

Wildwood Lake Restoration Design and Permitting

Project Description:

Funding for this project will go towards creating a “shovel ready” project for the restoration of Wildwood Lake. It includes the creation of a detailed Wildwood Lake restoration plan, permitting, design and surveys. The designs and permits will pave the way for a viable future construction project to restore the 90 acre freshwater lake.

Wildwood Lake has undergone a high rate of sedimentation over the last 100 years. The lake’s depth has decreased from an average of four feet to about three inches. Sections that were once lake are now upland. Due to the accumulation of silt, Wildwood Lake no longer functions as a large catch basin for storing floodwaters from Harrisburg and keeping pollution, mostly sediment, from reaching the Susquehanna River and the Chesapeake Bay. This is a significant problem for the wetland habitat and recreational quality of Wildwood Lake, a major regional attraction operated by the Dauphin County Parks and Recreation Department (DCPR). It is also a significant problem for downstream areas, mainly the Chesapeake Bay, which are receiving more sediment that is shunted through Wildwood directly to the Susquehanna River.

Wildwood Park, located in northern Harrisburg, PA and established in 1907, serves 115,000 visitors annually by providing recreational and environmental education opportunities. Wildwood has an active Friends group with over 250 members and park educational programming reaching 15,000 each year. The cornerstone of the park’s unique character is the extensive 90-acre wetland and lake built for flood protection in the early 20th Century. Park managers, partners and visitors uniformly agree the lake should be restored to continue to provide flood protection and increase water quality while maintaining optimal recreation areas and diverse wildlife habitat.

A past Growing Greener initiative helped provide funding for modifications to the Morning Glory Outlet structure - consequently directing Paxton Creek flood waters north to the Susquehanna Spillway Outlet structure. This past initiative was helpful in directing flood waters away from Harrisburg. This grant request will continue to build on those past efforts to restore Wildwood Lake. This project will address the main problem – sediment.

The ability of Wildwood Lake to catch silt is at capacity. Dauphin County Parks and Recreation’s goal is to manage Wildwood Lake as a wetland and not lose this valuable public resource.

Goals:

- Improve Wildwood Lake’s flood control impoundment capacity with practical dredging at coordinated locations throughout Wildwood Lake
- Provide downstream flood protection for the City of Harrisburg
- Improve the water quality in Paxton Creek, the Susquehanna River, and the Chesapeake Bay by restoring Wildwood Lake’s ability to trap and store sediments and pollutants
- Reduce flood damage (in downstream watershed and on-site)
- Create diverse aquatic ecosystems and habitats for both plants and animals to thrive
- Work collaboratively through the Joint Pollution Reduction Plan to address the source of sediment upstream.
- Educate citizens of all ages about how they can help reduce pollution. Dauphin County Parks and Recreation has partnered with Paxton Creek Watershed and Education Association and Audubon Pennsylvania to design and install on site outdoor National

Park Service style interpretive signs that will educate the public about Paxton Creek and how it is getting cleaned up.

Other Upstream Projects Reduce the Source of Sediment:

- Joint Pollution Reduction Plan – In 2017 municipalities upstream from Wildwood Lake created a joint plan to address sediment pollution in Paxton Creek with the short and long-term goals of reducing sediment by 10% and 35% respectively.
- In 2018, Dauphin County Parks and Recreation received a \$45,000 DEP grant to repair a section of Paxton Creek in Wildwood Park. It will reduce erosion by installing modified wood cribbing and provide long-term stabilization for the nature center foundation.
- Paxton Creek Watershed and Education Association – this hands-on watershed organization addresses Paxton Creek problems such as erosion and flooding, and protects and enhances watershed resources.
- Several streamside projects incorporating best management practices have already been completed upstream to reduce erosion and reduce storm water.

Cost

The total cost for the Wildwood Lake Restoration Design and Permitting project is \$200,000. It provides the groundwork for future restoration activities. \$170,000 of the total cost has been secured through a successful PA Department of Environmental Protection Growing Greener Plus grant application. The remaining \$30,000 match is sourced from the Dauphin County Local Share Municipal Grant Program.

Probable opinion of construction (dredging) costs at 1 to 4 selective dredges in Wildwood Lake range from \$4,000,000 to \$12,000,000. No funding is yet in place for construction.

Support

Dauphin County Parks and Recreation would like to recognize and thank the following support organizations for joining the Wildwood Lake Restoration Partnership, and working collectively to address pollution challenges in Paxton Creek and Wildwood Lake:

Army Corps of Engineers
Capital Region Water
City of Harrisburg
Dauphin County Conservation District
Dauphin County Parks and Recreation
DCNR
DEP
Friends of Wildwood
HRG
Land Studies
Lower Paxton Twp.
PENNDOT
PENNVEST
Susquehanna River Basin Commission
Susquehanna Township