

Evaluating the Forces of Change

Rapid urbanization, growing demand for timber, increasing numbers of satellite chip mills, forest pests, and changing air quality—these issues were among those that natural resource managers, the science community, and the public raised regarding the status and likely future of forests in the South. In 1999 leaders of the USDA Forest Service, US Environmental Protection Agency, US Fish and Wildlife Service, and the Tennessee Valley Authority embarked on an effort to provide some answers. The result was the Southern Forest Resource Assessment (SFRA).

In the same way that the Fifth Resource Planning Act (RPA) Timber Assessment sought to supply reliable information on the status and trends of the nation's forested resources (see RPA series, this issue), SFRA addressed a range of issues, from the economics of supply-and-demand to concerns about resource conditions, ecosystem health, and sustainability. The report focuses on the 13 states in USDA Forest Service Region 8. Highlighted here are a few broad findings uncovered in the assessment.

- Among forces of change, **urbanization** will have the most direct, immediate, and permanent effects on the extent, condition, and health of forests.

- Total forest area will remain stable, but **subregional and compositional changes** will continue. The report forecasts little net change in the total area of forests between 1995 and 2040 as losses of forests to urban uses are expected to be offset by shifts from agriculture to forest. Urban development probably will be concentrated in the eastern parts and afforestation of agricultural land in the western parts of the South. Thus there will be a west-

ward shift in forest area.

- Timber production will increase** but forest inventories will not be depleted below current levels. Between 1995 and 2040, softwood outputs will expand by 56 percent and hardwood outputs by 47 percent. Softwood inventories will continue to expand throughout; hardwood inventories will expand until 2025 and then decline slightly between 2025 and 2040.

- Investment in **pine plantations will expand** to meet increased softwood demand, which will have implications for the ecological characteristics of southern forests. Pine plantations enhance timber productivity; for example, planted forests accounted for 15 percent of timberland but contributed 35 percent of annual softwood removals between the 1980s and 1990s. Increases in pine plantation acreage could also result in varying ecological changes, depending on stand origin and management.

- Forecasts of increasing timber harvests imply **more jobs in the wood products sector**. The wood products industry currently accounts for about 6 percent of jobs and 8 percent of income in the region. In some rural parts of the South, these percentages are much higher and the industry has represented a majority of the local base economy.

- Forests also contribute to the quality of life in the region by providing opportunities for recreation, visual backdrops, and environmental quality. While changing forest conditions will benefit some people, they may cost others; also, there is likely to be **increased debate over forest uses** in areas outside the traditional production core of the South.



- Southern forests have proven resilient but some components are scarce and therefore at risk. During the 20th century, the South recovered from a largely cutover, exhausted, and eroded condition to become one of the most productive forest regions in the world. But the presence of numerous **imperiled animal species and increasingly rare forest communities** are reasons for concern. Scarce forest types have high ecological value. To borrow the adage from economics, scarcity defines value. The rare forest communities in the South have disproportionately high ecological value. Thus, much concern about biodiversity is focused on these relatively small shares of the forest landscape.

The Southern Forest Resource Assessment was made available in draft form for public comment and is now undergoing final preparation for release in mid-2002. The October/November 2002 issue of the *Journal* will spotlight the assessment, its findings, and implications for the nation's forests.

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