

East Texas Region

Study No. 4

Lake Murvaul Study

Prepared for:

East Texas Regional Water Planning Group

Submitted by:

Schaumburg & Polk, Inc.

Freese and Nichols, Inc.

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DRAFT

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DRAFT REPORT

December 2008



MEMORANDUM

TO: East Texas Regional Water Planning Group

FROM: Simone Kiel

SUBJECT: Lake Murvaul Study

DATE: December 18, 2008

Background:

The 2006 East Texas Region Water Plan shows a projected deficit for steam electric power in Rusk County beginning in 2020. This deficit is attributed to increased demands at the Luminant Martin Lake facility located in northeast Rusk County. The proposed strategies to meet these needs include: 1) exercise a contract option with the city of Dallas for water from Lake Fork, and 2) increase the supply from Toledo Bend Reservoir. Collectively, these strategies provide 28,074 acre-feet per year.

As an alternative strategy, Lake Murvaul may have available unpermitted yield that could potentially be used by the Lake Martin facility in lieu of some of the recommended surface water supplies or local groundwater. Lake Murvaul is owned by the City of Carthage and the sale of water from this project could be a potential revenue source for the City. Considering these factors, the East Texas Regional Water Planning Group authorized Special Study No. 4 to evaluate the feasibility of using water from Lake Murvaul for steam electric power demands at the Luminant Energy Martin Lake facility. This study is funded through a Research and Planning Grant sponsored by the Texas Water Development Board.

Scope of Work:

Study No. 4, *Supply form Lake Murvaul to Martin Lake*, consists of four tasks:

1. Meet with the City of Carthage and Luminant Energy to discuss the project and confirm that both parties are interested in evaluating this option.
2. Evaluate the yield of Lake Murvaul.
3. Develop and evaluate a water management strategy to move water from Lake Murvaul to Martin Lake.
4. Prepare a report.

Findings:

Freese and Nichols, Inc. contacted Luminant Energy regarding the concept of using unpermitted yield from Lake Murvaul to supply water to the steam electric plant at Martin Lake. Mr. Johnson of Luminant Energy said that at this time Luminant has no plans for obtaining water from Lake Murvaul to supply Martin Lake. Luminant Energy has exercised its contract option with the City of Dallas and can now transfer 13,000 acre-feet per year from Lake Fork to the station at Martin Lake. Luminant has built a pipeline to use this water.

Freese and Nichols attempted to contact the City of Carthage, but were unable to reach the City.

Since Luminant Energy is not interested in pursuing this study at this time, no further work was conducted.