Blalock Dam and Reservoir Improvement Works

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SYNOPSIS. The H. Taylor Blalock Reservoir is a water supply reservoir in South Carolina, USA. The reservoir is owned and operated by Spartanburg Water System (SWS) and provides vital storage to their water network which supplies over 180,000 people in Spartanburg County.

Shortly after construction was completed in 1983, the Dams and Reservoir Safety Division of the South Carolina Department of Health and Environmental Control (SCDHEC) reclassified the dam's hazard potential from 'significant' to 'high' hazard. The reclassification increased the design flood from half the Probable Maximum Flood (PMF) to the full PMF.

In addition to upgrading the dam and spillway to pass the design flood, SWS carried out construction works to raise the reservoir full supply level (FSL) by 3m to meet future water supply requirements. This paper describes the project and provides information on the Roller Compacted Concrete (RCC) used in the works.