

PROJECT DESCRIPTION

Red House Dam – Engineering Assessment Report

**Location:**

Cattaraugus County,
New York

Client: Bergmann

Associates for the NYS
Office of Parks
Recreation and Historic
Preservation

Client Contact:

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Spillway section

The Red House Lake Dam is located in Allegany State Park in the Town of Red House, Cattaraugus County, NY. The dam and arched bridge was built across Red House Brook in 1929 to create a recreational lake for the park. According to the New York State Inventory of Dams, the dam has a hazard classification of B (Intermediate Hazard dam).

The dam consists of earthen embankments (total length 1,350 ft.) and a concrete spillway with a length of 180 feet. Allegany State Park Route 1 runs along the dam crest and over a three span bridge that spans the spillway section.



Piezometer downstream of embankment

MMCE completed subsurface explorations and laboratory tests to measure the properties of the foundation soil and the groundwater levels in the embankment. MMCE and Bergmann prepared an Engineering Assessment Report that included the results of a safety inspection, hydrologic and hydraulic analyses, stability and seepage analyses and identified deficiencies in the dam. The report presented conceptual recommendations for remediation to bring the dam into compliance with current NYSDEC Guidelines. The team also prepared a Condition and Concept Study for the dam with recommended improvements and estimated costs.