabine River Station SR17 (USGS #08020000 Sabine River near Gladewater, TX), 212 cfs at Sabine River Station SR19 (USGS #08019200 Sabine River near Hawkins, TX), and 75.1 cfs at Sabine River Station SR21 (USGS #08018500 Sabine River near Mineola, TX) when samples were collected. The USGS-recorded flow at Big Sandy Creek (USGS #08019500 Big Sandy Creek near Big Sandy) was 101 cfs when samples were collected.

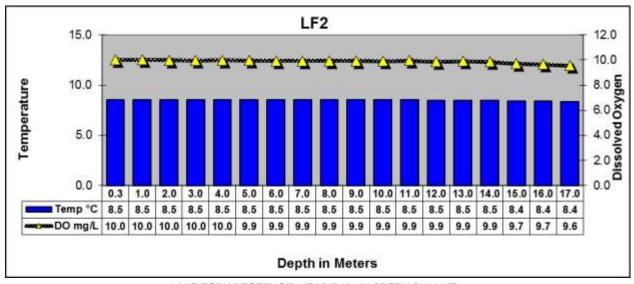
#### **Segment 0506 Water Quality**

Date and Time	Station	Depth	Temp	pН	DO	%	Cond	TDS	Secchi	Turbidity	E.coli
		meters	°C	SU	mg/L	Sat	μS/cm	mg/L	meters	NTU	mpn/100mL
1/10/18 8:01	10428(SR17)	0.3	8.3	6.6	10.8	93	193	124	0.12	68.1	613
1/10/18 7:06	10429(SR19)	0.3	7.8	7.2	11.1	95	253	162	0.15	47.5	345
1/9/18 13:32	10430(SR21)	0.3	7.1	7.6	10.6	89	565	362	0.15	57.2	172
Segment	0514										
1/10/18 7:32	10468(BS1)	0.3	8.8	6.2	10.4	91	136	87	0.78	12.1	152
Segment	0515										
1/9/18 13:57	10469(LF20)	0.3	7.7	7.2	10.5	89	195	125	0.30	28.6	166
Segment											
1/9/18 12:04	10458(LF2)	0.3	8.5	7.5	10.0	87	131	84	1.23	4.25	2
		1.0	8.5	7.4	10.0	87	131	84			
		2.0	8.5	7.4	10.0	87	131	84			
		3.0	8.5	7.4	10.0	86	131	84			
		4.0	8.5	7.4	10.0	87	131	84			
		5.0	8.5	7.4	9.9	86	131	84			
		6.0	8.5	7.3	9.9	86	131	84			
		7.0	8.5	7.4	9.9	86	131	84			
		8.0	8.5	7.4	9.9	86	131	84			
		9.0	8.5	7.3	9.9	86	131	84			
		10.0	8.5	7.3	9.9	86	131	84			
		11.0	8.5	7.3	9.9	86	131	84			
		12.0	8.5	7.3	9.9	86	131	84			
		13.0	8.5	7.3	9.9	86	131	84			
		14.0	8.5	7.3	9.9	85	131	84			
		15.0	8.4	7.3	9.7	84	131	84			
		16.0	8.4	7.3	9.7	83	131	84			
		17.0	8.4	7.3	9.6	82	131	84			

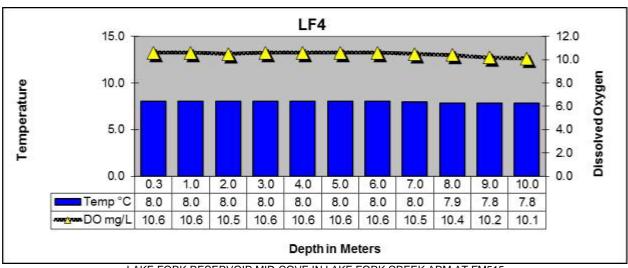
# **Segment 0506 Water Quality Continued**

Date and Time	Station	Depth	Temp	pН	DO	%	Cond	TDS	Secchi	Turbidity	E. coli
		meters	°C	SU	mg/L	Sat	μS/cm	mg/L	meters	NTU	mpn/100mL
1/9/18 11:09	10462(LF4)	0.3	8.0	7.5	10.6	90	129	83	1.03	4.24	3
		1.0	8.0	7.5	10.6	90	129	83			
		2.0	8.0	7.5	10.5	90	129	83			
		3.0	8.0	7.5	10.6	91	129	83			
		4.0	8.0	7.5	10.6	91	129	83			
		5.0	8.0	7.5	10.6	90	129	83			
		6.0	8.0	7.5	10.6	91	130	83			
		7.0	8.0	7.4	10.5	90	129	83			
		8.0	7.9	7.4	10.4	90	129	83			
		9.0	7.8	7.4	10.2	87	129	83			
		10.0	7.8	7.4	10.1	86	129	83			
1/9/18 11:30	10461(LF3)	0.3	7.5	7.7	10.8	91	130	83	0.72	5.91	1
		1.0	7.5	7.6	10.8	92	130	83			
		2.0	7.5	7.6	10.9	92	130	83			
		3.0	7.5	7.5	10.8	92	130	83			
		4.0	7.5	7.5	10.8	91	130	83			
		5.0	7.4	7.5	10.8	91	130	83			
		6.0	7.4	7.5	10.8	91	130	83			
		7.0	7.4	7.5	10.8	92	130	83			
		8.0	7.4	7.4	10.8	91	130	83			
		9.0	7.4	7.4	10.5	89	130	83			

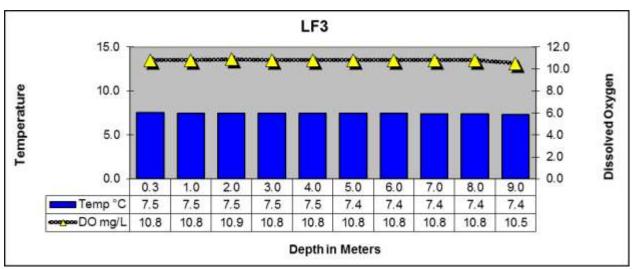
#### Lake Fork Reservoir Profiles



LAKE FORK RESERVOIR NEAR DAM IN CREEK CHANNEL

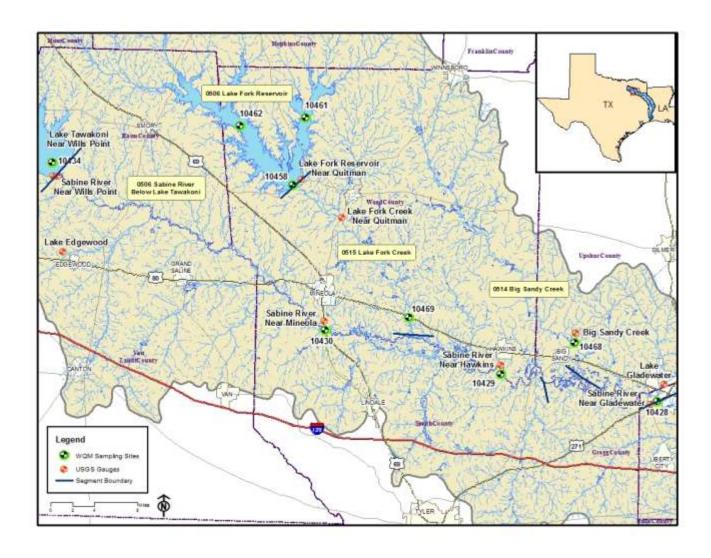


LAKE FORK RESERVOIR MID-COVE IN LAKE FORK CREEK ARM AT FM515



LAKE FORK RESERVOIR MID-ARM IN CANEY CREEK ARM AT FM515

### Segments 0506, 0512, 0514 & 0515



## Segment 0507 - Lake Tawakoni

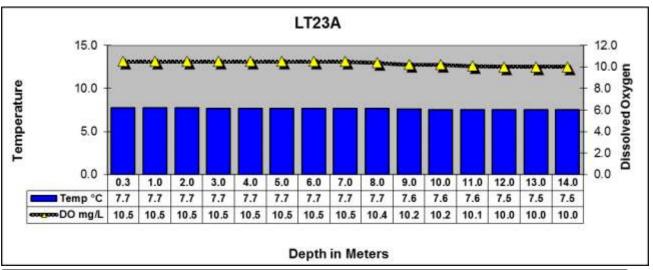
**Description:** The designated segment includes the impounded Sabine River from Iron Bridge Dam in Rains County up to the normal pool elevation of 437.5 feet. Although much of this segment is rural, it contains two cities with populations greater than 5,000, and one of the four largest cities in the Sabine Basin.

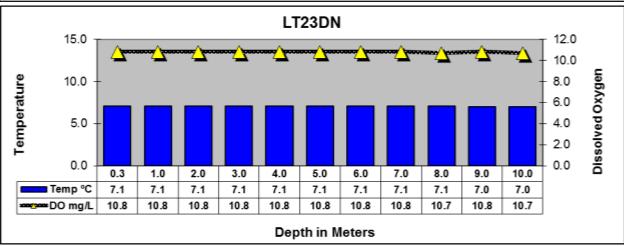
**Sampling Conditions:** Lake Tawakoni received 0.33 inches of rainfall during the seven days prior to sampling. The level of Lake Tawakoni was 436.76 feet msl with a release of 6 cfs at the time of sampling. Reservoir profiles indicated a mixed water column.

#### **Segment 0507 Water Quality**

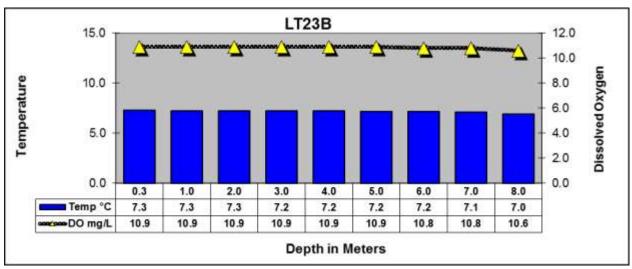
Date and Time	Station	Depth	Temp	pН	DO	%	Cond	TDS	Secchi	Turbidity	E.coli
		meters	°C	SU	mg/L	Sat	μS/cm	mg/L	meters	NTU	mpn/100mL
1/9/18 10:05	10434(LT23A)	0.3	7.7	8.0	10.5	90	194	124	1.26	3.72	< 1
		1.0	7.7	7.9	10.5	89	194	124			
		2.0	7.7	7.9	10.5	89	194	124			
		3.0	7.7	7.9	10.5	90	194	124			
		4.0	7.7	7.9	10.5	89	194	124			
		5.0	7.7	7.9	10.5	89	194	124			
		6.0	7.7	7.8	10.5	89	194	124			
		7.0	7.7	7.8	10.5	89	194	124			
		8.0	7.7	7.9	10.4	88	194	124			
		9.0	7.6	7.8	10.2	87	194	124			
		10.0	7.6	7.8	10.2	86	194	124			
		11.0	7.6	7.7	10.1	86	195	125			
		12.0	7.5	7.7	10.0	85	195	125			
		13.0	7.5	7.7	10.0	85	195	125			
		14.0	7.5	7.7	10.0	85	195	125			
1/9/18 9:28	21173(LT23DN)	0.3	7.1	8.0	10.8	90	195	125	1.18	5.60	< 1
		1.0	7.1	8.0	10.8	90	195	125			
		2.0	7.1	7.9	10.8	90	195	125			
		3.0	7.1	7.9	10.8	90	195	125			
		4.0	7.1	7.9	10.8	90	195	125			
		5.0	7.1	7.9	10.8	90	195	125			
		6.0	7.1	7.9	10.8	91	195	125			
		7.0	7.1	7.9	10.8	90	195	125			
		8.0	7.1	7.9	10.7	90	195	125			
		9.0	7.0	7.8	10.8	89	195	125			
		10.0	7.0	7.8	10.7	89	195	125			
1/9/18 9:06	10437(LT23B)	0.3	7.3	8.0	10.9	92	194	124	0.91	5.83	< 1
		1.0	7.3	7.9	10.9	92	194	124			
		2.0	7.3	7.9	10.9	91	194	124			
		3.0	7.2	7.9	10.9	91	194	124			
		4.0	7.2	7.9	10.9	91	194	124			
		5.0	7.2	7.9	10.9	92	194	124			
		6.0	7.2	7.9	10.8	91	194	124			
		7.0	7.1	7.9	10.8	91	194	124			
		8.0	7.0	7.8	10.6	88	194	124			

#### Lake Tawakoni Reservoir Profiles





LAKE TAWAKONI IN WACO BAY EQUIDISTANT FROM FINGER AND SPRING POINTS



LAKE TAWAKONI AT SH276

## Segment 0507

