



## **Nine Mile Run Watershed Tour**

Welcome to the Nine Mile Run Watershed! A watershed is an area of land that drains to a specific body of water, so when it rains in this area, the water flows over the land or through storm drains into the Nine Mile Run stream. The watershed is only 6.5 square miles, but it includes 4 municipalities: the City of Pittsburgh, Edgewood, Swissvale, and Wilkinsburg. You'll notice differences and unique qualities in these neighborhoods, but they're all united by the watershed.

On this tour you'll find places of green stormwater infrastructure like rain gardens and tree pits. These sites are designed to collect and soak up rainwater to prevent street and basement flooding. Since they also help prevent polluted rain water from going into storm drains that release water into Nine Mile Run, they can lessen flash floods and improve the health of the stream.

There are three routes on this tour. Pick one to follow, make your own, or choose just one stop to check out. When you arrive at a stop, click on its marker on the map to read more about it.

**Rosedale Runoff Reduction Project:** Five green stormwater infrastructure projects designed to target an area of the watershed that contributed a lot of stormwater runoff to Nine Mile Run. Explore Homewood and East Hills, and see how rain gardens can serve as community gathering spaces!

**Lots of Nature:** How can parking lots be a climate justice solution? This tour takes you to three different parking lots that have been retrofit with green infrastructure, and gives you a peak at Nine Mile Run underground!

**Swissvale Hill to Nine Mile Run:** This tour takes you from Wilkinsburg, to Edgewood, to where Nine Mile Run pops out from its underground culvert.

All of these projects were completed in collaboration with numerous partners, including residents, Operation Better Block, East Hills Consensus Group, the City of Pittsburgh, Borough of Wilkinsburg, Edgewood Borough, Sci-Tek Consultants Inc, Ethos Collaborative, C&R Landscape Development, and Urban Redevelopment Authority.

MAP: [Nine Mile Run Watershed Tour](#)

## ROSEDALE RUNOFF REDUCTION PROJECT

- **Rosedale Hill Rain Garden:** This garden is a collaborative effort between Operation Better Block and UpstreamPgh, completed in 2021. The foundation for the project was laid by Ms. Zinnia Scott, who began improving these vacant lots that became a muddy mess every time it rained. Eventually, with funding from the Operation Better Block Neighborhood Partnership Program, the URA Neighborhood Improvement Fund, and the Love Your Block Grant, the rain garden was built.

You can see the basin off to the left that can fill and hold rainwater. The Trade Institute of Pittsburgh assisted with building benches out of reclaimed materials, and the raised garden beds are designed to be accessible for people who rely on wheelchairs. The “Welcome to Homewood” sign was built since this area forms the border between Homewood and Wilkinsburg.

Today, Operation Better Block’s Junior Green Corps, “Pitt Serves” students, and UpstreamPgh volunteers maintain the site. The site was dedicated to longtime community activist and Homewood resident Shirley Wheaton. The City of Pittsburgh declared November 2nd, 2025 to be “Shirley Wheaton Day” in honor of her dedication to Homewood.

- **Rosedale Street Tree Pits** - Street trees are excellent at intercepting rain that falls on their leaves, but with limited pervious space at their base, many are unable to absorb water at the optimum rate. Stormwater tree pits increase the amount of stormwater street trees can capture by creating a large base and directing water to it, instead of to storm drains. These are the first stormwater tree pits in the watershed, and they can intercept over 2,500 gallons per rain event. They also provide shade for the neighborhood!
- **Oakwood Batavia:** The Oakwood-Batavia site showcases the first “bioswale bumpout” constructed in the City of Pittsburgh! The curb is extended and contains a bioswale, which is a basin filled with plants that captures and slows stormwater runoff. It also captures pollution and trash, keeping it out of our storm-sewer system and rivers. Bioswale bumpouts can help calm traffic and prevent cars from parking too close to stop signs, which can impair a driver’s line of sight.

Similar to the bumpout, there are narrower “green gutters” that capture water on Oakwood and Batavia Streets. This site also contains underground storage, and is designed to capture between 700,000 to 1,700,000 gallons annually.

- **Crescent Rain Garden:** This rain garden is located at the Crescent Early Childhood Center, and you can view it from the sidewalk of Bennet and Tokay streets. On Tokay Street, you’ll see a trench drain that directs water off the street into the garden. Water then moves through a series of connected rain gardens with underground storage. The

site can capture over a million gallons of rainwater a year!

In 2025, we worked with partners to replace a broken stormwater inlet at this site, and expand the trench drain to capture runoff from the entire street.

- **Public Art & Dornbush Green Infrastructure Site:** Take in the beauty on Bricelyn Street! One of our more recent projects, this site was completed in 2024, transforming two vacant lots through the City's Adopt a Lot program into rain gardens that can capture up to 1,750,000 gallons of stormwater annually. The most exciting part of all about this project is the art installation, *Sankofa Garden: Roots to a Brighter Future*. Completed by Pittsburgh-area artist Marlana Adele Vassar in 2025, this sculpture was inspired by the garden and the cultural identity of East Hills. Read the sign in the garden to learn more!

Follow the path of rainwater down Dornbush Street (Pittsburgh's second steepest street), through the storm drain into the rain garden where it can slowly sink into the earth and underground porous storage tanks. In major rain events, excess rainwater can flow into the domed storm drain you'll find hidden in the garden, but the idea is to keep water out of our combined storm-sewer system. This project was a 2024 American Society of Civil Engineers Pittsburgh Section - Sustainability Project of the Year!

## Lots of Nature

- **Wilkesburg Stormwater Resiliency Project:** Back in 2019, UpstreamPgh identified two publicly-owned parking lots in the Wilkesburg Business district that contributed significant amounts of water to the storm sewer system and during large storms, flooded neighboring streets. With funding from the Department of Environmental Protection, UpstreamPgh and Sci-Tek Consultants Inc. retrofit these lots with rain gardens and bioswales in place of concrete medians. By adding well-draining soil, new trees, and native plants, we're keeping water off the streets, reducing the heat-island effect, restoring native habitat, and reducing the overall volume entering the storm sewer system to help our rivers. Not to mention, we think they look pretty good, too! This project won the 2023 Pennsylvania Governor's Award for Environmental Excellence and the 2023 ASCE Pittsburgh Sustainability Project of the Year.

You'll find a similar design at both the South Ave and Wallace Ave gardens.

As you walk around Penn Ave and other parts of Wilkesburg, many of the trees you see were planted by UpstreamPgh! Our organization has historically had a big focus on restoring our watershed's urban canopy. In 2011-2013, we worked with over 400 volunteers to plant over 500 trees in Wilkesburg through the Rooted in Wilkesburg Program.

- **Nancy's Rain Garden:** One of our smaller projects, this rain garden took a parking space that always flooded when it rained, and converted it into a rain garden! Can you see where water is directed to enter the garden? The site is meant to mimic a riparian ecosystem - something like a riverbank. It gets flooded during strong storms but can dry out in between rain events. We use native plants that are adapted to these conditions and handle pollution well. In addition, these plants offer habitat to wildlife in an otherwise fairly urban area. And make sure to schedule a visit to Nancy's Diner while you're here!
- **Lamar Ave storm drain:** This is no ordinary storm drain - it's a window into Nine Mile Run! Did you know that much of Nine Mile Run flows underground? As the city of Pittsburgh grew, its streams suffered under the burden of pollution, sewage, and city development. Most of them were buried underground, including much of Nine Mile Run and its tributaries. Here you can see the stream flowing through an underground culvert.
- **Swissvale Hill:** The Swissvale Hill Rain Garden project transformed three vacant lots owned by Wilksburg into rain gardens that can capture up to 750,000 gallons of stormwater annually (that's more than an entire olympic-sized swimming pool!).

As you can see, Hill Street is STEEP, and it sends rainwater rushing down towards the homes, churches, and businesses on Swissvale Ave. That's where the rain gardens come in, diverting rain from the street into the garden. Under your feet, underground tanks add additional stormwater storage capacity.

Walk around the site, sit at the table, and depending on the season, enjoy the beautiful blooms of Joe pye weed, coreopsis, wild bergamot, hibiscus, and other native flowers. This project was designed by UpstreamPgh and Ethos Collaborative, and constructed by C&R Landscape Development, and we're excited to share that we will soon be expanding this site onto the adjacent lot farther uphill!

- **Maple Ave Tree Pit:** A few trees can make a big difference! This 75-foot stormwater tree trench includes trees planted in structural soils surrounded by native plants. Stormwater tree pits increase the amount of stormwater street trees can capture by creating a large base and directing water to it, instead of to storm drains. Made in partnership with Edgewood Department of Public Works, the project captures stormwater runoff from the street, filtering it as it soaks into the ground. Like nearly all of our sites, it has monitoring equipment to help us determine the amount of water diverted from the sewer system by this installation.
- **Daylight of Nine Mile Run:** Did you know, as you've been touring the watershed, Nine Mile Run has been beneath your feet? Many of our urban streams were culverted underground in the 1900s as they became increasingly polluted and to make way for development. When streams flow through brick tunnels underground, they move much quicker than a natural stream would, which can lead to flash flooding and erosion in the

stream. Depending on the recent weather, the stream may be moving quite quickly as it emerges from underground. If you continue to follow it, you'll come across a "plunge pool," or a deep pool designed to slow water down before the stream resumes a more natural path through Frick Park.

You've reached the end of the tour, and we hope you learned something new! To learn more about the stream, take our Fern Hollow to Monongahela Tour! And join us as we continue to learn about and steward this area:

<https://upstreampgh.org/get-involved/events/>