

## SABINE RIVER AUTHORITY OF TEXAS

**TO:** INTERESTED PARTIES  
**FROM:** ENVIRONMENTAL SERVICES DIVISION  
**RE:** JANUARY 2020 MONTHLY WATER QUALITY REPORT

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The Environmental Services Field Offices conducted water quality monitoring in the Sabine Basin from January 13<sup>th</sup> through the 16<sup>th</sup> and 21<sup>st</sup>. The results of field monitoring are presented in this report<sup>1</sup> and additional data can be found using the Texas Commission on Environmental Quality (TCEQ) [Clean Rivers Program Data Tool](#).

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

**Weather** – Air temperatures in the tidal basin were mild with highs in the upper 50s to mid 70s. Low temperatures were in the low 30s to upper 60s. The tidal stations received 2.22 inches of rainfall in the seven days prior to the sampling event.

**Tidal Conditions** – Surface salinity values were greater than 2 ppt at one of the six tidal stations. The highest salinity value of 7.2 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 mild with highs in the upper 50s to mid 70s. Low temperatures ranged in the mid 30s to low 50s. Toledo Bend received 1.57 inches of rainfall during the seven days prior to the sampling event.

**Lake Level** - The level of Toledo Bend was 165.6 feet with a daily average discharge of 228 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 mild with highs in the mid 30s to mid 70s. Low temperatures were in the mid 20s to low 40s. Lake Fork and Lake Tawakoni received no rainfall during the seven days prior to the sampling event. On the day of sampling Lake Fork and Lake Tawakoni received 2.17 and 1.71 inches of rainfall, respectively.  
**Lake Level** - The level of Lake Tawakoni was 436.07 feet msl with a release of 6 cfs on the day of sampling. The level of Lake Fork was 401.01 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 <http://www.sratx.org/>. If you have any questions or comments concerning this report, please contact:

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<sup>1</sup> Data in this report is considered preliminary until it is available in TCEQ's Surface Water Quality Monitoring Information System database.

**SABINE RIVER AUTHORITY OF TEXAS**  
**Monthly Water Quality Report**

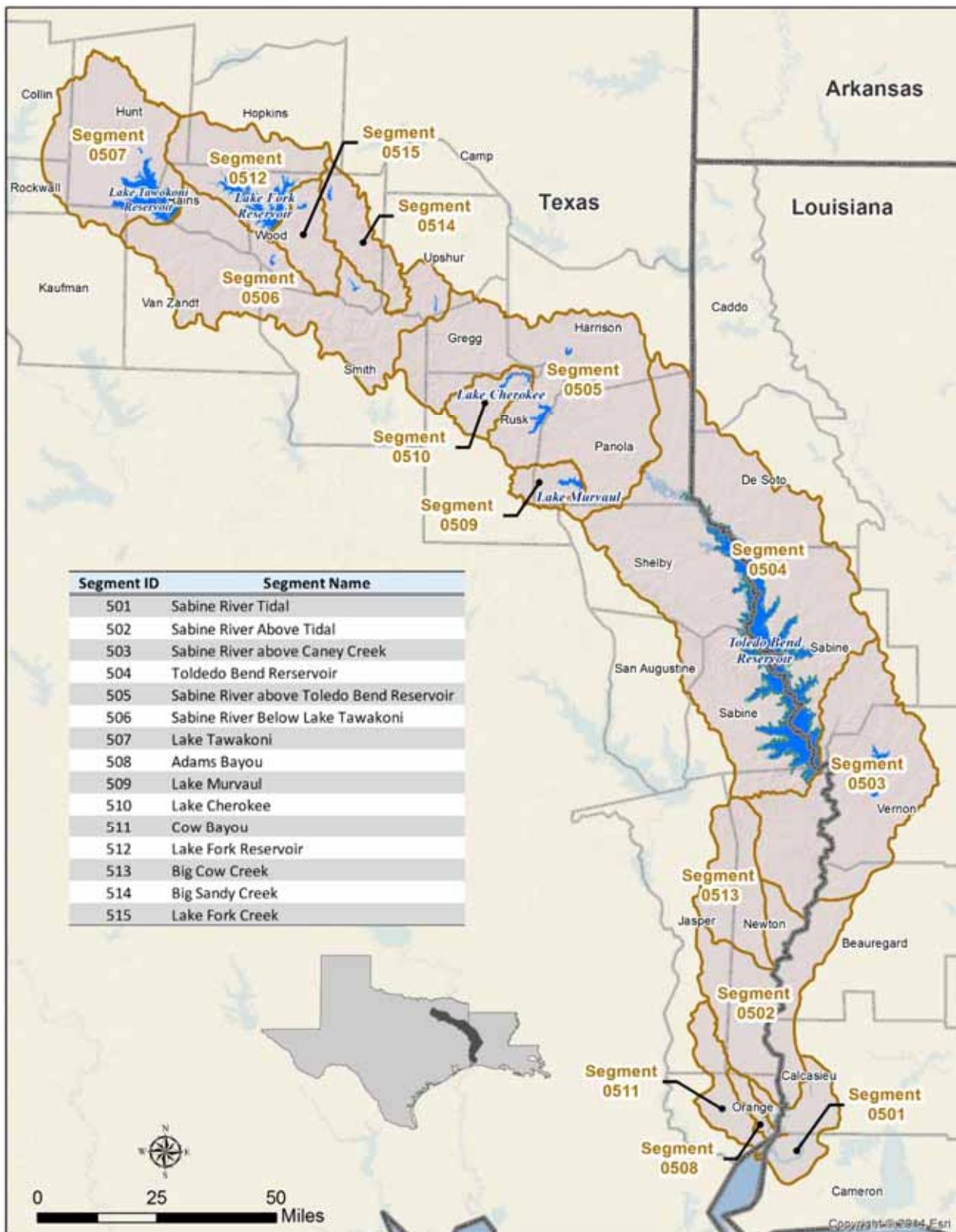
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## Sabine Basin Map



## Current Fixed Monitoring Stations

| Segment | Station<br>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   |
| 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.

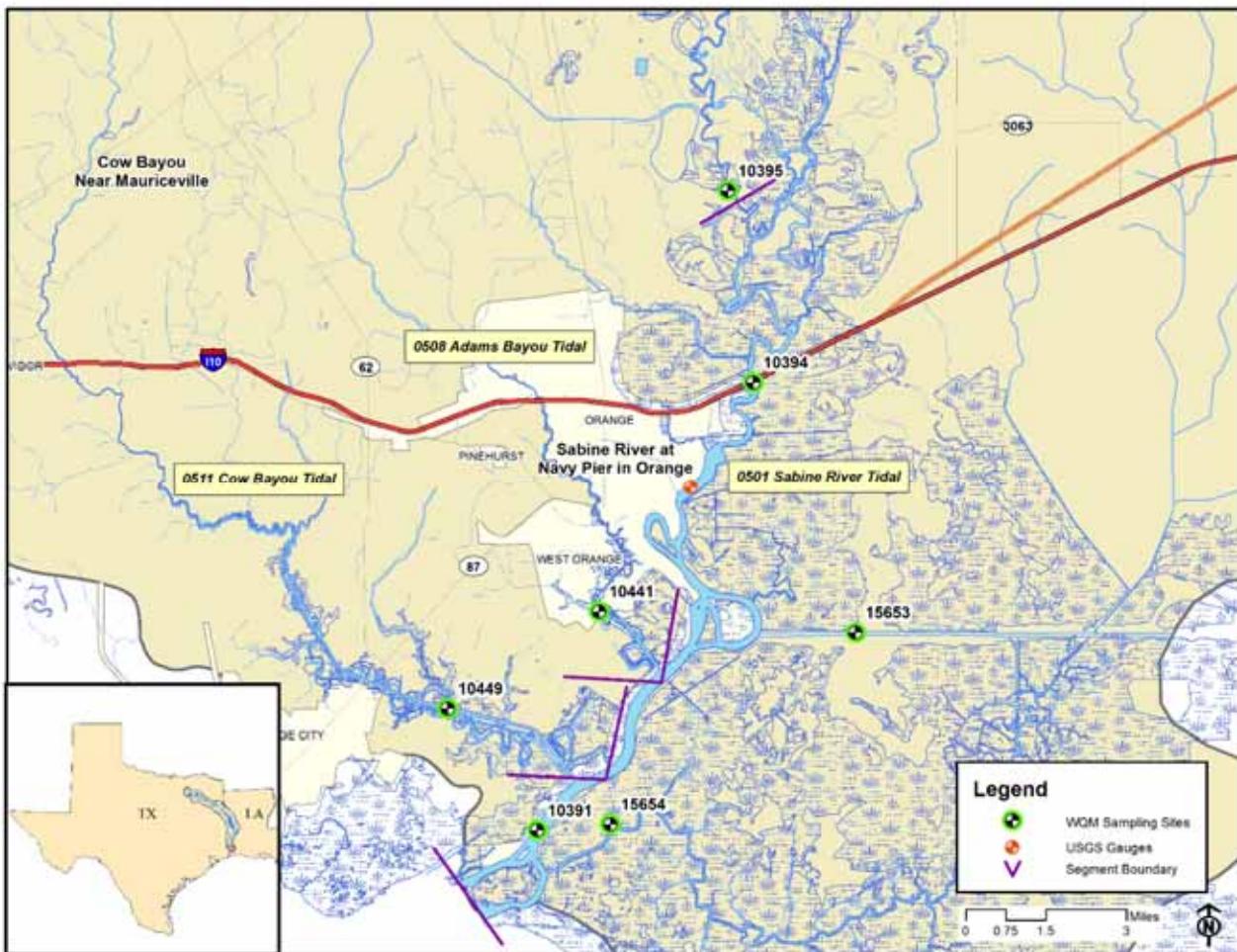
**Segment 0508 – Adams Bayou Tidal.** The segment reaches from the confluence with the Sabine River in Orange County to a point 1.1 kilometers (0.7 miles) upstream of IH-10 in Orange County.

**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.

## Segment 0501 Water Quality

| Date and Time       | Station     | Depth<br>meters | Temp<br>°C | pH<br>SU | DO<br>mg/L | % Sat | Cond<br>μS/cm | TDS<br>mg/L | Salinity<br>ppt | Secchi<br>meters | Turbidity<br>NTU | Enterococcus<br>mpn/<br>100mL |
|---------------------|-------------|-----------------|------------|----------|------------|-------|---------------|-------------|-----------------|------------------|------------------|-------------------------------|
| 1/16/20 10:22       | 10391(SRT1) | 0.3             | 16.4       | 7.1      | 7.7        | 79    | 2,420         | 1,560       | 1.3             | 0.38             | 28.9             | 85                            |
|                     |             | 3.0             | 16.4       | 7.0      | 7.5        | 78    | 3,590         | 2,160       | 1.8             |                  |                  |                               |
|                     |             | 6.0             | 16.5       | 6.9      | 7.5        | 78    | 8,970         | 5,860       | 5.3             |                  |                  |                               |
|                     |             | 9.0             | 16.9       | 7.2      | 7.6        | 82    | 12,700        | 8,000       | 7.2             |                  |                  |                               |
| 1/16/20 10:00       | 15654(BB1)  | 0.3             | 19.0       | 7.1      | 7.1        | 78    | 6,840         | 4,370       | 3.8             | 0.59             | 14.3             | 20                            |
|                     |             | 1.5             | 18.9       | 7.1      | 6.9        | 76    | 7,270         | 4,650       | 4.0             |                  |                  |                               |
|                     |             | 3.5             | 18.9       | 7.1      | 6.9        | 76    | 7,310         | 4,680       | 4.1             |                  |                  |                               |
| <b>Segment 0511</b> |             |                 |            |          |            |       |               |             |                 |                  |                  |                               |
| 1/16/20 09:42       | 10449(CB1)  | 0.3             | 17.3       | 7.0      | 6.2        | 63    | 231           | 148         | 0.1             | 0.18             | 80.2             | 512                           |
|                     |             | 2.5             | 16.9       | 6.6      | 6.0        | 62    | 221           | 142         | 0.1             |                  |                  |                               |
|                     |             | 4.8             | 16.9       | 6.5      | 5.9        | 61    | 226           | 145         | 0.1             |                  |                  |                               |
| <b>Segment 0508</b> |             |                 |            |          |            |       |               |             |                 |                  |                  |                               |
| 1/16/20 10:40       | 10441(AB2)  | 0.3             | 18.1       | 6.9      | 5.0        | 53    | 248           | 158         | 0.1             | 0.22             | 79.8             | 417                           |
|                     |             | 2.0             | 17.2       | 6.8      | 5.0        | 51    | 306           | 196         | 0.2             |                  |                  |                               |
|                     |             | 4.0             | 16.7       | 6.7      | 4.8        | 49    | 622           | 398         | 0.3             |                  |                  |                               |
| 1/16/20 10:57       | 15653(ICW1) | 0.3             | 17.1       | 7.1      | 7.6        | 80    | 3,120         | 1,990       | 1.7             | 0.42             | 27.8             | 74                            |
|                     |             | 3.0             | 17.5       | 7.0      | 7.5        | 80    | 5,490         | 3,500       | 3.1             |                  |                  |                               |
|                     |             | 6.0             | 17.7       | 7.1      | 7.4        | 80    | 7,400         | 4,720       | 4.1             |                  |                  |                               |
| 1/16/20 11:35       | 10394(SRT2) | 0.3             | 16.5       | 6.9      | 8.0        | 82    | 82            | 52          | <0.1            | 0.32             | 46.9             | 63                            |
|                     |             | 3.0             | 16.1       | 6.7      | 7.8        | 78    | 82            | 52          | <0.1            |                  |                  |                               |
|                     |             | 6.0             | 16.1       | 6.6      | 7.7        | 78    | 82            | 52          | <0.1            |                  |                  |                               |
|                     |             | 9.0             | 16.1       | 6.6      | 7.8        | 79    | 82            | 52          | <0.1            |                  |                  |                               |

## 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.** The segment reaches from the confluence with the Sabine River in Newton County to a point 4.6 kilometers (2.9 miles) upstream of CR 255 in Newton County.

### Segment 0502 USGS Recorded Flows

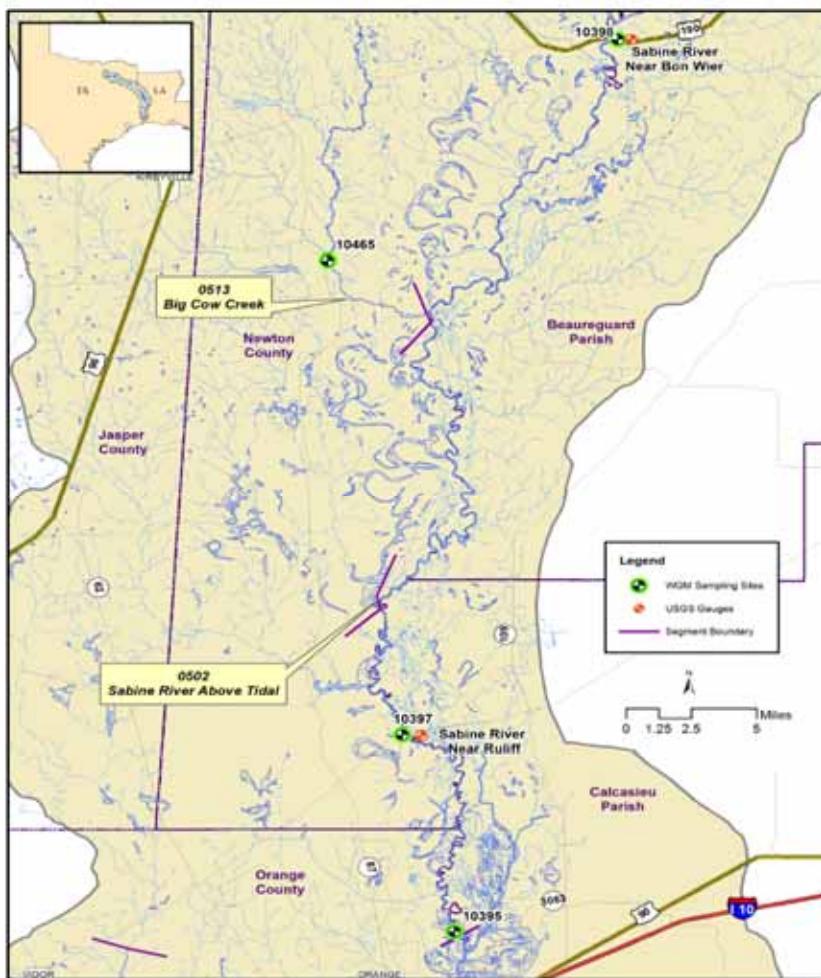
| Date and Time | Station    | USGS Station # | Location                     | Flow (cfs) |
|---------------|------------|----------------|------------------------------|------------|
| 1/15/20 08:45 | 10397(SR2) | 08030500       | Sabine River near Ruliff, TX | 7,270      |

### Segment 0502 Water Quality

| Date and Time       | Station     | Depth meters | Temp °C | pH SU | DO mg/L | % Sat | Cond µS/cm | TDS mg/L | Secchi meters | Turbidity NTU | E.coli mpn/100mL |
|---------------------|-------------|--------------|---------|-------|---------|-------|------------|----------|---------------|---------------|------------------|
| 1/16/20 12:00       | 10395(SR1)  | 0.3          | 16.4    | 7.0   | 8.1     | 82    | 91         | 58       | NM            | 62.6          | 579              |
| 1/15/20 08:45       | 10397(SR2)  | 0.3          | 15.1    | 6.5   | 8.4     | 83    | 61         | 39       | 0.15          | 61.8          | 1,203            |
| <b>Segment 0513</b> |             |              |         |       |         |       |            |          |               |               |                  |
| 1/15/20 09:25       | 10465(BCC1) | 0.3          | 16.8    | 5.7   | 8.0     | 82    | 28         | 18       | 0.18          | 51.8          | >2,420           |

NM = Not Measured

### 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.

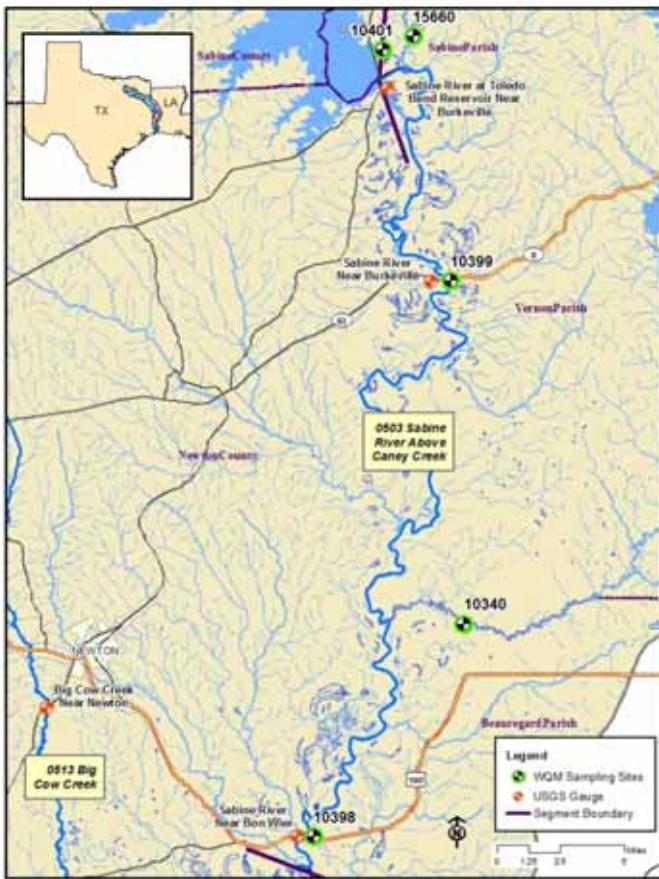
### Segment 0503 USGS Recorded Flows

| Date and Time | Station    | USGS Station # | Location                         | Flow (cfs) |
|---------------|------------|----------------|----------------------------------|------------|
| 1/15/20 11:13 | 10398(SR3) | 08028500       | Sabine River near Bon Wier, TX   | 7,490      |
| 1/15/20 10:20 | 10399(SR5) | 08026000       | Sabine River near Burkeville, TX | 3,170      |

### Segment 0503 Water Quality

| Date and Time | Station     | Depth meters | Temp °C | pH SU | DO mg/L | % Sat | Cond µS/cm | TDS mg/L | Secchi meters | Turbidity NTU | E.coli mpn/100mL |
|---------------|-------------|--------------|---------|-------|---------|-------|------------|----------|---------------|---------------|------------------|
| 1/15/20 11:13 | 10398(SR3)  | 0.3          | 16.6    | 6.7   | 8.3     | 85    | 57         | 36       | 0.18          | 179           | >2,420           |
| 1/15/20 10:52 | 10340(BA4)  | 0.3          | 16.4    | 6.6   | 8.6     | 88    | 76         | 49       | 0.12          | 96.4          | 1,986            |
| 1/15/20 10:20 | 10399(SR5)  | 0.3          | 15.9    | 6.7   | 8.6     | 87    | 64         | 41       | 0.08          | 174           | 1,733            |
| 1/13/20 13:02 | 10401(TB6S) | 0.3          | 14.1    | 7.9   | 10.9    | 106   | 116        | 74       | 1.2           | 4.86          | 6                |
| 1/13/20 12:45 | 15660(BT1)  | 0.3          | 13.1    | 7.0   | 9.8     | 93    | 72         | 46       | 0.11          | 104           | >2,420           |

### 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.

### Segment 0504 Water Quality

| Date and Time | Station     | Depth meters | Temp °C | pH SU | DO mg/L | % Sat | Cond µS/cm | TDS mg/L | Secchi meters | Turbidity NTU | E.coli mpn/100mL |
|---------------|-------------|--------------|---------|-------|---------|-------|------------|----------|---------------|---------------|------------------|
| 1/14/20 12:50 | 10404(TB6A) | 0.3          | 14.2    | 8.1   | 9.3     | 91    | 115        | 73       | 2.0           | 3.57          | <1               |
|               |             | 1.0          | 14.0    | 7.9   | 9.3     | 89    | 115        | 73       |               |               |                  |
|               |             | 2.0          | 13.7    | 7.8   | 9.2     | 88    | 115        | 73       |               |               |                  |
|               |             | 3.0          | 13.6    | 7.7   | 9.0     | 87    | 115        | 73       |               |               |                  |
|               |             | 4.0          | 13.6    | 7.6   | 9.0     | 87    | 115        | 73       |               |               |                  |
|               |             | 5.0          | 13.6    | 7.6   | 9.0     | 86    | 115        | 73       |               |               |                  |
|               |             | 8.0          | 13.5    | 7.5   | 8.9     | 85    | 115        | 73       |               |               |                  |
|               |             | 11.0         | 13.5    | 7.5   | 8.8     | 84    | 115        | 73       |               |               |                  |
|               |             | 14.0         | 13.5    | 7.5   | 8.7     | 84    | 115        | 73       |               |               |                  |
|               |             | 17.0         | 13.5    | 7.5   | 8.8     | 85    | 115        | 73       |               |               |                  |
|               |             | 20.0         | 13.5    | 7.4   | 8.9     | 85    | 115        | 73       |               |               |                  |
|               |             | 23.0         | 13.4    | 7.4   | 8.8     | 84    | 115        | 73       |               |               |                  |
|               |             | 24.0         | 13.4    | 7.4   | 8.1     | 77    | 115        | 73       |               |               |                  |
| 1/14/20 09:14 | 10406(TB6C) | 0.3          | 14.6    | 8.0   | 9.8     | 96    | 124        | 79       | 0.83          | 8.48          | 84               |
|               |             | 1.0          | 14.5    | 7.9   | 9.7     | 96    | 124        | 79       |               |               |                  |
|               |             | 2.0          | 14.2    | 7.6   | 9.2     | 88    | 133        | 85       |               |               |                  |
| 1/21/20 13:15 | 18054(TB6Q) | 0.3          | 13.5    | 6.9   | 9.4     | 90    | 121        | 77       | 1.3           | 4.19          | 1                |
|               |             | 1.0          | 13.4    | 7.5   | 9.3     | 89    | 121        | 77       |               |               |                  |
|               |             | 2.0          | 13.3    | 7.4   | 9.3     | 89    | 121        | 77       |               |               |                  |
|               |             | 3.0          | 13.2    | 7.4   | 9.2     | 88    | 121        | 77       |               |               |                  |
|               |             | 4.0          | 13.2    | 7.3   | 9.1     | 87    | 121        | 77       |               |               |                  |
|               |             | 5.0          | 13.1    | 7.3   | 9.1     | 86    | 121        | 77       |               |               |                  |
|               |             | 6.0          | 13.0    | 7.3   | 9.1     | 86    | 121        | 77       |               |               |                  |
|               |             | 7.0          | 13.0    | 7.2   | 9.0     | 85    | 121        | 77       |               |               |                  |

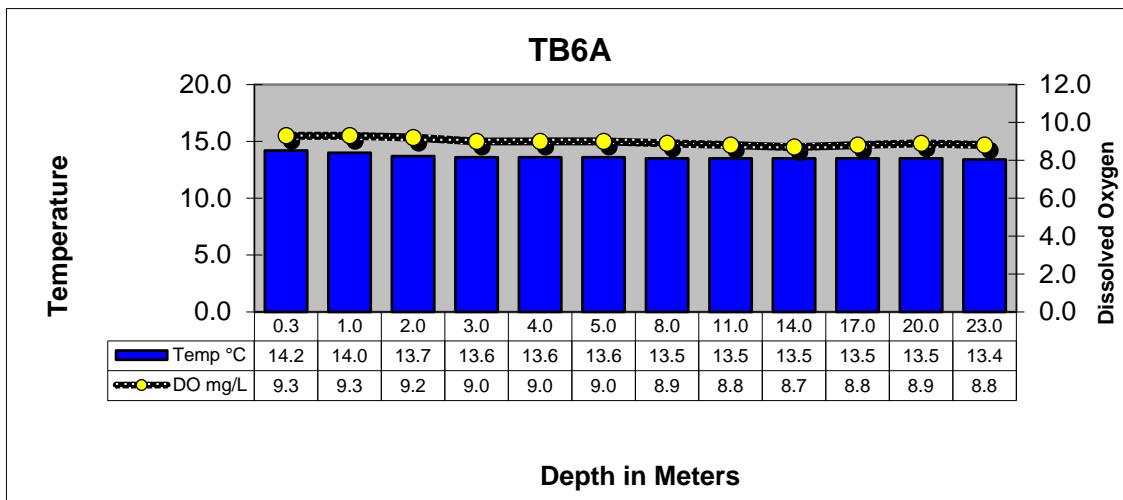
## Segment 0504 Water Quality Continued

| Date and Time | Station     | Depth meters | Temp °C | pH SU | DO mg/L | % Sat | Cond µS/cm | TDS mg/L | Secchi meters | Turbidity NTU | <i>E.coli</i> mpn/100mL |
|---------------|-------------|--------------|---------|-------|---------|-------|------------|----------|---------------|---------------|-------------------------|
| 1/13/20 10:57 | 10411(TB6F) | 0.3          | 14.0    | 7.4   | 9.1     | 88    | 117        | 75       | 0.24          | 40.2          | 2,420                   |
|               |             | 1.0          | 14.0    | 7.3   | 9.0     | 87    | 117        | 75       |               |               |                         |
|               |             | 2.0          | 13.8    | 7.2   | 8.9     | 86    | 117        | 75       |               |               |                         |
|               |             | 3.0          | 13.7    | 7.1   | 8.6     | 82    | 113        | 72       |               |               |                         |
| 1/21/20 10:45 | 10402(TB6H) | 0.3          | 12.9    | 7.4   | 9.5     | 90    | 128        | 82       | 1.4           | 4.35          | <1                      |
|               |             | 1.0          | 12.9    | 7.4   | 9.4     | 89    | 128        | 82       |               |               |                         |
|               |             | 2.0          | 12.9    | 7.3   | 9.4     | 89    | 129        | 82       |               |               |                         |
|               |             | 3.0          | 12.9    | 7.3   | 9.4     | 89    | 129        | 82       |               |               |                         |
|               |             | 4.0          | 12.8    | 7.2   | 9.3     | 88    | 129        | 82       |               |               |                         |
|               |             | 5.0          | 12.9    | 7.2   | 9.3     | 88    | 129        | 82       |               |               |                         |
|               |             | 8.0          | 12.8    | 7.1   | 9.3     | 88    | 129        | 82       |               |               |                         |
|               |             | 11.0         | 12.8    | 7.1   | 9.3     | 88    | 129        | 82       |               |               |                         |
|               |             | 14.0         | 12.8    | 7.1   | 9.3     | 88    | 129        | 82       |               |               |                         |
|               |             | 17.0         | 12.8    | 7.1   | 9.3     | 88    | 129        | 82       |               |               |                         |
|               |             | 19.0         | 12.7    | 7.1   | 9.1     | 85    | 129        | 82       |               |               |                         |
| 1/13/20 11:20 | 15659(TB6K) | 0.3          | 14.2    | 7.7   | 9.5     | 93    | 169        | 108      | 0.45          | 13.7          | 16                      |
|               |             | 1.0          | 13.9    | 7.6   | 9.5     | 92    | 164        | 105      |               |               |                         |
|               |             | 2.0          | 13.8    | 7.4   | 9.3     | 89    | 162        | 103      |               |               |                         |
|               |             | 3.0          | 13.6    | 7.4   | 9.2     | 89    | 153        | 97       |               |               |                         |
|               |             | 4.0          | 13.6    | 7.3   | 9.3     | 89    | 150        | 96       |               |               |                         |
|               |             | 5.0          | 13.6    | 7.3   | 9.2     | 89    | 150        | 96       |               |               |                         |
|               |             | 6.0          | 13.6    | 7.3   | 9.2     | 89    | 150        | 96       |               |               |                         |
|               |             | 7.0          | 13.6    | 7.2   | 9.1     | 87    | 151        | 97       |               |               |                         |
|               |             | 8.0          | 13.6    | 7.2   | 8.9     | 85    | 151        | 97       |               |               |                         |
| 1/13/20 10:28 | 15655(TB6J) | 0.3          | 13.7    | 7.7   | 9.8     | 94    | 151        | 97       | 0.41          | 13.1          | 20                      |
|               |             | 1.0          | 13.6    | 7.6   | 9.8     | 94    | 149        | 96       |               |               |                         |
|               |             | 2.0          | 13.5    | 7.5   | 9.8     | 95    | 145        | 93       |               |               |                         |
|               |             | 3.0          | 13.5    | 7.4   | 9.9     | 95    | 144        | 92       |               |               |                         |

## Segment 0504 Water Quality Continued

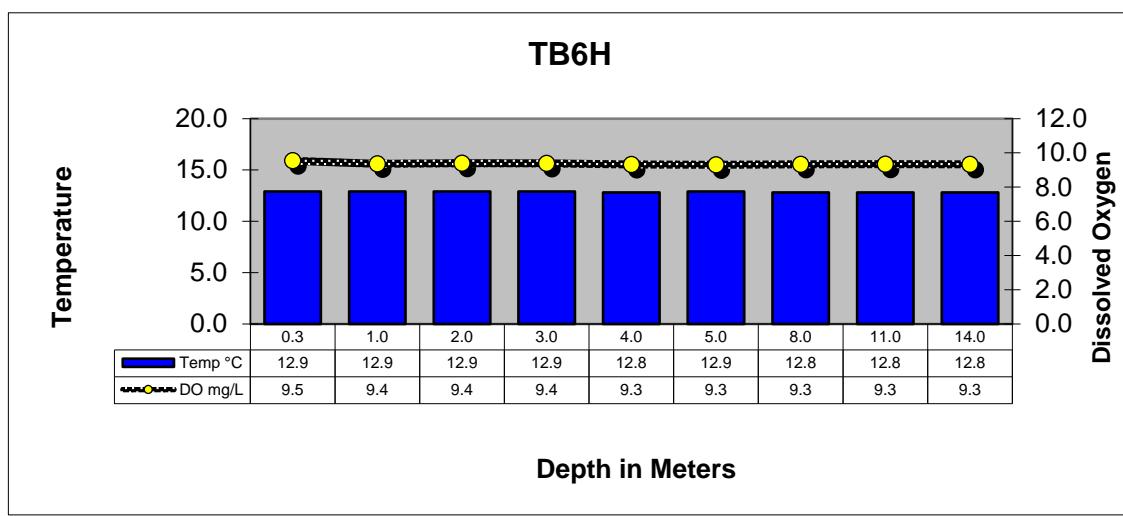
| Date and Time | Station      | Depth meters | Temp °C | pH SU | DO mg/L | % Sat | Cond µS/cm | TDS mg/L | Secchi meters | Turbidity NTU | <i>E.coli</i> mpn/100mL |
|---------------|--------------|--------------|---------|-------|---------|-------|------------|----------|---------------|---------------|-------------------------|
| 1/21/20 11:40 | 18053(TB6LN) | 0.3          | 13.4    | 6.7   | 8.8     | 84    | 127        | 81       | 0.71          | 13.4          | 6                       |
|               |              | 1.0          | 13.4    | 7.2   | 8.8     | 84    | 126        | 81       |               |               |                         |
|               |              | 2.0          | 13.4    | 7.2   | 8.7     | 83    | 126        | 81       |               |               |                         |
|               |              | 3.0          | 13.3    | 7.2   | 8.6     | 82    | 125        | 80       |               |               |                         |
|               |              | 4.0          | 13.3    | 7.1   | 8.4     | 80    | 124        | 79       |               |               |                         |
| 1/21/20 09:30 | 18052(TB6R)  | 0.3          | 12.2    | 7.6   | 10.1    | 95    | 175        | 112      | 0.84          | 8.83          | 1                       |
|               |              | 1.0          | 12.2    | 7.5   | 10.1    | 95    | 175        | 112      |               |               |                         |
|               |              | 2.0          | 12.2    | 7.5   | 10.1    | 95    | 175        | 112      |               |               |                         |
|               |              | 3.0          | 12.2    | 7.4   | 10.1    | 95    | 175        | 112      |               |               |                         |
|               |              | 4.0          | 12.2    | 7.4   | 10.1    | 95    | 174        | 111      |               |               |                         |
|               |              | 5.0          | 12.2    | 7.4   | 10.1    | 95    | 174        | 111      |               |               |                         |
|               |              | 6.0          | 12.2    | 7.4   | 10.1    | 95    | 174        | 111      |               |               |                         |
|               |              | 7.0          | 12.2    | 7.4   | 10.1    | 95    | 174        | 111      |               |               |                         |
|               |              | 8.0          | 12.2    | 7.4   | 10.2    | 95    | 175        | 112      |               |               |                         |
|               |              | 9.0          | 12.2    | 7.4   | 10.1    | 95    | 176        | 112      |               |               |                         |
|               |              | 10.0         | 12.2    | 7.4   | 10.1    | 95    | 176        | 112      |               |               |                         |
|               |              | 11.0         | 12.2    | 7.4   | 10.2    | 95    | 176        | 113      |               |               |                         |
|               |              | 12.0         | 12.2    | 7.4   | 10.2    | 95    | 176        | 113      |               |               |                         |
|               |              | 13.0         | 12.2    | 7.4   | 10.2    | 95    | 177        | 114      |               |               |                         |

### Toledo Bend Reservoir Profiles



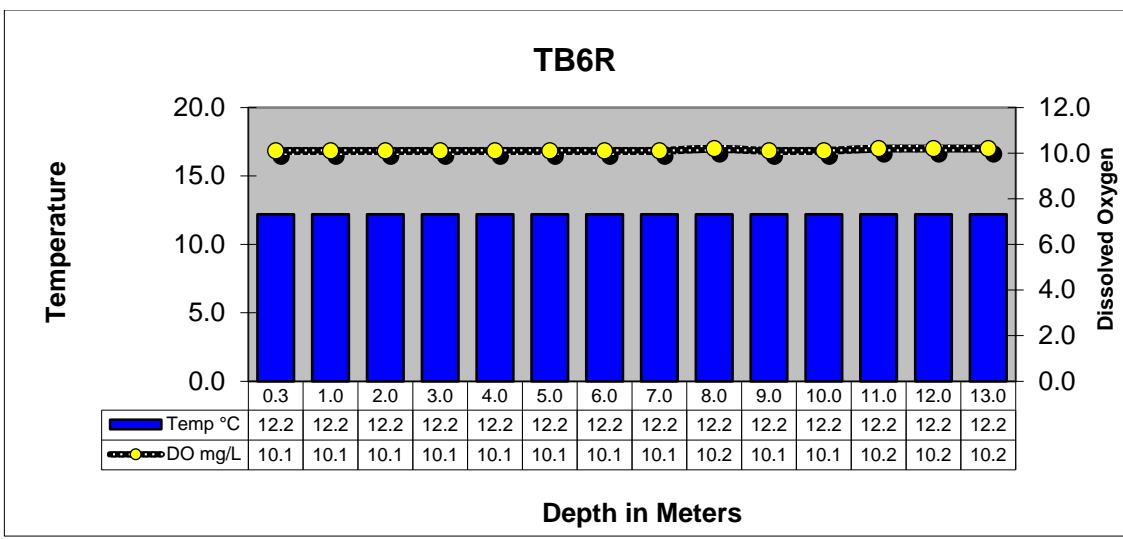
Depth in Meters

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



Depth in Meters

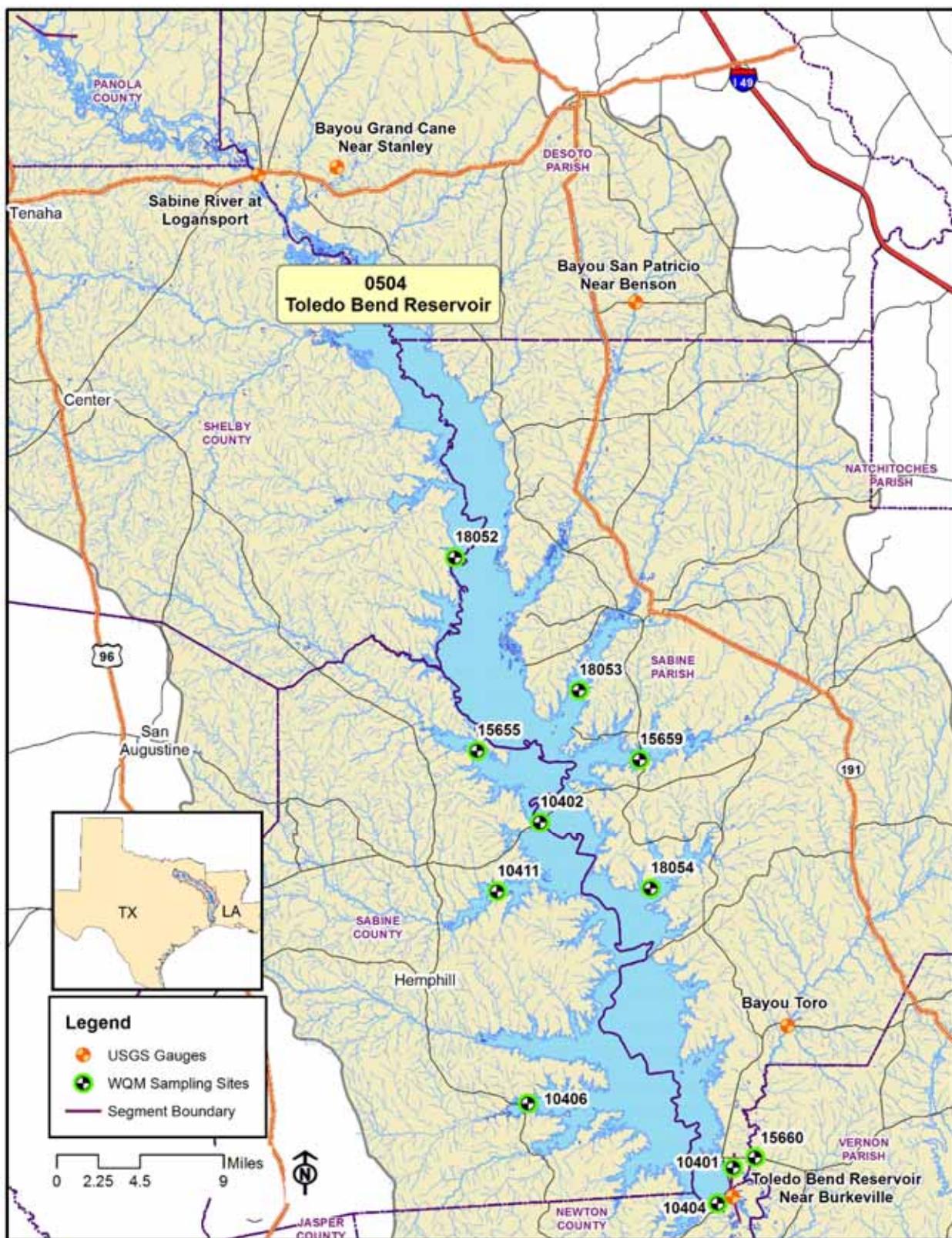
TOLEDO BEND RESERVOIR AT SH 21 NORTHEAST OF MILAM



Depth in Meters

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.

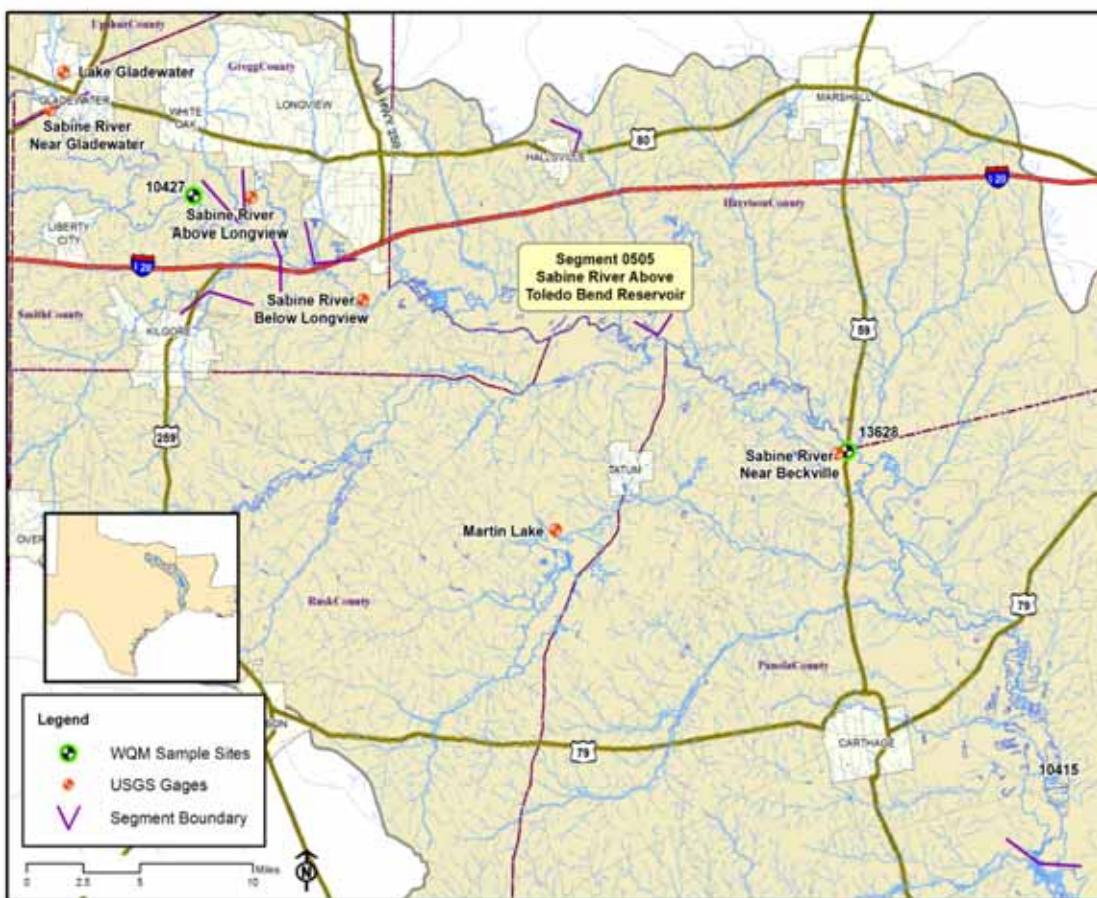
### Segment 0505 USGS Recorded Flows

| Date and Time | Station     | USGS Station # | Location                        | Flow (cfs) |
|---------------|-------------|----------------|---------------------------------|------------|
| 1/15/20 09:26 | 13628(SR11) | 08022040       | Sabine River near Beckville, TX | 1,570      |

### Segment 0505 Water Quality

| Date and Time | Station     | Depth meters | Temp °C | pH SU | DO mg/L | % Sat | Cond µS/cm | TDS mg/L | Secchi meters | Turbidity NTU | E. coli mpn/100mL |
|---------------|-------------|--------------|---------|-------|---------|-------|------------|----------|---------------|---------------|-------------------|
| 1/15/20 09:51 | 10415(SR10) | 0.3          | 12.7    | 7.0   | 9.4     | 89    | 300        | 191      | 0.12          | 83.4          | 687               |
| 1/15/20 09:26 | 13628(SR11) | 0.3          | 12.2    | 6.9   | 9.8     | 92    | 191        | 123      | 0.12          | 126           | 579               |
| 1/15/20 08:25 | 10427(SR16) | 0.3          | 11.3    | 6.7   | 9.4     | 86    | 390        | 252      | 0.07          | 161           | 722               |

### 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.** The segment reaches 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.** The segment reaches from the confluence with the Sabine River in Wood County to Lake Fork Dam in Wood County.

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

### **Segment 0506 USGS- Recorded Flows**

| Date and Time       | Station     | USGS Station # | Location                           | Flow (cfs) |
|---------------------|-------------|----------------|------------------------------------|------------|
| 1/15/20 07:58       | 10428(SR17) | 08020000       | Sabine River near Gladewater, TX   | 1,770      |
| 1/15/20 07:05       | 10429(SR19) | 08019200       | Sabine River near Hawkins, TX      | 1,200      |
| 1/14/20 13:20       | 10430(SR21) | 08018500       | Sabine River near Mineola, TX      | 944        |
| <b>Segment 0514</b> |             |                |                                    |            |
| 1/15/20 07:30       | 10468(BS1)  | 08019500       | Big Sandy Creek near Big Sandy, TX | 353        |

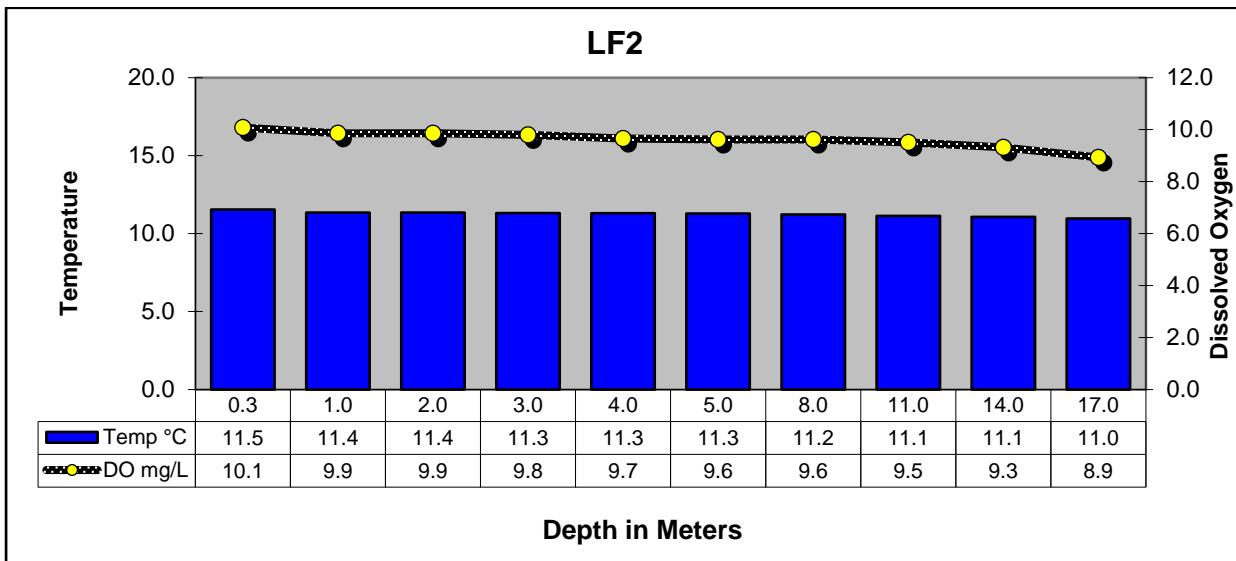
### **Segment 0506 Water Quality**

| Date and Time       | Station     | Depth meters | Temp °C | pH SU | DO mg/L | % Sat | Cond µS/cm | TDS mg/L | Secchi meters | Turbidity NTU | <i>E. coli</i> mpn/100mL |
|---------------------|-------------|--------------|---------|-------|---------|-------|------------|----------|---------------|---------------|--------------------------|
| 1/15/20 07:58       | 10428(SR17) | 0.3          | 11.1    | 6.9   | 9.5     | 87    | 285        | 182      | 0.06          | 164           | 1,553                    |
| 1/15/20 07:05       | 10429(SR19) | 0.3          | 10.8    | 6.7   | 9.1     | 83    | 202        | 128      | 0.05          | 177           | 2,420                    |
| 1/14/20 13:20       | 10430(SR21) | 0.3          | 9.8     | 6.4   | 8.8     | 79    | 242        | 155      | 0.06          | 193           | >2,420                   |
| <b>Segment 0514</b> |             |              |         |       |         |       |            |          |               |               |                          |
| 1/15/20 07:30       | 10468(BS1)  | 0.3          | 11.5    | 6.0   | 8.9     | 82    | 124        | 79       | 0.12          | 92.6          | >2,420                   |
| <b>Segment 0515</b> |             |              |         |       |         |       |            |          |               |               |                          |
| 1/14/20 14:18       | 10469(LF20) | 0.3          | 10.3    | 6.2   | 9.1     | 82    | 181        | 116      | 0.11          | 83.8          | 2,420                    |

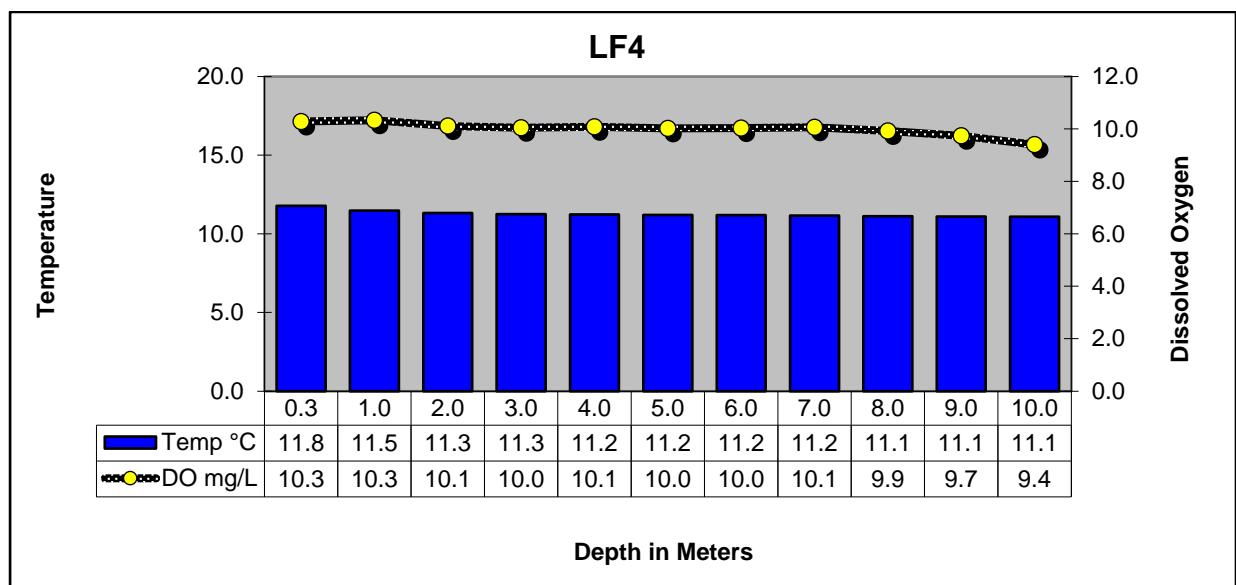
## Segment 0506 Water Quality Continued

| Date and Time | Station      | Depth meters | Temp °C | pH SU | DO mg/L | % Sat | Cond µS/cm | TDS mg/L | Secchi meters | Turbidity NTU | E. coli mpn/100mL |
|---------------|--------------|--------------|---------|-------|---------|-------|------------|----------|---------------|---------------|-------------------|
|               | Segment 0512 |              |         |       |         |       |            |          |               |               |                   |
| 1/14/20 12:22 | 10458(LF2)   | 0.3          | 11.5    | 7.2   | 10.1    | 94    | 128        | 82       | 1.1           | 9.38          | 5                 |
|               |              | 1.0          | 11.4    | 7.1   | 9.9     | 92    | 128        | 82       |               |               |                   |
|               |              | 2.0          | 11.4    | 7.1   | 9.9     | 92    | 128        | 82       |               |               |                   |
|               |              | 3.0          | 11.3    | 7.0   | 9.8     | 90    | 128        | 82       |               |               |                   |
|               |              | 4.0          | 11.3    | 7.0   | 9.7     | 89    | 128        | 82       |               |               |                   |
|               |              | 5.0          | 11.3    | 7.0   | 9.6     | 88    | 128        | 82       |               |               |                   |
|               |              | 8.0          | 11.2    | 7.0   | 9.6     | 88    | 128        | 82       |               |               |                   |
|               |              | 11.0         | 11.1    | 7.0   | 9.5     | 87    | 128        | 82       |               |               |                   |
|               |              | 14.0         | 11.1    | 7.0   | 9.3     | 86    | 128        | 82       |               |               |                   |
|               |              | 17.0         | 11.0    | 6.9   | 8.9     | 81    | 128        | 82       |               |               |                   |
| 1/14/20 11:25 | 10462(LF4)   | 0.3          | 11.8    | 7.2   | 10.3    | 96    | 127        | 82       | 0.65          | 9.82          | 12                |
|               |              | 1.0          | 11.5    | 7.2   | 10.3    | 95    | 127        | 82       |               |               |                   |
|               |              | 2.0          | 11.3    | 7.1   | 10.1    | 93    | 128        | 82       |               |               |                   |
|               |              | 3.0          | 11.3    | 7.1   | 10.0    | 93    | 128        | 82       |               |               |                   |
|               |              | 4.0          | 11.2    | 7.1   | 10.1    | 93    | 128        | 82       |               |               |                   |
|               |              | 5.0          | 11.2    | 7.1   | 10.0    | 93    | 128        | 82       |               |               |                   |
|               |              | 6.0          | 11.2    | 7.1   | 10.0    | 93    | 128        | 82       |               |               |                   |
|               |              | 7.0          | 11.2    | 7.1   | 10.1    | 93    | 128        | 82       |               |               |                   |
|               |              | 8.0          | 11.1    | 7.1   | 9.9     | 90    | 128        | 82       |               |               |                   |
|               |              | 9.0          | 11.1    | 7.0   | 9.7     | 89    | 128        | 82       |               |               |                   |
|               |              | 10.0         | 11.1    | 7.0   | 9.4     | 86    | 128        | 82       |               |               |                   |
| 1/14/20 11:55 | 10461(LF3)   | 0.3          | 12.1    | 7.3   | 10.3    | 96    | 127        | 82       | 0.69          | 10.2          | 35                |
|               |              | 1.0          | 11.7    | 7.2   | 10.2    | 95    | 127        | 82       |               |               |                   |
|               |              | 2.0          | 11.7    | 7.1   | 10.0    | 93    | 127        | 82       |               |               |                   |
|               |              | 3.0          | 11.7    | 7.1   | 9.9     | 93    | 127        | 82       |               |               |                   |
|               |              | 4.0          | 11.6    | 7.1   | 9.8     | 92    | 127        | 82       |               |               |                   |
|               |              | 5.0          | 11.5    | 7.0   | 9.6     | 87    | 127        | 82       |               |               |                   |
|               |              | 6.0          | 11.3    | 6.9   | 9.0     | 82    | 128        | 82       |               |               |                   |
|               |              | 7.0          | 11.2    | 6.9   | 8.4     | 78    | 130        | 83       |               |               |                   |
|               |              | 8.0          | 11.2    | 6.9   | 8.2     | 75    | 130        | 83       |               |               |                   |
|               |              | 9.0          | 11.2    | 6.8   | 7.6     | 65    | 130        | 83       |               |               |                   |

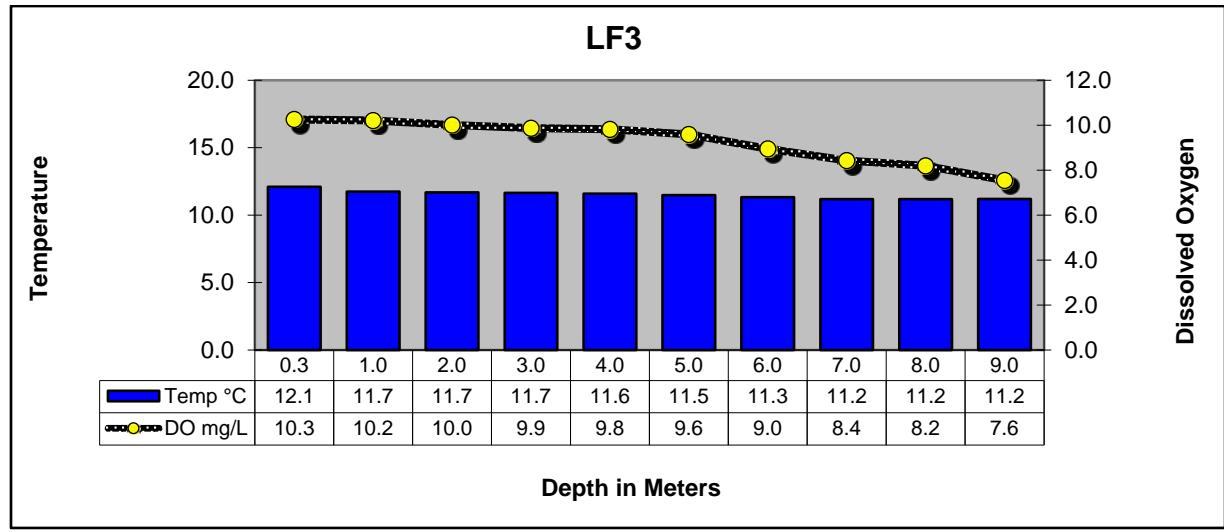
### Lake Fork Reservoir Profiles



LAKE FORK RESERVOIR NEAR DAM IN CREEK CHANNEL

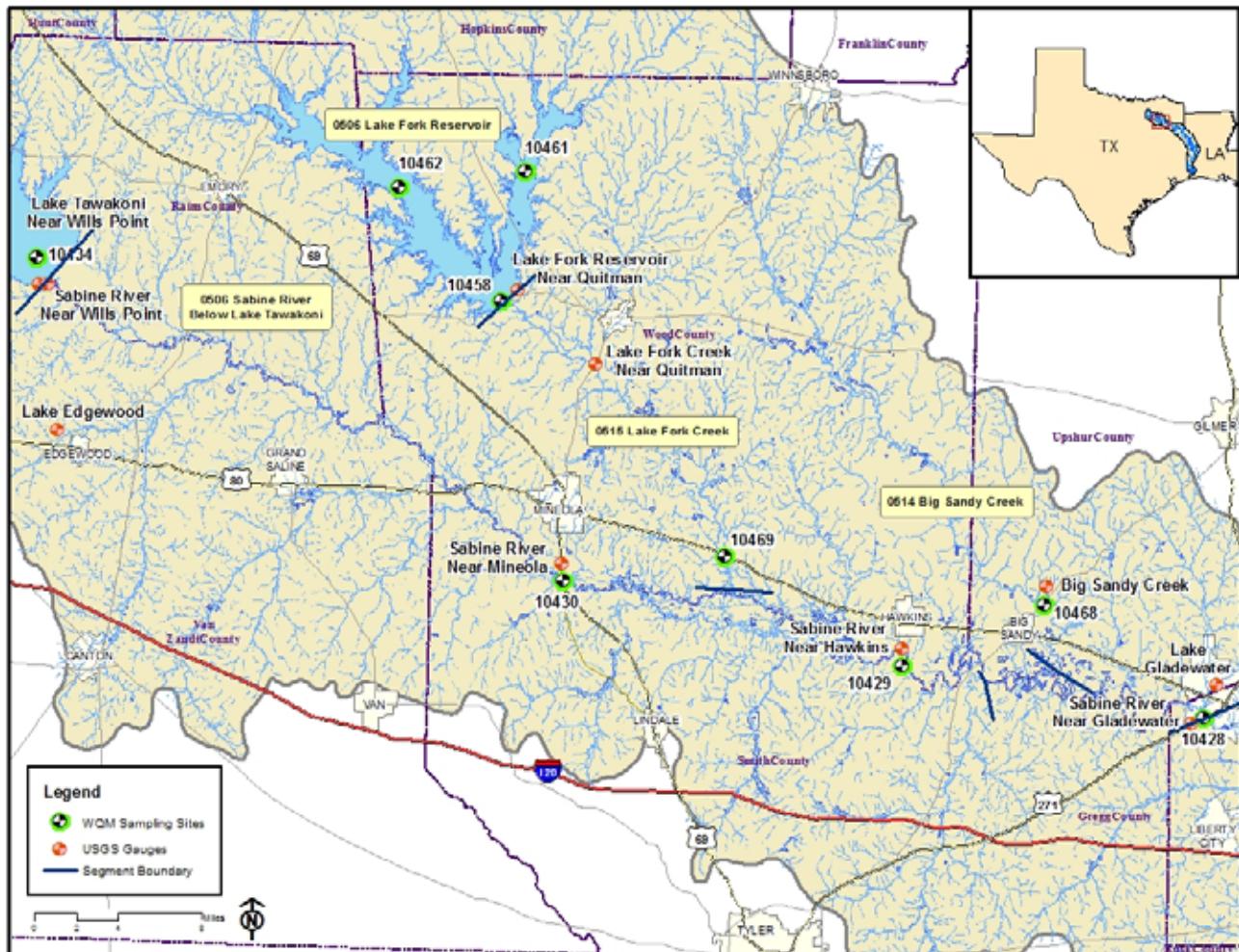


LAKE FORK RESERVOIR MID-COVE IN LAKE FORK CREEK ARM AT FM515



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

## Segments 0506, 0512, 0514 & 0515



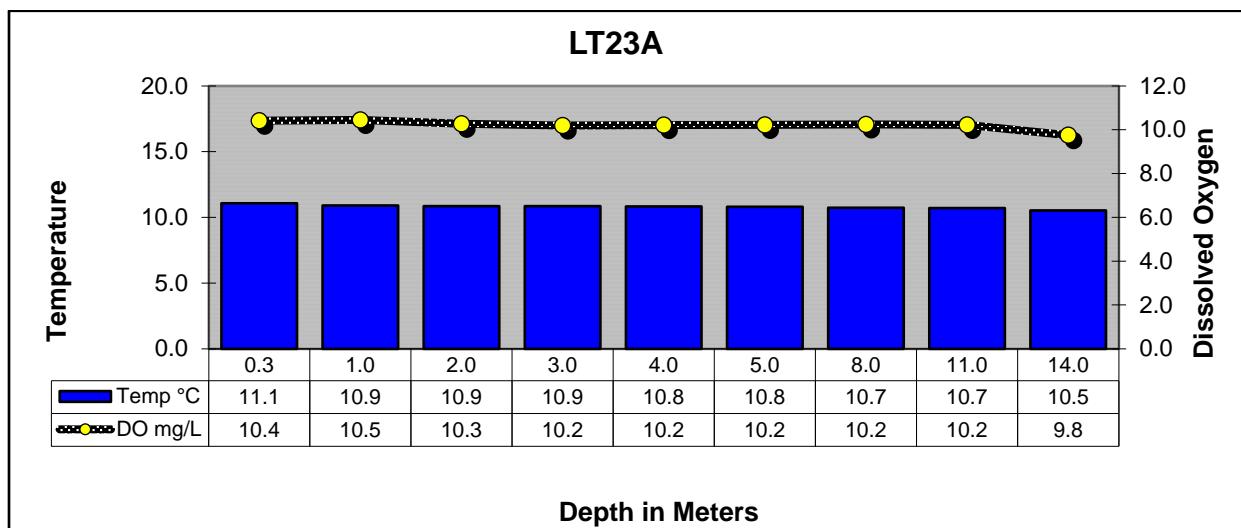
## Segment 0507 - Lake Tawakoni

**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.

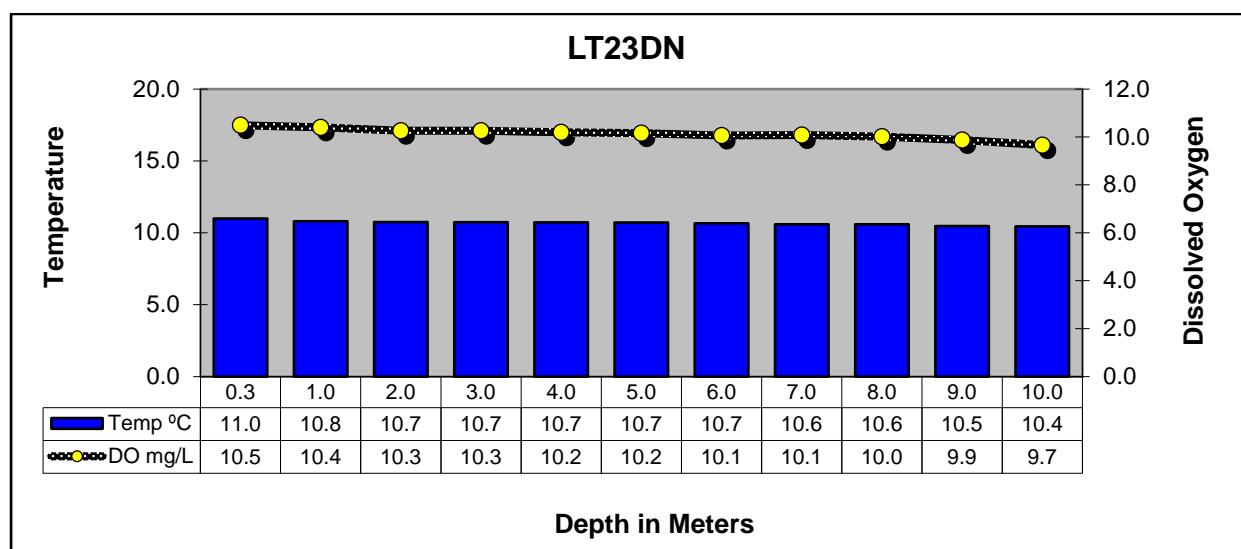
### Segment 0507 Water Quality

| Date and Time | Station       | Depth meters | Temp °C | pH SU | DO mg/L | % Sat | Cond µS/cm | TDS mg/L | Secchi meters | Turbidity NTU | E. coli mpn/100mL |
|---------------|---------------|--------------|---------|-------|---------|-------|------------|----------|---------------|---------------|-------------------|
| 1/14/20 10:28 | 10434(LT23A)  | 0.3          | 11.1    | 7.6   | 10.4    | 96    | 183        | 116      | 0.80          | 6.19          | 3                 |
|               |               | 1.0          | 10.9    | 7.6   | 10.5    | 96    | 183        | 116      |               |               |                   |
|               |               | 2.0          | 10.9    | 7.6   | 10.3    | 94    | 183        | 116      |               |               |                   |
|               |               | 3.0          | 10.9    | 7.6   | 10.2    | 94    | 183        | 116      |               |               |                   |
|               |               | 4.0          | 10.8    | 7.6   | 10.2    | 94    | 183        | 116      |               |               |                   |
|               |               | 5.0          | 10.8    | 7.6   | 10.2    | 94    | 183        | 116      |               |               |                   |
|               |               | 8.0          | 10.7    | 7.6   | 10.2    | 94    | 183        | 116      |               |               |                   |
|               |               | 11.0         | 10.7    | 7.6   | 10.2    | 93    | 183        | 116      |               |               |                   |
|               |               | 14.0         | 10.5    | 7.5   | 9.8     | 88    | 183        | 116      |               |               |                   |
| 1/14/20 09:51 | 21173(LT23DN) | 0.3          | 11.0    | 7.7   | 10.5    | 96    | 185        | 118      | 0.72          | 6.65          | <1                |
|               |               | 1.0          | 10.8    | 7.6   | 10.4    | 95    | 185        | 118      |               |               |                   |
|               |               | 2.0          | 10.7    | 7.6   | 10.3    | 93    | 185        | 118      |               |               |                   |
|               |               | 3.0          | 10.7    | 7.6   | 10.3    | 93    | 185        | 118      |               |               |                   |
|               |               | 4.0          | 10.7    | 7.6   | 10.2    | 93    | 185        | 118      |               |               |                   |
|               |               | 5.0          | 10.7    | 7.6   | 10.2    | 93    | 185        | 118      |               |               |                   |
|               |               | 6.0          | 10.7    | 7.6   | 10.1    | 92    | 185        | 118      |               |               |                   |
|               |               | 7.0          | 10.6    | 7.6   | 10.1    | 92    | 185        | 118      |               |               |                   |
|               |               | 8.0          | 10.6    | 7.6   | 10.0    | 91    | 185        | 118      |               |               |                   |
|               |               | 9.0          | 10.5    | 7.6   | 9.9     | 89    | 185        | 118      |               |               |                   |
|               |               | 10.0         | 10.4    | 7.5   | 9.7     | 87    | 185        | 118      |               |               |                   |
| 1/14/20 08:48 | 10437(LT23B)  | 0.3          | 10.9    | 7.7   | 10.1    | 93    | 184        | 118      | 0.56          | 7.40          | 1                 |
|               |               | 1.0          | 10.7    | 7.7   | 10.2    | 92    | 184        | 118      |               |               |                   |
|               |               | 2.0          | 10.6    | 7.6   | 10.2    | 93    | 184        | 118      |               |               |                   |
|               |               | 3.0          | 10.7    | 7.7   | 10.2    | 93    | 184        | 118      |               |               |                   |
|               |               | 4.0          | 10.6    | 7.6   | 10.2    | 93    | 184        | 118      |               |               |                   |
|               |               | 5.0          | 10.6    | 7.6   | 10.2    | 93    | 184        | 118      |               |               |                   |
|               |               | 6.0          | 10.6    | 7.6   | 10.1    | 92    | 184        | 118      |               |               |                   |
|               |               | 7.0          | 10.6    | 7.6   | 10.1    | 92    | 184        | 118      |               |               |                   |
|               |               | 8.0          | 10.5    | 7.6   | 10.0    | 91    | 184        | 118      |               |               |                   |
|               |               | 9.0          | 10.6    | 7.3   | 9.2     | 81    | 184        | 118      |               |               |                   |

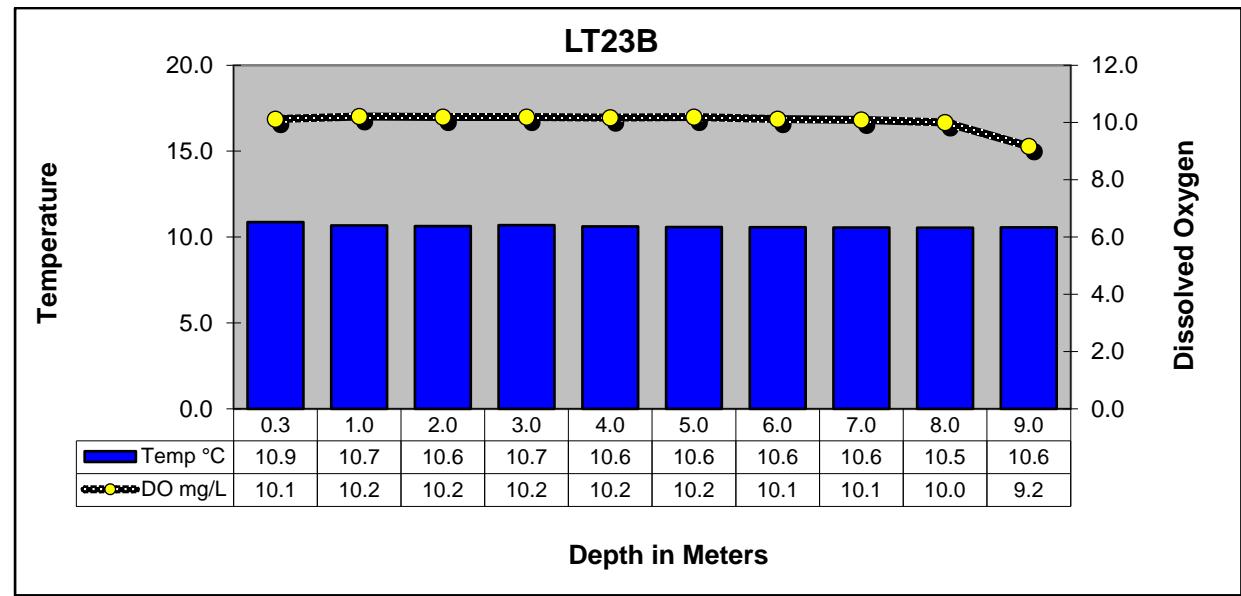
### Lake Tawakoni Reservoir Profiles



LAKE TAWAKONI IN THE MAIN LAKE NEAR THE DAM



LAKE TAWAKONI IN WACO BAY EQUIDISTANT FROM FINGER AND SPRING POINTS



LAKE TAWAKONI AT SH276

## Segment 0507

