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FOR IMMEDIATE RELEASE

UPPER SECTIONS OF LAKE GREENWOOD SEVERELY IMPACTED BY SEDIMENT DEPOSITS

A new study shows that the upper sections of Lake Greenwood have been severely impacted by sediment. These sections of the lake have lost 45 to 60 per cent of their original capacity and now contain enough sediment to fill over one million dump trucks.

The study was performed by the Saluda-Reedy Watershed Consortium, in collaboration with the Natural Resources Conservation Service (NRCS), a division of the U.S. Department of Agriculture. The Consortium is a broad-based group of non-profit organizations, universities, private consultants and public agencies, working together to protect and improve water quality in the Saluda-Reedy watershed.

Brad Wyche, Executive Director of Upstate Forever, a nonprofit organization that serves as the Consortium's project coordinator, said, "This study provides, for the first time, scientifically-based estimates of the amount of sediment deposited in the upper sections of Lake Greenwood. The results should be a wake-up call on the urgent need to take action to protect the lake."

Lake Greenwood, an 11,400-acre lake constructed in 1941, is a critically important economic and recreational asset to the region. It is the primary source of drinking water for the Greenwood community and contributes significantly to the area's economic well-being by attracting development, providing water-based tourism and recreation, and generating hydroelectric power. The lake has a watershed area of 1,165 square miles, including much of the rapidly growing urban Greenville area. The Reedy and Saluda Rivers are the lake's principal sources.

The results of the study are summarized in the following table:

Portion of Lake Surveyed	Area of Survey Unit (acres)	Estimated Volume of Sediment Accumulated Since Construction (cubic yards)	Percent of Lake Storage Volume Lost to Sediment
Rabon Creek	145	938,435	45
Reedy River	329	2,704,107	60
Saluda River, Turkey Crk, Mulberry Crk	196	1,672,592	60
Upper Lake Greenwood	152	1,027,692	46
Camp Branch	53	866,623	56
Total – All Areas Studied	875	7,209,449	53

The volume of sediment accumulated in these sections of the lake is roughly equal to:

- Six and one half times the volume of Ericsson Stadium in Charlotte, measured from the field to the top of the highest seats (roughly 1.1 million cubic yards).
- Enough to fill over one million dump trucks (standard 7 cu.yd. trucks).
- 13.6 tons of soil from every acre in the watershed (745,600 acres).

It is important to recognize that the surveyed areas represent only a small portion of Lake Greenwood (approximately 7%). Moreover, it does not take into account extensive areas that have accumulated so much sediment that they are now above the normal water level of 439 feet elevation and are vegetated. Thus, the results presented in this study are considered very conservative.

The study also measured water depths throughout the lake above the Highway 221 Bridge. These depths ranged from less than five feet in the upper reaches of the lake to 25 to 30 feet at the Highway 221 bridge. (There is a very small part of the lake at and near the bridge that is over 30 feet deep). These measurements suggest that the sedimentation problem is not confined to the upper sections but affects the entire lake (above the Highway 221 bridge).¹ Future studies will assess this issue in more detail.

Kim Kroeger, NRCS geologist who led the field survey commented, “All lakes will eventually fill in, but under natural conditions that normally takes centuries to occur. What is happening at Lake Greenwood is that this process has been dramatically accelerated by land use activities and poor conservation practices in the watershed. Land is being disturbed and altered, and it's obvious that huge volumes of soil have ended up in the lake.

The amount of sediment in the upper reaches of Lake Greenwood is very troubling for several reasons: 1) the accumulation of sediment displaces storage capacity for the local water utility (thus far nearly 4,469 acre-feet (1.45 billion gallons) in just the upper portion of the lake); 2) lakefront property values can be harmed by sediment-choked waters; 3) sediment impairs fish habitat and interferes with recreation; 4) shallow conditions create a warming effect that can contribute to algae blooms; and 5) the overall ecological balance of the lake can be significantly altered.

The study was funded by a grant made last year by the V. Kann Rasmussen Foundation to the Consortium. NRCS provided matching funds in the form of technical assistance, equipment, and expertise.

On March 7, 2003, the V. Kann Rasmussen Foundation announced the award of a \$1 million grant to the Consortium to launch more work and studies in the Saluda-Reedy watershed. On the same day, Fujifilm, Inc. announced a \$500,000 grant to the Consortium for educational programs in the watershed.

¹The drought was not a significant factor in this study. The survey was conducted when the elevation of the lake was 438.4 feet (April 15) and 438.5 feet (April 16); the normal lake level is 439 feet.

The Foothills Resource Conservation & Development (RC&D) Council and the Ninety-Six RC&D Council, nonprofit organizations whose members include the county Soil and Water Conservation Districts in upper South Carolina, also provided support for the study.

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