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BUILDING A SCIENTIFIC FOUNDATION FOR SOUND ENVIRONMENTAL DECISIONS

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ECOLOGICAL RESEARCH PROGRAM

US EPA ARCHIVE DOCUMENT

DECISION SUPPORT TOOLS GUIDE REGIONAL GROWTH

Issue:

With its population expected to nearly double between now and 2030, the two-state region in and around Charlotte, N.C. is facing a severe test of its natural and man-made resources. The area is required by state authorities to produce a growth-management plan to comply with air quality standards. The challenge for area planners is to guide growth with a regional perspective that sustains the environment and provides quality of life for residents.

Science Objective:

The Sustainable Environment for Quality of Life (SEQL) is a federal, state, and local partnership, including the U.S. Environmental Protection Agency, 15 counties and over 100 political jurisdictions in both North and South Carolina. This collaboration is addressing current issues that affect the region's air, land, and water quality, and is providing plans for protecting the

environment and quality of life in the future.

EPA's Office of Research and Development is working with SEQL partners through its Regional Vulnerability Assessment (ReVA) program to develop a Web-based toolkit for use by local decision-makers, land-use planners and other interested parties. Different possible development plans are being studied using ReVA. By using the toolkit tailored to the region's specific needs, officials will be able to make more informed decisions about guiding the region's future growth.

Application and Impact:

SEQL is assisting area officials to plan for growth that takes into account impacts on human well-being and the environment. Local leaders have formed an alliance to allow strategic planning to take place across regional boundaries. In addition, SEQL is allowing

individual jurisdictions to consider land use and other issues on a more regional basis, not just by each locality. Now, questions of land use and other issues that impact the environment are being looked at on a broader scale.

References:

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Smith, E.R.; McKinnis, P.; Tran, L.T. and O'Neill, R.V. The effects of uncertainty on estimating the relative environmental quality of watersheds across a region. *Landscape Ecology*, 2006, 21:225-231.

SEQL in the Greater Charlotte Bi-State Region: Tackling Environmental Challenges In a Growing Metropolitan Area. U.S. Environmental Protection Agency, Washington, D.C., EPA/456/R-06/001, 2006. Available at: www.epa.gov/air/toxicair/community/seql_report.pdf

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