



Lake and Dam Engineering

Our staff is recognized for their ability to provide lake and dam engineering solutions, along with an understanding of the intricacies of the project implementation processes to keep projects on schedule. Our beginning-to-end capabilities include hydrologic and hydraulic modeling of existing systems, identification of candidate solutions, detailed system analysis and engineering design, project permitting, construction plan and specification preparation, sediment and erosion control plan preparation, and construction administration. LJB provides breach analysis, inundation mapping and development of emergency action plans for dams as well.

LJB Services:

- Dams
- Lakes
- Stormwater management systems
- Detention ponds
- Streams
- Stormwater wetlands



BASS LAKE DAM SPILLWAY

In 2016, Bass Lake overtopped the emergency spillway during the flooding caused by Hurricane Matthew. LJB initially provided a dam inspection and technical report of the observations and recommendations and later developed plans and permitting for restoring the spillway.

- Location: Holly Springs, NC
- Client: Town of Holly Springs



KAYMOORE DAM REPAIRS

LJB provided hydraulic modeling, conceptual design and a construction cost estimate to assist the HOA in planning for funding and later developed plans and specifications for permitting and construction to improve the dam to meet current high hazard dam regulations.

- Location: Winston-Salem, NC
- Client: Kaymoore Home Owners Association



CULTURAL CENTER DAM REPAIRS

LJB provided a dam evaluation to the Lumbee Tribe and FEMA in order to acquire FEMA Hurricane Matthew recovery funding. After a breach analysis and risk assessment, LJB designed the solution, prepared plans, and acquired all permits and regulatory approvals for construction.

- Location: Pembroke, NC
- Client: Lumbee Tribe of North Carolina