6. Conclusion

This report has examined the economic effects of TVA lake management policy for the region surrounding seven lakes in East Tennessee. Estimates of economic impact and economic value from a delayed drawdown through the end of September have been developed. The estimates are based on surveys of recreators and households, and an analysis of property tax records for a sample of homes on Douglas and Cherokee lakes.

Based on the survey of recreators it is estimated that $5.4 million in new spending would take place within the multi-county lake region on the part of nonresidents should drawdowns be delayed to the end of September. Inclusive of the ripple effects of the multiplier, this initial spending would yield $2.35 million in new income for area residents and 124 annual full-time equivalent jobs (or 744 jobs for the two-month period of August and September). Increased recreation activity by nonresidents would boost Tennessee (as opposed to only lake-region) income by $1.9 million and add 100 annual jobs (or 600 jobs for August and September).

Gains in economic value for residents and nonresidents of the lake region would also accrue from a delayed drawdown. Based on the preferred choice model estimates, annual economic value would rise by $39.7 million for a one-month drawdown delay and $63.3 million for a two-month drawdown delay. Norris Lake would yield the largest benefits, totaling $11.4 for one month and nearly $20 million for two months. Estimates for Fontana Lake (North Carolina) from a parallel study indicate gains in economic value of $1.7 million and $2.5 million for a one-month and two-month delay in drawdown. Based on a sample of lakefront properties on Cherokee and Douglas lakes, estimates of increased property value were estimated. For each 100 homes on Cherokee Lake it is estimated that total property value would rise by $65,000 while total value on Douglas Lake would grow by $112,210 per 100 parcels of property.

There are two limitations of the current research that need to be noted. First, the study does not consider effects of a delayed drawdown on other parts of the TVA river system, nor the effects on water quality, flood control, power generation and so on. These broader dimensions of the policy question will need to be considered to enable TVA to balance the competing uses of the river system.

Second, the estimates presented here are based on a policy change — a delayed drawdown — that has never taken place. In practice it is impossible to determine the exact nature of recreation use and home values that would follow from a delay in the summer and fall drawdown. For example, if individuals...
currently do not recreate on the lakes because they are at or near full pool for only three months of the year, it is impossible to capture contingent behavior through a recreation survey. Some of these individuals may choose to recreate in the presence of a delayed drawdown, giving rise to both positive economic impacts and economic values. Again, the survey methods employed in this study cannot capture such behavior. Similarly, it is impossible to determine with precision housing development patterns and hence property value effects under an alternative lake management policy that has never been in place. A one or two month delay in the annual drawdown may support a significant increase in residential development that would ripple through the economy and support increases in economic value for property and home owners. Yet again, the methods employed here cannot estimate these effects with any degree of precision. For example, individuals with a strong preference for access and views who are aware of the drawdowns on East Tennessee lakes would likely choose to purchase a home on a lake like Fort Loudoun which has a modest annual drawdown. Those with less strong preferences may choose a lake like Douglas or Cherokee. With higher pools for one or two months of the year, a different settlement pattern might emerge. These considerations suggest that the estimates presented here are a conservative assessment of the consequences of a delayed drawdown on the multi-county lake region in East Tennessee.