THIRD-PART RULEMAKING TO AMEND REGULATION NO. 6, REGULATIONS FOR STATE ADMINISTRATION OF THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)

EXECUTIVE SUMMARY

Central Arkansas Water (CAW) supplies drinking water to 17 cities and communities in central Arkansas. CAW currently serves a population of nearly 400,000 people and estimates that it will serve a population of 575,000 by the year 2050. Lake Maumelle is one of two principal sources of drinking water for CAW. Lake Maumelle is one of the cleanest water supply lakes in this region of the country. One of the primary reasons for the high quality of the water is that much of the watershed has remained undeveloped. However, potentially up to 53 percent of the land area of the watershed is developable. The effect of development on water quality is a significant concern to those who use Lake Maumelle as a source of drinking water.

CAW has developed extensive watershed and lake models to evaluate and predict how the water quality would respond to various management initiatives. The models allowed a determination of allowable pollutant loads to the lake. Two scenarios were developed to describe potential future development: Scenario 1 – characterized by large lot development and, Scenario 2 – characterized by denser development near the lake.

Under either scenario, future water quality conditions would not meet target water quality levels. Excessive levels of sediment, phosphorus, nitrogen and total organic carbon loading would threaten public health, water supply operations and recreation.

The largest potential sources are those associated with new developments and the wastewater from those new residences. Direct surface wastewater discharges were found to pose the greatest threat. Significantly, if any direct wastewater discharges are allowed into the lake, it will be impossible to meet lake water quality targets. Non-point source loading and stormwater require 100 percent of the allowable load for new developments. Accordingly, in order to allow a reasonable level of development in the watershed while protecting the quality of the drinking water supply, CAW proposes a complete prohibition on direct surface discharges other than stormwater into the Lake Maumelle Basin.

