



Project Title: Gate Installation Turtle Creek

Client: Touchie Engineering / City of Moncton

Project Description:

The Turtle Creek dam constructed in the 1960s provides a reservoir for the drinking water supply of the Greater Moncton Area. In the mid 1990s it was necessary to add additional storage to the system. GEMTEC Limited was retained to modify the existing uncontrolled overflow spillway by adding seven radial gates to increase the reservoir level by approximately 2 metres providing an additional 30% of storage volume. The design consisted of adding six concrete piers between each new gate, provision of a reinforced concrete operating deck and modifying the existing spillway abutments from reinforced cantilever to gravity walls. The top of the 25-metre-high earth dam was built up slightly to provide adequate freeboard for the new spillway discharge capacity. A reinforced concrete apron was installed upstream of the spillway to ensure seepage conditions under the new operating levels were similar to those prior to installation of the gates. Before and after photographs are shown on the following page.

