

July 8, 2002

FOR FURTHER INFORMATION,  
PLEASE CONTACT:

Derek Smithee, Chief  
Water Quality Division  
Oklahoma Water Resources Board  
(405) 530-8800

***Water Quality Improving in Lake Thunderbird***

A new report by the Oklahoma Water Resources Board (OWRB) indicates that water quality in Lake Thunderbird, near Norman, is improving. The report, available on the OWRB Web site at [www.owrb.state.ok.us](http://www.owrb.state.ok.us), reveals that chlorophyll concentrations fell significantly last year, an indication of the reduction of algae and overall improvements in water quality, water clarity, and habitat.

While it is normal for lakes as they age to go through a process called eutrophication, or high productivity of algae, chlorophyll-a concentrations above 20 micrograms per liter ( $\mu\text{g/L}$ ) indicate that algal productivity has reached an excessive stage and must be reduced, says Paul Koenig, an OWRB water quality specialist. "In 2001, 20percent fewer samples from the lake showed chlorophyll concentrations above 20  $\mu\text{g/L}$ , and the average concentration decreased from 23  $\mu\text{g/L}$  in 2000 to 15  $\mu\text{g/L}$  in 2001."

The OWRB initiated its study in July 2000 through cooperative agreement with the Central Oklahoma Master Conservancy District (COMCD), which manages Lake Thunderbird and oversees the delivery of the lake's water to Norman, Del City, and Midwest City. The role of the OWRB has been to collect and analyze water quality data from the lake and provide recommendations to the COMCD on improving water quality. "Subsequent improvements in the past year have been a direct result of management decisions by the COMCD, particularly the decision to cease operation of an under-powered aeration system, which was actually stimulating algal growth," Koenig pointed out.

The Thunderbird study also included a capacity determination for Lake Thunderbird to determine proper sizing for a new aeration device. OWRB staff recommends that a new, adequately sized aeration system be installed as part of the lake's water treatment system to further decrease algal productivity and significantly reduce taste and odor problems.

For more information on the Lake Thunderbird study or report, please contact Derek Smithee or Paul Koenig at 405-530-8800.

###