



Caddo Lake: Watershed Protection Plan

Water Body	Caddo Lake (Seg 0401)
Location	Harrison and Marion Counties
River Basin	Cypress Creek (04)
Contractor	Northeast Texas Municipal Water District (NETMWD)
Project Period	February 14, 2007 to August 31, 2010
Project Total	\$600,000 (Federal 60% and Local 40%)

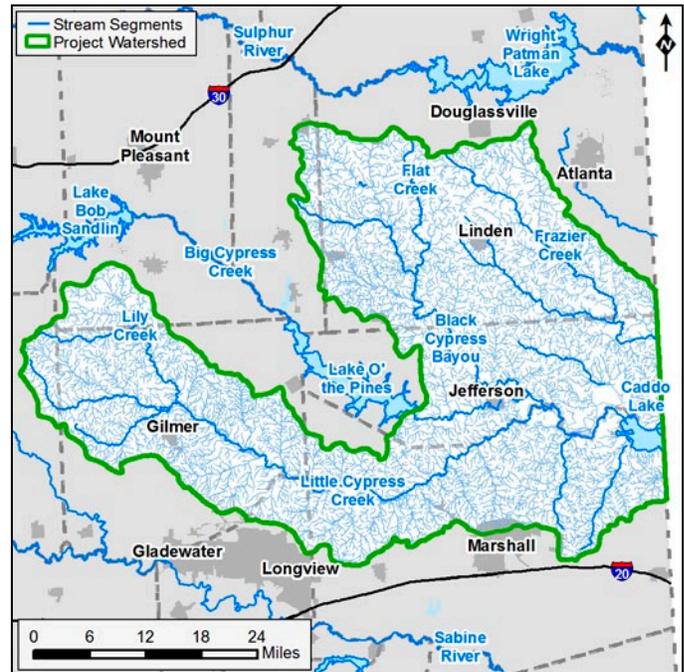
Background

The Caddo Lake watershed is in northeast Texas on the border of Louisiana near Shreveport. It is fed by the Big Cypress Creek, a tributary to the Red River. Land uses in the watershed are predominately forest and pasture, and major commercial activities include forestry, poultry, and cattle. The largest city in the watershed is the City of Gilmer with a population of about 5,000 people. Caddo Lake displays wetland, stream, and open lake characteristics at various locations and is one of the best examples in the southern United States of a mature Baldcypress forest. The area is known for its exceptional wildlife diversity.

Caddo Lake and segments in the contributing watershed are listed on the state's 303(d) List as impaired due to bacteria, low dissolved oxygen, mercury in edible tissue, and pH. Stakeholders in the watershed have initiated a Watershed Protection Plan (WPP) project to address six bacteria and 15 dissolved oxygen impairments identified in the Draft 2010 Texas 303(d) List.

Project Description

The WPP project consisted of project administration, meeting facilitation, water quality monitoring, modeling, and report preparation tasks. A comprehensive list of watershed stakeholders was developed, and numerous public meetings were conducted in order to communicate with and receive information from stakeholders. An ambitious technical approach consisting of two watersheds, one hydrologic, and one water quality models were utilized to characterize bacteria and nutrient sources in the watershed and to evaluate their impact on stream and lake water quality. Draft technical project reports preliminarily identify livestock, wildlife, pets, on-site sewage facilities, poultry (lagoon wastes and dry litter), and wastewater treatment facilities as significant sources of bacteria and nutrients in the watershed. The modeling assumptions will be evaluated, and a plan for verifying their accuracy will be developed. Information regarding the WPP and the



draft technical project reports can be found on [NETMWD's website](#).

Current Status

Draft technical reports are under review.

For More Information

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Websites

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Project Highlights

- **05/2006** – NETMWD, in coordination with TCEQ and the United States Geological Survey (USGS), installed a stream gauge station to monitor flow and conduct associated water quality monitoring on tributaries to Caddo Lake.
- **08/2006** – A Clean Rivers Program (CRP) special study was conducted in cooperation with the USGS to determine the distribution of phosphorus and organic carbon in riverine sediment within the Caddo Lake watershed.
- **08/2007** – The CRP funded a special study that provided intensive monitoring of nutrient loading from all the major tributaries to Caddo Lake.
- **10/2007** – The Lake Management Plan for invasive species in Caddo Lake was prepared by Texas Parks and Wildlife Department.
- **03/2008** – NETMWD was awarded funding from the TCEQ 106 grant for Giant Salvinia control in Caddo Lake.
- **11/2008** – The Technical Memo was completed presenting data inventory, summary statistics, trend analyses, and modeling recommendations for the Caddo Lake watershed.
- **01/2010** – The quality assurance project plan was approved for the Caddo Lake WPP project.
- **06/2010** – The 2010 Texas Surface Water Quality Standards were adopted by TCEQ. These standards included significant changes to the standards for Caddo Lake and the contributing watershed.
- **11/2010** – The Draft WPP Technical Memoranda was distributed for stakeholder review. It documented the water quality goals for the watershed, characterized pollutant sources, the load reductions necessary to achieve water quality goals, and the possible management strategies needed to achieve water quality goals.