

Piney Run Watershed Study

Fact Sheet

History

For nearly 50 years, the Piney Run Dam and Reservoir have served as a focal point for Carroll County's recreation and flood control, for this portion of the County. Now, the County is undertaking a comprehensive study to assess the dam's infrastructure and reservoir to ensure the area's continued safety.

The state of Maryland, through the Maryland Department of the Environment (MDE) classifies the dam as a "High Hazard Dam" due to the size of the dam and the risk if the dam were to fail. Due to this classification, extra precautions are taken by the County and MDE to ensure the dam is inspected annually and well-maintained.

Why the Study

While Piney Run Dam met all requirements in 1974 when it was constructed, MDE has expressed concern the dam may not meet current safety criteria, specifically, the capacity of the dam's grass-lined spillway's ability to pass the required design flood flow, which is referred to as the Probable Maximum Flood or PMF. This is made more difficult as the earthen structure may be prone to erosion during heavy flows through the spillway. These regulatory requirements are the primary drivers for this study.

Funds for the study are furnished by a grant from the Natural Resources Conservation Service (NRCS), the organization that originally constructed the dam. The \$500,000 grant allows the County to prepare a thorough watershed study to evaluate the dam and determine options for addressing any identified deficiencies.

Glossary of Terms

- **Dam** - An artificial barrier that can impound water, wastewater, or any liquid-borne material, for the purpose of storage or control of water.
- **Principal spillway** –Designed to operate frequently during most flood events. *The principal spillway at Piney Run is the lower concrete riser tower and pipe conduit. It controls the reservoir elevation.*
- **Auxiliary spillway** – Formerly referred to as the emergency spillway. Designed to operate infrequently during extreme flood events that exceed the capacity of the principal spillway. *The auxiliary spillway at Piney Run is a grass-lined spillway, typical of NRCS designs.*
- **Water Supply Intake Structure** –Designed to withdraw water from the reservoir for conveyance to a water treatment plant. *The water supply intake tower (the structure with bridge to it from the dam and the "house" on top of it) and conduit have never been put into service and are currently only used by the County to meet the state's stream flow and temperature control requirements.*
- **Hazard potential classification** - A system categorizing dams according to the degree of adverse consequences of a failure or mis-operation. The hazard potential classification **does not reflect** the current condition of the dam (i.e., safety, structural integrity, flood routing capacity). There are three hazard classification categories, "low", "significant" and "high" and classification depends on the consequences of failure of the dam. A "high-hazard" dam in Maryland is a dam with the potential to cause probable loss of life and serious damage to residential, industrial, or commercial buildings; important public utilities, public roads; or railroads should it fail. Piney Run is assigned with a "high-hazard" classification, and is the only high-hazard dam owned and maintained by the County.
- **Probable Maximum Flood** - The flood that may be expected from the most severe combination of critical weather and hydrologic conditions that are reasonably possible in a particular drainage area. *The probable maximum flood at Piney Run is the flood from a storm consisting of approximately 39 inches of rainfall over a 72-hour period.*



Piney Run Watershed Study Project Timeline



Opportunity for Public Input

How to provide input and get more information

We welcome your input. If you would like to provide a comment, submit an email to pineyrunstudy@carrollcountymd.gov.

You may also mail comments to the following address:

Bureau of Resource Management
225 North Center Street
Westminster, MD 21157

For information, visit the project website www.carrollcountymd.gov/pineyrunwatershedstudy

Piney Run Dam and Reservoir

