



## **Regional Sustainable Land Use Project**

Sustainable Sandhills was awarded a 3 year grant by the USEPA's Collaborative Network for Sustainability program in July, 2005. The Project goal is to integrate sustainability planning into the day-to-day operations of the governments and communities in the Sandhills. The North Carolina Sandhills region is defined as an eight county area: Cumberland, Harnett, Hoke, Lee, Montgomery, Moore, Richmond, and Scotland – approximately 2.5 million acres of land. The land of these counties contains the entire Sandhills/Longleaf Pine ecosystem in North Carolina, considered one of the 21 most endangered ecosystems in the United States. The original geographic extent of the project has since been expanded to include three other southeastern NC counties that are active participants in the BRAC Regional Task Force initiative – Bladen, Robeson and Sampson counties.

As in much of the Southeastern U.S., robust population growth is significantly impacting the infrastructure and landscape in our region. The following examples are some of the recent impacts that affect the long-term sustainability of the region:

- The region recently received its first non-attainment deferred designation for poor air quality. Cumberland County was designated by EPA as a non-attainment deferred area for the 8-hour ozone standard. An agreement was made between NCDENR and local governments to significantly improve air quality in Cumberland County by 2007.
- A recent four-year drought resulted in emergency connections between water supply systems, mandatory water-use restrictions, and the threat of water system failure in many parts of the region. The current year drought is being discussed as potentially becoming the "drought of record" for the region.
- A number of the counties in the region are considered "Tier 1 or 2" communities, meaning they are the most economically distressed in the state - based on population growth, unemployment rate, and income.
- The pressure to develop farmland, forests and natural areas for suburban development is fragmenting the Sandhills' unique longleaf pine ecosystem, reducing the amount of land available to sustain rare and endangered plants and animals, as well as providing other ecosystem services and recreational areas for the communities of the region.
- The Base Closure and Realignment action will result in additional population growth for the region. Adjusted projections for population growth in the region by year 2030 now exceed 250,000 new residents.

A coordinated approach to economic development, cultural and natural resource preservation and enhancement is needed to maintain and improve the quality of life in the region.

Sustainable Sandhills is participating in ongoing regional efforts to conserve land in the Sandhills region led by the NC Sandhills Conservation Partnership (NCSCP). The participants in the NCSCP have made valuable contributions to fostering a regional approach to land use planning. This project is building on these efforts, creating an integrated, systems-oriented Land Use Decision Support Tool. It will incorporate community input on economic, environmental, and social concerns with the results of the previous regional land use efforts.

## **The Suitability Models**

This project will create a set of GIS-based models of land suitability to balance development, conservation and community. The models and resulting maps and tables are intended to enhance each local community's ability to assess the implications of the land use priorities they develop. The project requires a unique collection of data because of the bounds of the ecosystem and because no other organization or political entity coincides with the eight (or eleven) county region. Thanks to a partnership with the Sandhills GIS Association and the NC Department of Commerce's Division of Community Assistance, Sustainable Sandhills has access to a comprehensive Sandhills GIS database with annually updated and integrated GIS data sets. And thanks to a recent partnership with the BRAC Regional Task Force (BRAC RTF), the models and data layers used by this project have been extended to include the three additional counties mentioned above.

Maps and statistics produced by the model will inform local and regional planning processes and the land use decisions that affect sustainability. The model will:

- Use data developed and maintained by regional partners as well as data readily available from state sources (NC One Map).
- Integrate GIS data layers that depict land cover, land use, natural resources, environmentally sensitive areas, protected areas, infrastructure, developed areas, socioeconomic characteristics, cultural and historic resources, and other themes relevant to a sustainable future;
- Integrate layers in ways that will be transparent and explainable;
- Incorporate criteria for selecting, rating, ranking, and weighting the layers generated by the planners, decision makers, and community representatives in the set of planning workshops;
- Produce output (maps and statistics) that will be easily accessible, meaningful, reliable, and simple enough to guide plans and decisions.

## **Today's Meeting**

The purpose of today's meeting is to review the results of the first two years of this three year project. We will review the process and technical details of the Suitability models, and demonstrate how we envision the resulting maps and statistics could be integrated into the day-to-day work of local planners. We have designed the workshop to collect feedback on the process, models and maps from YOU – the region's planning community. We realize that the models and maps must be useful for you – or you won't use them! Thanks for your interest and your constructive feedback on how we can best complete our work on the project.

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