



A grouting and epoxy rehabilitation program for the Samp Mortar Dam prevented potentially serious damage at a lakefront community in Connecticut.

Samp Mortar Lake Dam Repair

Fairfield, CT

The Samp Mortar Lake Dam could have cracked and flooded downstream areas below a private lakefront community. However, a grouting and epoxy rehabilitation program—designed by Mueser Rutledge Consulting Engineers (MRCE)—prevented potentially serious damage. Supporting bedrock was improved and concrete was repaired throughout the structure. More than 90 years old, the dam is a concrete gravity structure that state agencies declared unsafe as the result of long-term structural deterioration combined with possible damage from rock blasting in a sewer trench near one abutment.

MRCE made a detailed examination of the dam, made borings cored into its bedrock foundation, and developed plans and specifications for repair work. The repair work included epoxy grouting of the dam concrete, cement grouting of the foundation, and stabilization of the abutment slopes. The firm also inspected the rehabilitation work that led to the dam receiving approval from state agencies.