

40th Anniversary of the Laurel Run Dam Failure, PA

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The Laurel Run Dam was a 42 ft. high, 620 ft. long earthen dam constructed between 1915 and 1918. It was built to replace a smaller dam to provide water for drinking and industrial needs for the growing population in and around Johnstown.

In 1943, the spillway of the dam was identified as being insufficient to pass a major rain event, and an assessment in the 1950's proved that the spillway was less than half of the size that would be needed for a dam its size. In July of 1977, a massive storm hit the Johnstown area, equivalent to a 500-year event, causing water to reach the top of the dam and begin to spill over the dam crest. By approximately 2:15 a.m. on July 20, 1977, overtopping of Laurel Run Dam scoured the downstream slope of the dam enough to cause the embankment to breach resulting in complete failure of the dam.

At the time of the failure, there was no one present at the dam site. Thus, no warnings or evacuation notices were given before the dam breached. Laurel run was one of several dam failures to occur on that day and was one of a series of dam failures that occurred in the 1970's that were influential in the development of dam safety programs across the U.S.. This presentation will focus on the events leading up to the dam failure, the aftermath of the failure and lessons learned.