

Wright Patman Lake

Segment: 0302 Sulphur River Basin

Basin number: 3
Basin group: A
Water body description: From Wright Patman Lake Dam in Bowie/Cass County to a point 1.5 kilometers (0.9 miles) downstream of Bassett Creek in Bowie/Cass County, up to the normal pool elevation of 225 feet (impounds the Sulphur River)
Water body classification: Classified
Water body type: Reservoir
Water body length / area: 20,300 Acres
Water body uses: Aquatic Life Use, Contact Recreation Use, General Use, Fish Consumption Use, Public Water Supply Use

Standards Not Met in 2002				
Assessment Area	Use	Support Status	Parameter	Category
2300 acres in arm, west of dam	General Use	Partially Supporting	high pH	5c
4000 acres in upper portion of lake	Aquatic Life Use	Partially Supporting	depressed dissolved oxygen	5c
500 acres in the northeast corner of lake	General Use	Partially Supporting	high pH	5c

Standards Not Met and Concerns in Previous Years				
Assessment Area	Use	Support Status or Concern	Parameter	Category
1600 acres in upper mid-lake	Aquatic Life Use	Partially Supporting	depressed dissolved oxygen	5c
1600 acres in upper mid-lake	General Use	Partially Supporting	high pH	5c
200 acres in the northwestern tip of lake	Aquatic Life Use	Partially Supporting	depressed dissolved oxygen	5c
200 acres in the northwestern tip of lake	General Use	Partially Supporting	high pH	5c
400 acres, south dam	Aquatic Life Use	Partially Supporting	depressed dissolved oxygen	5c
4000 acres mid-lake	General Use	Partially Supporting	high pH	5c

Additional Information: The public water supply and fish consumption uses are fully supported. The contact recreation use was not assessed.

(based on data from 03/01/1996 to 02/28/2001)

This segment was identified on the 2000 303(d) List as partially supporting the general use due to high pH values in several areas of the lake. Because there were insufficient data in 2002 to evaluate changes in water quality, this segment will be identified as not meeting the standard for pH 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 in multiple areas of the lake. 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 determine support of the criterion.

2002 Concerns:			
Assessment Area	Use or Concern	Concern Status	Description of Concern
1600 acres in upper mid-lake	General Use	Use Concern-Limited Data	high pH
1600 acres in upper mid-lake	General Use	Use Concern-Limited Data	temperature
200 acres in the northwestern tip of lake	General Use	Use Concern-Limited Data	high pH
200 acres in the northwestern tip of lake	General Use	Use Concern-Limited Data	temperature
300 acres at International Paper intake	General Use	Use Concern-Limited Data	high pH
4000 acres in upper portion of lake	Aquatic Life Use	Use Concern	depressed dissolved oxygen
4000 acres in upper portion of lake	Nutrient Enrichment Concern	Concern	total phosphorus
4000 acres mid-lake	General Use	Use Concern-Limited Data	high pH
4000 acres mid-lake	General Use	Use Concern-Limited Data	temperature
500 acres in the northeast corner of lake	Algal Growth Concern	Concern	excessive algal growth
5000 acres mid-lake, below Hwy 8	General Use	Use Concern	high pH

Monitoring sites used:		
Assessment Area	Station ID	Station Description
1600 acres in upper mid-lake	14103	WRIGHT PATMAN LAKE USGS SITE EC
1600 acres southwest of dam	10213	WRIGHT PATMAN LAKE NEAR DAM APPROX 2.1KM SW OF SPILLWAY AND 1.1KM NW OF RAW WATER INTAKE STRUCTURE
200 acres in the northwestern tip of lake	14099	WRIGHT PATMAN LAKE USGS SITE BC
2300 acres in arm, west of dam	14100	WRIGHT PATMAN LAKE USGS SITE CC
2300 acres in arm, west of dam	16860	WRIGHT PATMAN LAKE IN BIG CREEK ARM APPROX. 2.4MI (3.9KM) EAST OF FM991 BRIDGE

Monitoring sites used:		
Assessment Area	Station ID	Station Description
300 acres at International Paper intake	16859	WRIGHT PATMAN LAKE ADJACENT TO INTERNATIONAL PAPER WAW WATER INTAKE STRUCTURE AND 1.5MI (2.4KM) NE OF THE NORTH TIP OF BELLS ISLAND
400 acres, north dam	14098	WRIGHT PATMAN LAKE USGS SITE AL
400 acres, south dam	14097	WRIGHT PATMAN LAKE USGS SITE AC
4000 acres in upper portion of lake	10214	WRIGHT PATMAN LAKE AT SH 8
4000 acres mid-lake	14102	WRIGHT PATMAN LAKE USGS SITE DC
500 acres in the northeast corner of lake	15061	WRIGHT PATMAN LAKE AT NORTH SHORE AT CLEAR SPRING PARK
5000 acres mid-lake, below Hwy 8	16205	LAKE WRIGHT PATMAN NEAR ATLANTA STATE PARK AT KNIGHT'S BLUFF

Published studies:		
Publication	Date	Author
IMS 17 Lake Wright Patman	Jan. 1975	Twidwell, S.

Historical fish kills:			
Date	Location	Fish Killed	Suspected Cause
8/22/1996	Wright Patman at and above HWY 8 bridge to Anderson Creek	100	Low Dissolved Oxygen