

## A Guide to the Fact Sheet of the 2004 Texas Water Quality Inventory

The Fact Sheet is designed to provide summary information about each water body. The Fact Sheet describes the water body and its designated uses. It highlights the results of the 2004 water quality assessment, identifying parameters that do not meet water quality standards and concerns. It also lists the active water quality monitoring stations, any TCEQ-published reports, and fish kills which occurred during the assessment period.

### **DRAFT 2004 Texas Water Quality Inventory**

(based on data from 03/01/1998 to 02/28/2003)

Period of record. Data collected during this time period were used to assess the water body.

This section includes descriptive information about the water body and its designated uses.

### **Sam Rayburn Reservoir**

Segment: 0610    Neches River Basin

<b>Basin number:</b>	6
<b>Basin group:</b>	A
<b>Water body description:</b>	From Sam Rayburn Dam in Jasper County to a point 5.6 kilometers (3.5 miles) upstream of Marion's Ferry on the Angelina River Arm in Angelina/Nacogdoches County and to a point 3.9 km (2.4 miles) downstream of Curry Creek on the Attoyac Bayou Arm in Nacogdoches/San Augustine County, up to the normal pool elevation of 164 ft (except on the Angelina River Arm)(impounds Angelina River and Attoyac Bayou)
<b>Water body classification:</b>	Classified
<b>Water body type:</b>	Reservoir
<b>Water body length / area:</b>	114,500 Acres
<b>Water body uses:</b>	Aquatic Life Use, Contact Recreation Use, General Use, Fish Consumption Use, Public Water Supply Use

**Standards Not Met in 2004.**

This table indicates the parameters identified in the 2004 assessment which did not meet the water quality standards for the indicated use. The summary data to support these findings can be found in the accompanying Assessment Data Sheet.

Describes the location where the water quality standards are not met.

For a description and explanation of the categories, please see the *Draft 2004 Texas 303(d) List*

<b>Standards Not Met in 2004</b>				
<b>Assessment Area</b>	<b>Use</b>	<b>Support Status</b>	<b>Parameter</b>	<b>Category</b>
Bear Creek arm	Fish Consumption Use	Partially Supporting	mercury in largemouth bass and freshwater drum	5a
Extreme upper Angelina River arm	Fish Consumption Use	Partially Supporting	mercury in largemouth bass and freshwater drum	5a
Lower Angelina River arm	Fish Consumption Use	Partially Supporting	mercury in largemouth bass and freshwater drum	5a
Lower Attoyac Bayou arm	Fish Consumption Use	Partially Supporting	mercury in largemouth bass and freshwater drum	5a
Lower Ayish Bayou arm	Fish Consumption Use	Partially Supporting	mercury in largemouth bass and freshwater drum	5a
Main pool by the dam	Fish Consumption Use	Partially Supporting	mercury in largemouth bass and freshwater drum	5a
Mid-Angelina River arm (SH 147)	Fish Consumption Use	Partially Supporting	mercury in largemouth bass and freshwater drum	5a
Upper Angelina River arm	Fish Consumption Use	Partially Supporting	mercury in largemouth bass and freshwater drum	5a
Upper Attoyac Bayou arm	Fish Consumption Use	Partially Supporting	mercury in largemouth bass and freshwater drum	5a
Upper Ayish Bayou arm	Fish Consumption Use	Partially Supporting	mercury in largemouth bass and freshwater drum	5a
Upper mid-Angelina River arm	Fish Consumption Use	Partially Supporting	mercury in largemouth bass and freshwater drum	5a

Standards Not Met in Previous Years. This table indicates the parameters (if any) which were previously identified as Not Supporting or Partially Supporting the standards, or as a Use Concern with limited data, but for which there were not enough representative data from the 2004 assessment period to determine use support. Once a parameter has been identified as not supporting standards in a water body or area, this parameter is tracked until sufficient data are collected to show that the water quality standards have been met.

<b>Standards Not Met and Concerns in Previous Years</b>				
<b>Assessment Area</b>	<b>Use</b>	<b>Support Status or Concern</b>	<b>Parameter</b>	<b>Category</b>
Lower Attoyac Bayou arm	Aquatic Life Use	Partially Supporting	depressed dissolved oxygen	5c
Upper Angelina River arm	Aquatic Life Use	Partially Supporting	depressed dissolved oxygen	5c
Upper Ayish Bayou arm	Aquatic Life Use	Partially Supporting	depressed dissolved oxygen	5c
Upper mid-Angelina River arm	Aquatic Life Use	Partially Supporting	depressed dissolved oxygen	5c

Parameters Removed from the 2002 303(d) List.  
 This section indicates any parameter included on the 2002 303(d) List that has now been removed from the List.

**Parameters Removed from the 2002 303(d) List:** aluminum in water

**Additional Information.** This section gives information about the uses for which water quality standards are met or were not assessed, as well as further information about the water body. Explanations are included for parameters where standards were not met in previous years and for some of the parameters removed from the 2002 303(d)

List

**Additional Information:** The aquatic life, contact recreation, public water supply and general uses are fully supported.

This segment was identified on the 2000 303(d) List as partially supporting the aquatic life use due to aluminum in water. Because there were insufficient data available in 2002 to evaluate changes in water quality, this segment will be identified as not meeting the standard for aluminum in water until sufficient data are available to demonstrate use support.

This segment was also identified on the 2000 303(d) List as partially supporting the aquatic life use due to depressed dissolved oxygen. Because an insufficient number of 24-hour dissolved oxygen values were available in 2002 to determine if the criterion is supported, this segment will be identified as not meeting the standard for dissolved oxygen until sufficient 24-hour measurements are available to demonstrate support of the criterion.

**Concerns.** This table indicates parameters of concern which were identified by the 2004 assessment (if any). The summary data to support these concerns can be found in the accompanying data sheets.

*Use concerns* are associated with specific water quality uses. *Concerns* are associated with water quality conditions such as nutrient enrichment, sediment contaminants, and fish tissue contaminants.

<b>2004 Concerns:</b>			
<b>Assessment Area</b>	<b>Use or Concern</b>	<b>Concern Status</b>	<b>Description of Concern</b>
Main pool by the dam	Aquatic Life Use	Use Concern-Limited Data	copper (acute) in water
Upper Angelina River arm	Aquatic Life Use	Use Concern-Limited Data	aluminum (acute) in water
Upper Angelina River arm	Aquatic Life Use	Use Concern	depressed dissolved oxygen
Upper Angelina River arm	Nutrient Enrichment Concern	Concern	total phosphorus
Upper Attoyac Bayou arm	Aquatic Life Use	Use Concern	depressed dissolved oxygen

**Monitoring sites.** This table lists the TCEQ monitoring stations used to assess water quality in specific assessment areas.

<b>Monitoring sites used:</b>		
<b>Assessment Area</b>	<b>Station ID</b>	<b>Station Description</b>
Bear Creek arm	15527	SAM RAYBURN RESERVOIR NEAR MILL CREEK PARK IN THE BEAR CREEK CHANNEL
Bear Creek arm	15674	SAM RAYBURN RESERVOIR USGS SITE LC
Bear Creek arm	16787	SAM RAYBURN RESERVOIR AT MILL CREEK PARK SWIMMING AREA, 1.5MI EAST OF US96 AND STATE LOOP 149 INTERSECTION IN BROOKLAND
Extreme upper Angelina River arm	10615	SAM RAYBURN RESERVOIR AT MARION'S FERRY
Extreme upper Angelina River arm	15525	SAM RAYBURN RESERVOIR AT KINGTOWN ABOUT .25 MI. UPSTREAM OF THE ANGELINA RIVER CHANNEL IN CARIZZO BAYOU
Extreme upper Angelina River arm	16789	SAM RAYBURN RESERVOIR AT MARION FERRY BOAT RAMP, 1.9MI NORTH OF FM1669 AND SH103 INTERSECTION
Lower Angelina River arm	15522	SAM RAYBURN RESERVOIR NEAR VEACH BASIN IN THE ANGELINA RIVER CHANNEL
Lower Angelina River arm	15670	SAM RAYBURN RESERVOIR USGS SITE GC
Lower Angelina River arm	15671	SAM RAYBURN RESERVOIR USGS SITE FC
Lower Attoyac Bayou arm	15523	SAM RAYBURN RESERVOIR ADJACENT TO ALLIGATOR COVE IN THE ATTOYAC RIVER CHANNEL
Lower Attoyac Bayou arm	15667	SAM RAYBURN RESERVOIR USGS SITE IC
Lower Attoyac Bayou arm	16791	SAM RAYBURN RESERVOIR AT JACKSON HILL MARINA SWIMMING AREA, 1.5MI NW OF SH147 AND FM2851 INTERSECTION
Lower Ayish Bayou arm	15526	SAM RAYBURN RESERVOIR BETWEEN NEEDMORE POINT AND POWELL PARK IN THE AYISH BAYOU CHANNEL
Lower Ayish Bayou arm	15673	SAM RAYBURN RESERVOIR USGS SITE AC
Lower Ayish Bayou arm	15675	SAM RAYBURN RESERVOIR USGS SITE MC
Lower Ayish Bayou arm	16784	SAM RAYBURN RESERVOIR AT SAN AUGUSTINE PARK SWIMMING AREA, 3.5MI SOUTH OF FM83 AND FM1751 INTERSECTION
Main pool by the dam	14906	SAM RAYBURN RESERVOIR AT MAIN POOL APPROXIMATELY 0.94 KM NORTH OF THE POWER PLANT INTAKE
Main pool by the dam	15672	SAM RAYBURN RESERVOIR USGS SITE CC
Main pool by the dam	16786	SAM RAYBURN RESERVOIR AT EBENEZER PARK SWIMMING AREA, 1.2MI NW OF POWER PLANT INTAKE
Mid-Angelina River arm (SH 147)	10612	SAM RAYBURN RESERVOIR AT SH 147 BRIDGE SW OF BROADDUS AND NE OF ZAVALLA
Mid-Angelina River arm (SH 147)	16790	SAM RAYBURN RESERVOIR AT CASSEL-BOYKIN PARK BOAT RAMP, 0.9MI NW OF SH147 AND FM3123 INTERSECTION
Upper Angelina River arm	10613	SAM RAYBURN RESERVOIR AT SH 103, 2.3 MI. WEST OF ETOILE
Upper Attoyac Bayou arm	10614	SAM RAYBURN RESERVOIR AT SH 103, 6.5 MI. EAST OF ETOILE

<b>Monitoring sites used:</b>		
<b>Assessment Area</b>	<b>Station ID</b>	<b>Station Description</b>
Upper Ayish Bayou arm	14907	SAM RAYBURN RESERVOIR AT FM 83 BRIDGE CROSSING APPROXIMATELY 14.5 KM WEST OF PINELAND
Upper mid-Angelina River arm	15524	SAM RAYBURN RESERVOIR NEAR SHIRLEY CREEK IN THE ANGELINA RIVER CHANNEL
Upper mid-Angelina River arm	15669	SAM RAYBURN RESERVOIR USGS SITE JC
Upper mid-Angelina River arm	16792	SAM RAYBURN RESERVOIR AT HANKS CREEK PARK BOAT RAMP, 10.3MI EAST OF CITY OF HUNTINGTON
Upper mid-Angelina River arm	16793	SAM RAYBURN RESERVOIR AT SHIRLEY CREEK MARINA BOAT RAMP, 5.6MI SE OF FM226 AND SH103 INTERSECTION IN ETOILE

Published studies. This table lists the reports (if any) published by the TCEQ for water quality studies performed in the water body.

<b>Published studies:</b>		
<b>Publication</b>	<b>Date</b>	<b>Author</b>
IMS 12 Sam Rayburn Reservoir	Nov. 1973	Kirkpatrick, J.

Fish kill information. This table lists information from the Texas Parks and Wildlife Department on fish kills which occurred during the period of record.

<b>Historical fish kills:</b>			
<b>Date</b>	<b>Location</b>	<b>Fish Killed</b>	<b>Suspected Cause</b>
7/3/1998	Sam Rayburn Reservoir- main pool below SH 147 - 1.5 miles NW of R255 @ FM 1007	1771	Unknown