

Department of Forest Resources Leads Assessment of Urban Forest Cover and Structure in the Greenville-Spartanburg Metropolitan Area

The Issue: In the Upstate Region of northwestern South Carolina, the I-85 corridor has experienced explosive growth over the past 20 years. The most rapidly urbanizing part of the corridor, Greenville County, had a 1999 population equivalent to Atlanta in 1950. Population growth in this Upstate MSA over just the 1990 to 1999 period was 37 percent (*per U.S. Bureau of the Census, Census of the Population, 1930 to 1990, and 1999*). Even more alarming, during the same period, the rate of land conversion to urban uses has been estimated to be greater than 200 percent. (*Upstate Forever*)

The Analysis: The Department of Forest Resources received funding to coordinate a project, entitled *Assessment of Urban Forest Cover and Structure In The Greenville-Spartanburg Metropolitan Area: Implications and Opportunities for Local Policy Changes* to assess and monitor the urban forest resources of the GSP corridor to provide a base understanding of these resources and how they change over time. This information is essential to the improvement of resource management practices in the area, and to achieving all of the concomitant benefits of a healthy urban forest system. The management focus of this study has been selected to 1) address the lack of critical urban forest resource information for the area; 2) to identify forces for change in the urban forest and their influence on its use and management; and 3) to collect information essential to utilizing predictive models being developed to estimate the influence of change on the urban forest and the community.

The project, a cooperative venture involving the Strom Thurmond Institute and Pinnacle Consulting Group, is well under way and should be completed by April 2003. The study area, approximately 750 square miles, includes all of the key municipalities in the corridor, plus a window of five miles on either side of the major highways serving the area. The project will 1) describe and quantify the urban forest structure; 2) document change in forest cover over time (1981 – 1999); 3) evaluate the impacts of those changes; 4) establish baseline information and permanent inventory plots for future assessments; 5) use the results to inform and educate public policy makers, the private sector, and the public; and 6) be used to produce a strategy for mitigating past problems and conserving existing urban natural resources. The study area presently encompasses many urban forest fragments and many sensitive components associated with critical riparian zones. Many of these forest remnants have significant potential for protection and enhancement through public greenspace programs, provided management programs are developed and implemented soon.

Using the Information: This project will 1) establish sound local information to enable the SC Forestry Commission, Clemson Extension, and other agencies to provide comprehensive educational programs, demonstration projects, and technical assistance on maintaining and managing the community forest; 2) improve the public and private sector understanding of the benefits of preserving and enhancing existing tree cover; 3) encourage local governments and the private sector to preserve, expand, and maintain community tree cover through codes and best practices; and 4) expand on-going USDA Forest Service research and educational efforts by providing additional southeastern information to test UFORE and other urban forestry predictive models.