

# Kentucky Reservoir Operations Under the ROS Preferred Alternative

## Background

The final Environmental Impact Statement (FEIS) for TVA's Reservoir Operations Study recommends changes in the policies that guide TVA's operation of the Tennessee River and reservoir system. These changes would better align TVA's operating policies with the values expressed by the public during the comprehensive study of how TVA operates the reservoir system.

The FEIS includes the Preferred Alternative developed by TVA staff based on extensive public and agency input and detailed technical analysis. The Preferred Alternative combines elements of the alternatives outlined last summer in the draft Environmental Impact Statement, including elements designed to enhance navigation, reservoir recreation, tailwater recreation, and scenic beauty. Adjustments also were made to avoid or reduce unacceptable impacts to other objectives, including flood risk, water quality, power supply, aquatic species, wetlands, and shoreline erosion.

Under the Preferred Alternative, TVA would no longer target specific summer pool elevations. Instead reservoir operations would be aimed at managing the flow of water through the system to meet the objectives identified by the public and others who participated in the scoping process conducted at the beginning of the study.

This approach would increase recreation opportunities on tributary storage reservoirs by limiting the drawdown of those reservoirs from June 1 through Labor Day, as long as rainfall and runoff are sufficient to meet project-specific and system-wide flow requirements. Flow requirements also would be used to protect water quality and aquatic resources, ensure year-round commercial navigation, and provide an adequate supply of cooling water for TVA's coal-fired and nuclear power plants. Additional water—beyond that required to meet flow requirements—would be released from tributary storage reservoirs only when necessary to preserve the reliability of the TVA power system.

Additional information on the ROS and TVA's Preferred Alternative is available online at [www.tva.com/ros](http://www.tva.com/ros) or by calling TVA toll-free at 888-882-7675. A printed copy of the FEIS also may be available at your local public library.

## Next steps

The public is invited to review and comment on the final Environmental Impact Statement (FEIS) for TVA's Reservoir Operations Study during a 45-day period continuing through April 12, 2004.

Comments may be submitted by accessing the ROS web site at [www.tva.com/ros](http://www.tva.com/ros); by mail to TVA Reservoir Operations Study, WT 11A, 400 West Summit Hill Dr., Knoxville, TN 37902; or by fax to 865-632-3146. If you would like more information, please call TVA toll-free at 888-882-7675.

The TVA Board of Directors is expected to make a decision in late spring 2004 about whether to change TVA's reservoir operating policies.

## How Kentucky will be affected

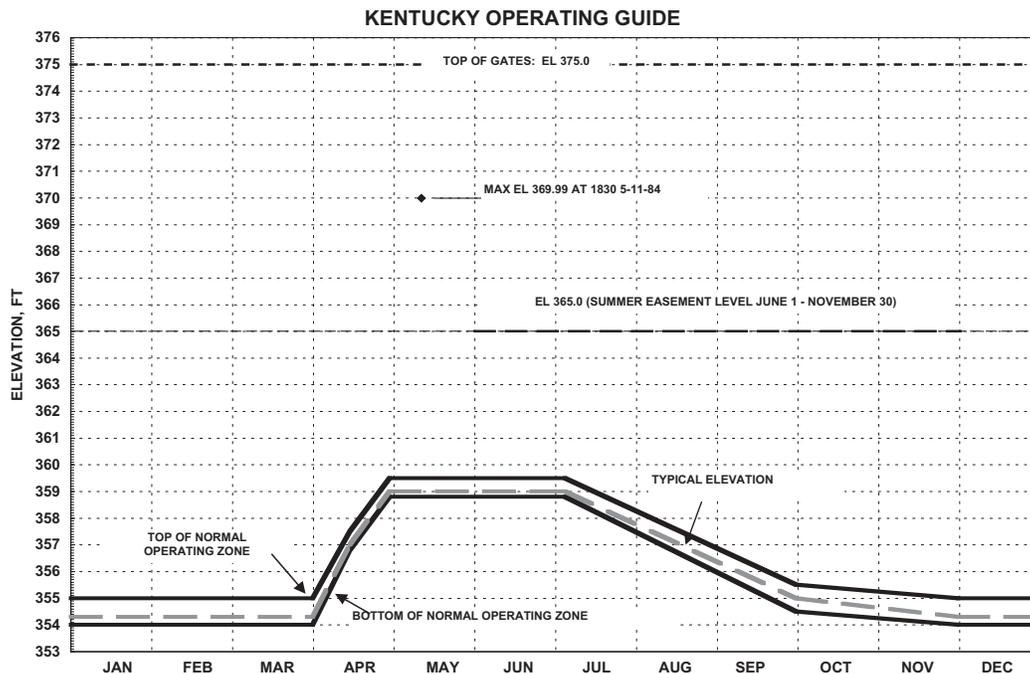
Water levels on Kentucky and Barkley reservoirs would remain the same under the Preferred Alternative based on concerns expressed by some members of the public and by the U. S. Army Corps of Engineers, the U. S. Fish and Wildlife Service, the Tennessee Wildlife Resources Agency, and Kentucky Fish and Wildlife.

Early in the study, the Corps of Engineers expressed the view that any change affecting flood-storage capacity in Kentucky Reservoir would require a major study involving both the Cumberland and the lower Ohio/Mississippi River systems, which would require Congressional authorization and funding. The Corps' position reflects the importance of Kentucky Reservoir in regulating the water that flows into the Ohio and Mississippi rivers from the Tennessee River watershed. Kentucky provides four million acre-feet of storage capacity—more than any other TVA reservoir.

The U.S. Fish and Wildlife Service opposed changes to water levels on Kentucky based on two federal rules: the Migratory Bird Treaty Act and the Executive Order on Migratory Birds, which establish protection for geese, ducks, shorebirds, and songbirds and other neotropical migratory birds. Specifically, Fish and Wildlife believes that deeper water levels would reduce the amount of mudflats available to wintering waterfowl in the Tennessee National Wildlife Refuge on Kentucky Reservoir and Cross Creeks National Wildlife Refuge on Barkley Reservoir. This could affect the infrastructure of these refuges and force changes in their management strategies, resulting in increased costs.

The Tennessee Wildlife Resources Agency and Kentucky Fish and Wildlife rejected changing water levels on Kentucky because of potential impacts to fisheries, especially crappie. These agencies also believe that keeping summer pool levels up longer on Kentucky could negatively impact stands of button bush that fish use as breeding nurseries and expressed concern about potential impacts to shorebirds and waterfowl.

TVA is unable to recommend changes in Kentucky or Barkley operation until the impact of such changes on flood-storage capacity in Kentucky, wading bird habitat, and fisheries can be fully evaluated.



**Top of Gates** represents the maximum controlled elevation at a project, typically the top of a spillway gate in a closed position or crest elevation of an uncontrolled outlet structure.

**Top and Bottom of Normal Operating Zone** depicts a zone of normal operation for power production and mosquito control operations (in the summer). During high flow periods, the top of the normal operating zone may be exceeded for the regulation of flood flows.

**Preferred Alternative Typical Elevation** is the reservoir elevation that represents the typical headwater elevation (at the dam) for a project. During high flows, upstream elevations on the reservoir will be higher due to the buildup of head required to pass water through the reservoir.