

Rehabilitation of Hydraulic Structures



Pointe du Bois GS powerhouse and spillway rehabilitation



Many existing hydroelectric developments and water control structures in Canada were constructed from twenty to ninety years ago and are now approaching or exceeding their intended design life. KGS Group has extensive experience in the inspection, assessment, and life extension of hydraulic structures, including design and construction management for rehabilitation of existing powerhouses, spillways, dams, canals, and penstocks.

Other aspects of hydraulic structure rehabilitation in which KGS Group offers their skills include the assessment and rehabilitation of intake and spillway gates, finite element analyses of structural behaviour, assessment and monitoring of concrete growth due to Alkali Aggregate Reaction (AAR), and the technical evaluation and economic analyses associated with upgrading mechanical/electrical equipment.