

## EXECUTIVE SUMMARY

The single most important factor that limits the continued growth and economic development of the Upstate is the capacity to treat wastewater. The current capacity of 64 million gallons per day can barely satisfy present needs, yet demand is projected to nearly double in just 20 years. The problem is aggravated by the fact that the Upstate is a "headwaters region" where the flow in our rivers and streams is relatively small. The Upstate Roundtable was formed to develop a 20-year plan for meeting this challenge.

This plan focuses on the need for a regional approach to wastewater treatment planning in the five Upstate counties drained by the Saluda, Reedy and Enoree Rivers. The counties include Anderson, Greenville, Laurens, Pickens and Spartanburg.

The plan provides an inventory of current assets—facilities now in operation and their current and available capacities—and it projects future growth in each of the three basins in terms of development, wastewater flow and potential locations for new regional treatment facilities. These facilities play a major role in the plan, which forecasts the need for seven facilities to be constructed, six current plants to be upgraded, and 12 older plants to be consolidated or closed.

The proposed system would handle anticipated increases in wastewater flow of 150, 50 and 125 percent, respectively, in the Saluda, Reedy and Enoree River Basins. By the year 2015, an estimated capacity of 124 million gallons per day will be needed to serve the three basins. The cost to build the plants and trunk lines to handle that volume is projected at \$362 million (in 1994 dollars).

The plan reviews a variety of issues that affect wastewater treatment capacity. These issues are divided into three broad categories: capacity, management and planning.

Several strategies should be adopted to optimize future capacity. For example, existing treatment capacity can be increased by implementing water conservation programs and recovering unused capacity allotted to industrial customers. Sewer capacity can be increased by solving infiltration and inflow problems; river capacity can be optimized by locating mid-size regional treatment plants at specific points on the rivers. The plan also examines strategies associated with the need to change metals limitations, control nonpoint sources of pollution, and improve river modeling techniques. Additionally, alternatives must be found for wastewater treatment discharges during low-flow conditions. These include alternate effluent uses, land application, reuse, effluent diversion to larger bodies of water, controlled effluent releases based on river flow, and alternate water quality standards for specific river segments.

To govern river capacity for the region as a whole, the plan recommends that a basin manager oversee each of the three basins. This manager would deal with issues such as coordination of entities providing service, controlling nonpoint sources of pollution, and establishing intergovernmental agreements for the sharing of services.

Common programs are needed for the management of sludge disposal as well as programs to control septage and oil and grease entering the sewer system.

The successful financing of a regional wastewater treatment system depends on interagency cooperation and the coordination of resources. A variety of potential alternative capital financing services are available, including commercial banks, the State Revolving Loan Fund, traditional general obligation and revenue bond financing, and joint ventures with counties and local sewer providers. Since market and investor preferences change over time, each of these alternatives should be examined to determine the most cost-effective financing vehicle available as specific projects are undertaken.

The plan calls for agencies to work together to explore the feasibility of federal funding for construction. The concept of an access fee should be explored as a potential source of additional revenue to help defray construction costs. Furthermore, an interagency development fund should be established to finance specific projects after all other avenues of funding have been exhausted.

The Upstate has a long history of self-reliance in meeting challenges. The demand for providing modern, cost-effective infrastructure is vital to the continuing success of the Upstate. Only through regional cooperation and coordination can this challenge be met successfully.