

LAKE PEACHTREE DAM SPILLWAY

STATE PROGRAM: Georgia Environmental Finance Authority

ASSISTANCE RECIPIENT: Peachtree City

ASSISTANCE AMOUNT: \$3.2M



PROJECT DESCRIPTION

Built approximately 50 years ago, the Peachtree Dam is located along the Flat Creek in Peachtree City. It is classified as a Category II Dam, which means that there is a probable loss-of-life situation if breached. Exploratory borings were drilled to evaluate the condition of the existing spillway, and voids were discovered beneath the concrete spillway. Based on these findings, the City Council elected to upgrade the spillway to promote long-term operation of the lake and to mitigate the risk of a dam failure. A piano-key weir (PK weir) was chosen as a replacement for the spillway because this design is capable of both maintaining current flooding levels during higher frequency storm events while also providing the discharge capacity needed to pass the runoff associated with the State-required design storm event. The PK weir crest will consist of three different elevations, which will control flood releases during 2- to 100-year storm events while still providing adequate spillway capacity to safely discharge runoff. This PK weir will also provide aesthetic value for the community and is the first one built in North America.

To read more about this case study, please visit https://www.epa.gov/sites/default/files/2018-11/documents/pisces_2018_compendium_0.pdf.