Reservoir Operations Study



The Record of Decision on TVA's Reservoir Operations Study is available on TVA's Web site at www.tva.com.

TVA Board Approves Preferred Alternative

- On May 19, 2004, the TVA Board of Directors approved a new policy for operating the Tennessee River and reservoir system. This policy will take effect on June 1, 2004.
- The policy maintains TVA's ability to meet its fundamental responsibilities for flood control, commercial navigation, and power production while protecting water quality and accommodating the increased demands created by recreational and residential growth.
- The new policy is the result of TVA's Reservoir Operations Study, a comprehensive review of how TVA operates 35 of the 49 dams and reservoirs in the river system.
- The participation of the public was a key component of the Reservoir Operations Study. TVA heard from thousands of members of the public across the region, including public officials, business leaders, environmentalists, recreation users, commercial shippers, water quality specialists, waterfowl enthusiasts, members of state and federal agencies, and many others.
- This input was used to define the objectives for the study, which in turn were used to evaluate alternative operating policies. The TVA Board approved the policy that best matches the objectives identified by the public at the outset of the study.
- Under the new operating policy, the focus of TVA reservoir operations will shift from achieving specific summer pool elevations on TVA-managed reservoirs to managing the flow of water through the river system.
- Flow requirements will be used to increase recreation opportunities on tributary storage reservoirs while protecting water quality and aquatic resources, ensuring year-round navigation, and preserving the reliability of the TVA power system.
- The new policy was carefully crafted to avoid any increase in flood damages for flood events up to a 500-year magnitude (a flood event with a 1-in-500 chance of happening in any given year) and to improve flood protection at locations on the main river.
- The new policy also addresses public comments about the importance of drawing water from tributary storage reservoirs equitably. When water must be released from these reservoirs to meet downstream flow requirements, the operating objective would be to balance pool levels by drawing a fair share of the needed water from each reservoir.

Tributary reservoir operation changes

The new operating policy will improve recreation on tributary reservoirs by:

- Limiting the drawdown of 10 tributary reservoirs (Blue Ridge, Chatuge, Cherokee, Douglas, Fontana, Hiwassee, Norris, Nottely, South Holston, and Watauga) from June 1 through Labor Day.
- Allowing higher winter water levels on the same 10 reservoirs, as well as on Boone Reservoir.



- Attempting to fill Great Falls Reservoir to its summer operating level by Memorial Day.
- Providing expanded releases for tailwater recreation at five additional tributary projects (Apalachia, Ocoee No. 1, Norris, Watauga/Wilbur, and South Holston), including advance notice of water release schedules.
- Providing continuous minimum flows between Apalachia Dam and Powerhouse from June 1 through November 1.

Main-stem reservoir operation changes

To reduce flood risk along the Tennessee River, the spring fill on Fort Loudoun/Tellico, Watts Bar, and Chickamauga reservoirs will occur more gradually, assuming normal rainfall and runoff. As in the past, half the normal spring fill will occur in the first week of April to ensure that fish spawning areas are covered. The second half of the fill will continue more slowly and be completed by mid-May.

The summer operating zone will be maintained through November 1 on Watts Bar and through Labor Day on Chickamauga, Guntersville, Wheeler, and Pickwick.

The minimum winter pool level at Wheeler will be raised six inches, and minimum flows of up to 25,000 cubic feet per second will be provided from Kentucky Dam.

Water levels on Kentucky and Barkley reservoirs will remain the same. Changes were considered as part of the ROS, but they were not adopted because of concerns expressed by some members of the public and by other agencies regarding potential resource and flood-risk impacts.

Monitoring resource impacts

As the new operating policy is implemented, TVA will work with the U.S. Fish and Wildlife Service, the Tennessee Wildlife Resources Agency, and other federal and state agencies to monitor the effects across the watershed. This will include extensive monitoring to:

- Evaluate the effects of the changes in fill operations on Fort Loudoun/Tellico, Watts Bar, and Chickamauga reservoirs.
- Ensure that the dissolved oxygen targets adopted as part of the 1991 Lake Improvement Plan are met.
- Address impacts to sensitive cultural-resource sites related to shoreline erosion.
- Address impacts to specific wetland plant communities and threatened and endangered species.

This will enable TVA to adjust its reservoir operating policy if unexpected or unacceptable impacts are identified. Monitoring results will be available from TVA's Watershed Teams and at www.tva.com.