

PROJECT OVERVIEW 2017

March 2017

BUCKEYE LAKE DAM

PROJECT OVERVIEW

The Ohio Department of Natural Resources (ODNR) recognizes the value of Buckeye Lake both in terms of the recreational opportunities it offers and the vital role it plays in economic development and tourism in the region.

After the nation's foremost dam safety experts at the U. S. Army Corps of Engineers (USACE) released an alarming report in March 2015 detailing unacceptable deficiencies in the dam, and the damage and potential loss of life that could result from catastrophic failure, Ohio Governor John Kasich understood it was time to act. Kasich announced plans in March to replace the nearly 200-year-old, 4.1-mile earthen dam.

ODNR immediately began exploring safe and efficient ways to replace the dam and ensure the safety of the surrounding community. Agency engineers and hydrologists studied the latest technologies and consulted with industry experts across the country. In consultation with the USACE, ODNR also began to implement Interim Risk Reduction Measures which would lower the risk of dam failure during the construction process.

PHASE ONE

In July 2015, ODNR hired Gannett Fleming Associates to provide design for structural dam risk reduction measures. In August, ODNR began a construction-manager-at-risk process to provide construction services for interim and comprehensive dam risk reductions measures. The water level at Buckeye Lake was left at winter pool as part of interim risk reduction measures recommended by the USACE report. Phase One construction began in September 2015.

Phase One structural risk reduction measures were completed in May 2016 and included placement of a 30-ft. wide embankment stability berm and a nearly 43 ft. deep soil mix seepage cutoff wall along the entire length of the dam. The new seepage barrier and stability berm were planned and constructed in just 15 months and provide the community and the residents downstream with a structure that offers significant protections against potential dam failure.

Following completion of the stability berm and seepage barrier, engineers from Gannett Fleming and the contractors building the dam assessed the structure, and recommended that 2 feet above winter pool would be a safe water level to be maintained at this stage in the project. ODNR dam engineers reviewed and accepted that recommendation, with the understanding that proactive lake management will be utilized to keep the water at a safe level.

PHASE TWO

Phase Two dam construction is expected to begin in April 2017. Completion of the project is anticipated in Fall 2018. Lake elevation will be returned to normal levels after dam construction is completed. Normal winter pool at Buckeye Lake is 888.50 ft. above mean sea level; the operational interim summer pool target level is 890.50 ft. above mean sea level.

Initial estimates regarding cost and timeline for the dam construction project have been significantly reduced due to exceptional planning and aggressive timelines. Initial estimates placed the cost of the new dam at \$150 million, but current estimates indicate that the state could achieve nearly a 20 percent savings on total cost. In addition, the completion of the first phase of the project in 2016 has the project a year ahead of schedule.

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