

Huntsman Lake Dam Provides Storm Water Management and Much More

“Pohick Watershed Dam No. 8, known locally as Huntsman Dam Lake is surrounded by hundreds of residential homes and when citizens cross over the dam to reach the trails around the lake they often don’t really see it as a storm water management structure. What they see is a lake that is a community asset that brings joy and a place to view nature and wildlife” said Laura Grape, Executive Director for the Virginia Soil and Water Conservation District (SWCD).

The dam is located in a highly populated area in Fairfax County, Virginia. It was constructed in 1973 by Fairfax County Board of Supervisors and the Northern Virginia SWCD with the assistance of the USDA Natural Resources Conservation Service (NRCS) Watershed Program. The dam is owned and operated by Fairfax County and was constructed for flood control and to capture sediment.

The Northern Virginia SWCD provides assistance to the County in the operation and maintenance of the dam and in educating citizens of the dam’s purpose and its benefits.

“There are multiple benefits obtained from having the dam and lake beyond its primary purpose of flood and sediment control. The recreational use, increased home values for houses adjacent to the lake and the scenic beauty of the lake makes it an important resource for the community and is highly valued by citizens,” adds Grape.

“This dam is one of eight flood control dams in the Pohick Watershed Project, of which six are in Fairfax County. These dams trap sediment and pollutants that would otherwise flow into the Potomac River and eventually into the Chesapeake Bay,” said Grape. “So the dams are not only providing local benefits, but benefits for major water bodies downstream.”



"The dam was rehabilitated in 2014 with the assistance of the NRCS Watershed Rehabilitation Program and the Northern Virginia Soil and Water Conservation District to bring it up to current dam safety standards. The rehabilitation project extended the benefits provided by the facility for another 75 years after construction. Both the principal and auxiliary spillways were upgraded with this project. It was determined through an analysis of the required major storm event dam design criteria that water velocities could result in significant erosion of the vegetated auxiliary spillway which did not meet NRCS stability criteria. It also was determined that the concrete principal spillway riser did not meet the current NRCS seismic stability criteria" said Craig Carinci, Director of Fairfax Storm Water Planning Division. "We are located in a very urban area and the dam is classified as a high hazard due to possible loss of life or serious economic damage if it failed, so upgrading it to meet all current dam safety standards was critical."



The rehabilitation project reduces the threat to life and property downstream. There are 170 houses and businesses and six public road ways within the overtopping breach inundation area. The new riser included a mid-level gate to provide flexibility in lowering the normal pool for maintenance activities such as dredging and a cold water release system to improve downstream water quality, particularly during periods of low base flow.

"This is but one of the thousands of examples of how the NRCS Watershed Program has assisted communities across the nation solve natural resource issue and improve the quality of life for citizens," said Mark Gilbert, Chairman of the National Watershed Coalition.

The NRCS Watershed Rehabilitation Program is assisting watershed project sponsors across the nation in rehabilitating high hazard flood control dams that were constructed with NRCS assistance. One hundred and thirty-two dams have been rehabilitated to date and one hundred and fifty dams are in various stages of planning, design or construction.

"Rehabilitation of these dams ensures they remain safe and extends their many benefits for an additional 50-100 years, said Gilbert."

A video about the Huntsman Dam Lake is available for viewing on the National Watershed Coalition Web Page: www.watershedcoalition.org. under the Rehabilitation tab.

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January 23, 2017