

# DEPENDABLE YIELD ANALYSIS – SURFACE WATER SUPPLIES

**Owner:** Groton Utilities  
Groton, CT

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## PROJECT DESCRIPTION

Amory Engineers provided engineering services for the determination of the dependable yield of the Groton Utilities surface water and groundwater supplies in accord with CT Department of Public Health requirements.

The Groton reservoir system includes a diversion facility, four surface water impounding reservoirs and a natural lake which receives significant recharge from the adjacent aquifer. The analysis utilized the US Corps of Engineers HEC-3 -Reservoir System Analysis for Conservation. The mass balance method modeled long-term gauged watersheds with similar characteristics of Groton’s watersheds and unique operating characteristics to determine the multi-year critical dry period for the reservoir system.

