Wheaton Branch Dam Overtopping Protection and Repair Project - Fact Sheet

DEPARTMENT OF ENVIRONMENTAL PROTECTION
MONTGOMERY COUNTY • MARYLAND

September 2025

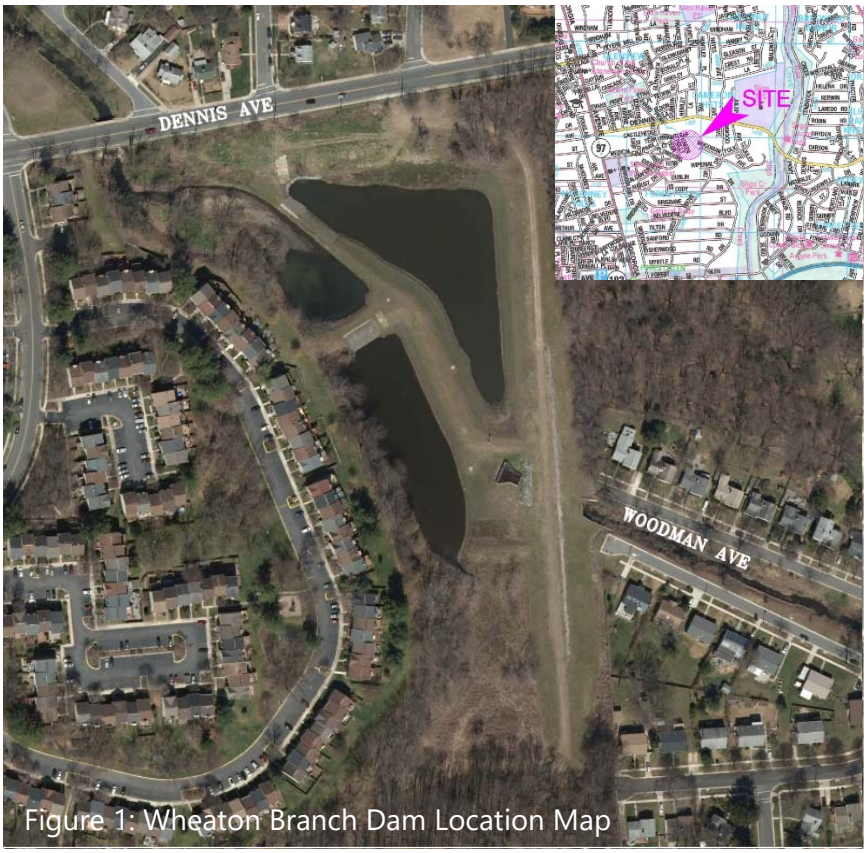

Figure 1: Wheaton Branch Dam Location Map

Wheaton Branch Dam

Original Construction:
1979
Owner:
Montgomery County
Location:
Wheaton, MD
Drainage Area:
760 acres
Surface Area of Lake:
7.5 acres
Dam Height:
27 feet
Watershed:
Sligo Creek
Project Goals:
Install Articulated Concrete Block overtopping protection, perform minor grading to the top of the dam, and perform repair to the existing toe drain pipe
Costs:
$2.4 M

Background

Wheaton Branch Pond (Pond) is a regional stormwater management pond designed to capture and treat stormwater runoff. The Pond was built in the 1979 by constructing a dam across a tributary to Sligo Creek in the Anacostia River watershed. The Pond was retrofitted in 1988 to provide stormwater management controls and install an overflow spillway near the middle of the dam. The dam is designated as a high-hazard dam by the Maryland Department of the Environment (MDE) Dam Safety Division (DSD) and is owned and operated by Montgomery County Department of Environmental Protection (MCDEP). The dam is designated by the MCDEP as Asset #11365 and by MDE as Dam #127.

Project Selection

In 2018, a dam breach analysis was performed to simulate various flooding scenarios. The analysis showed that several houses and major roadways would be inundated during Probable Maximum Flood (PMF) conditions.

During the non-breach PMF scenario, it was revealed that flow over the spillway had the potential to be erosive. A loss of surface material along the downstream slope of the dam could cause a catastrophic failure of the dam embankment, increasing risk for downstream residents.

Based on these results, MCDEP has determined that installing overtopping protective measures would be beneficial to improve the structural integrity of the dam and reduce the potential impacts to downstream residents.

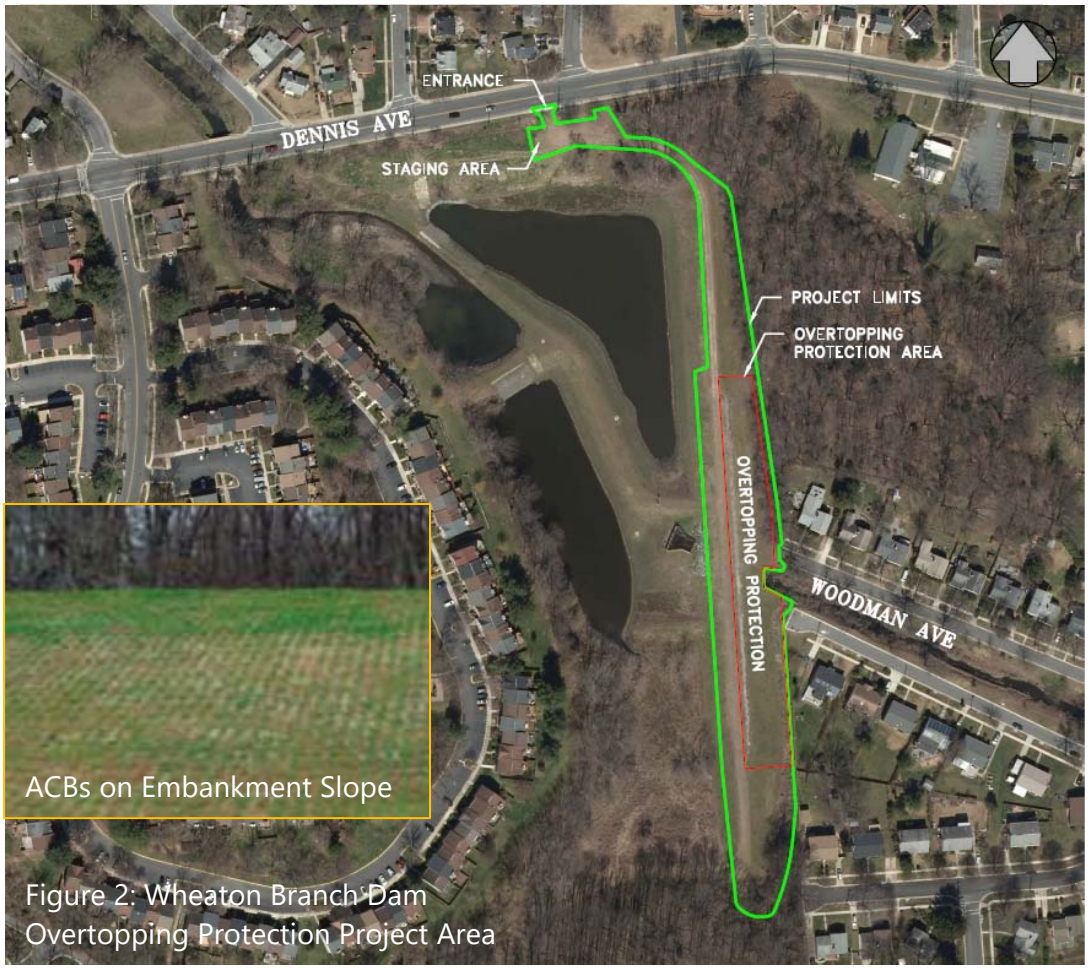

Figure 2: Wheaton Branch Dam Overtopping Protection Project Area

Proposed Scope

The Wheaton Branch Dam Overtopping protection and Repairs Project will include the installation of overtopping protection measures, minor grading at the top of the dam, and repair of the existing toe drain. The overtopping protection will consist of an articulated concrete block (ACB) system underlain with a structural drainage layer and perforated underdrain pipe. During excavation to install the ACBs, the exiting toe drain will be repaired by replacing a section of damaged pipe. Minor grading along the top of the dam will provide a consistent top elevation along the entire length. A structural access road will be installed along the spillway crest to allow for maintenance vehicle traffic.

No impacts to adjacent pedestrian or vehicular traffic are proposed during construction. Trucks entering and leaving the facility will use the access road along Dennis Ave, as shown in Figure 2. Once the project is complete, the project area will be restored.

Proposed Schedule

The project is expected to take approximately four months to complete, with construction starting in **October 2025** and substantial completion in **February 2026**, depending on weather conditions. The County will make every effort to minimize the impacts of the construction activities on the residents living near the Pond.

For more information, contact:

Mr. Doug Marshall, 240.777.7767
Department of Environmental Protection, Watershed Restoration Division
2425 Reedie Drive, 4th floor, Wheaton, Maryland 20902
Douglas.Marshall@MontgomeryCountyMD.gov