

## FOUR MILE RUN WATERSHED TASK FORCE

### Four Mile Run Watershed Walk

October 8, 2020

Schenley Park Route: The Neill Log House to Serpentine Drive to Bartlett Street then continuing down through the Panther Hollow stream valley to Panther Hollow Lake

Approximately 15 participants, including representatives from the Parks Conservancy, PWSA, and City Planning

Erin Copeland, Pittsburgh Parks Conservancy senior restoration ecologist, and Gavin White, community projects manager, led the walk. Their presentation was supported by explanations and details of the plan for the 4-mile run watershed by Tim Nuttle of CEC, the engineering consulting firm for the 4-mile Run Watershed project, Rebecca Zito of PWSA, and Ose Akinlotan of the Department of City Planning.

Erin introduced the purpose of the tour as way to enable community members to visit the actual Schenley Park site and update participants on information delivered at PWSA's public presentations of the project and in various community meetings. The walk was the third in a series of planned watershed walks organized by Parks Conservancy staff to share information about ongoing and long-range planning for stormwater management and neighborhood investment in the city's six watersheds. PWSA wrote its Green First plan to help address stormwater management issues in these watersheds.

Erin explained that the Parks Conservancy is working to expand community engagement in watershed planning across the city. Each of the six watersheds is involved in a planning process with projects at various stages of development. Community participation is essential to achieving a successful plan that considers and responds to the interests of residents who live in the watershed. The Negley Run Watershed project is the most fully developed, and the Negley Run Watershed Task Force is serving as a model for other watershed groups with the goal of creating a network of groups to share their insights on process and planning.

The group gathered at the Neill Log House on Serpentine Drive. Erin described the 1765 building as the oldest European style home in the city. The log building, an important historic landmark in Schenley Park, was reconstructed using the original materials. The group also noted the nearby monument to Shawnee Chief Catahecassa Blackhoof, recognizing the original owners of the land on which the park has been developed. The monument once was situated near a natural spring that has been buried or diverted. Both structures border Schenley Park's golf course. The course divides the Panther Hollow Watershed from the Phipps Run Watershed. The Panther Hollow side is more forested, while Phipps Run has more stormwater run-off.

Proceeding down Serpentine Drive, the group paused at the site of a 2019 landslide/road collapse that involved a truck toppling over the edge of the road. Erin explained that Pittsburgh's friable soils and heavy rainfalls make the steep terrain in many parts of the city prone to landslides. We should expect landslides to increase with climate change. There are five active landslides in Schenley Park. Solutions can incorporate green infrastructure components, such as living stakes or reseeded to prevent further erosion and collapse.

The group paused at the corner of Bartlett Street and Serpentine Drive, which marks the headwaters of the Panther Hollow Stream. The stream was "beheaded" or truncated and is now directed into the sewer line under Bartlett Street. The discharge pipes are visible in the ravine along the street. The walk continued down through the streambed, which was mostly dry in the upper portion. The stream valley becomes narrower, and the trail continues down toward Panther Hollow Lake through areas with more wetland characteristics.

Erin noted the first of two Tufa Bridges in the park. Their unique rock construction contributes to the park's historic character. The group next passed over one of the five cut stone bridges constructed by WPA crews in the 1939. Along the route, there were numerous toppled Ash trees killed by a devastating infestation of Emerald Ash borer. Other current threats to Pittsburgh's urban forest include the Spotted Lantern Fly and the Asian Long-Horned Beetle.

Erin explained that Panther Hollow is a watershed within 4-mile run. When the stone bridges were built, there were no engineering studies of the volume of storm water moving through the run. As a result, the bridges and stream valley are grossly undersized and sediment as well as debris obstruct the flow of water, a constant problem with respect to managing stormwater. Over time, efforts to address this issue have included installing pipes to control the stormwater overflows, and the trail has also been reinforced. However, the stream is very dynamic, and Erin indicated areas of stream incision where the water has created a secondary channel. She also pointed out evidence of another landslide.

As the group approached Panther Hollow Lake, Tim Nuttle and Rebecca Zito described PWSA's plan to reduce flooding, better manage stormwater, and limit basement backups in the 4-mile Run Watershed. PWSA has developed a design to control the water level in the lake. They are also preparing to daylight streams that are currently piped underground and to line the stream embankments with plants and vegetation to control and absorb stormwater. The addition of a large pipe near the 4-mile Run Junction Hollow neighborhood will convey water to the river. Tim explained that a pond will be created in the existing wetland behind the bridge closest to the lake. Currently this area suffers from a great deal of sedimentation. The pond will trap sediment and allow water to flow under the bridge to a wetland, which will slow and filter the water on its course to the lake.

The lake itself will be modified in the following ways. The concrete edge will be removed and fringed with a natural wetland designed with public access points. A causeway over the water is also part of the plan. The existing concrete channel along one edge of the lake will be buried. The lake is currently only 2 to 3 feet deep. It must be dredged to restore its ecological health. When dredging is complete, the lake will be about 10 feet deep at its deepest point. An existing berm along the railroad tracks at the far edge of the lake that serves as a dam to the lake must be brought up to code. It must be raised and brought into compliance with state and federal safety requirements. The upper edge of the berm will be replanted with meadow and trees.

PWSA has submitted the project to the state to secure the two permits needed before work can begin. One permit applies to site disruption; the second governs dam safety.

There will be public comment period and PWSA plans to make the documents available on PWSA's website. As the walk came to a close, Gavin asked people to email him with suggestions and further points for discussion. Ose Akinlotan, with the Department of City Planning, asked people to submit comments to the new ForgingPgh website <https://engage.pittsburghpa.gov/forgingpgh>. The site has been created to solicit public feedback for a single comprehensive plan for the city.