

VALLEY PARK PROJECTS

Many of the area’s neighborhood parks are targeted for reinvestment and are ideal places for green stormwater infrastructure.

Many of the parks in the upper watershed were created in low valleys where development was less desirable. In some places, historic waterways still move through the buried sewer system, and the sound of flowing water can sometimes be heard underground—evidence that inflow and infiltration remain an issue.

These valley parks offer good opportunities for stormwater management. Some parks naturally receive runoff from surrounding areas and can store water during storms. In other cases, water from nearby streets and neighborhoods could be directed to the parks where it can be captured and managed.

Most of these parks need reinvestment to meet current standards. Maintenance has often been limited, and some facilities have been abandoned, raising questions about long-term care. At the same time, the low level of disturbance has allowed strong ecological communities to grow, though invasive species are common.

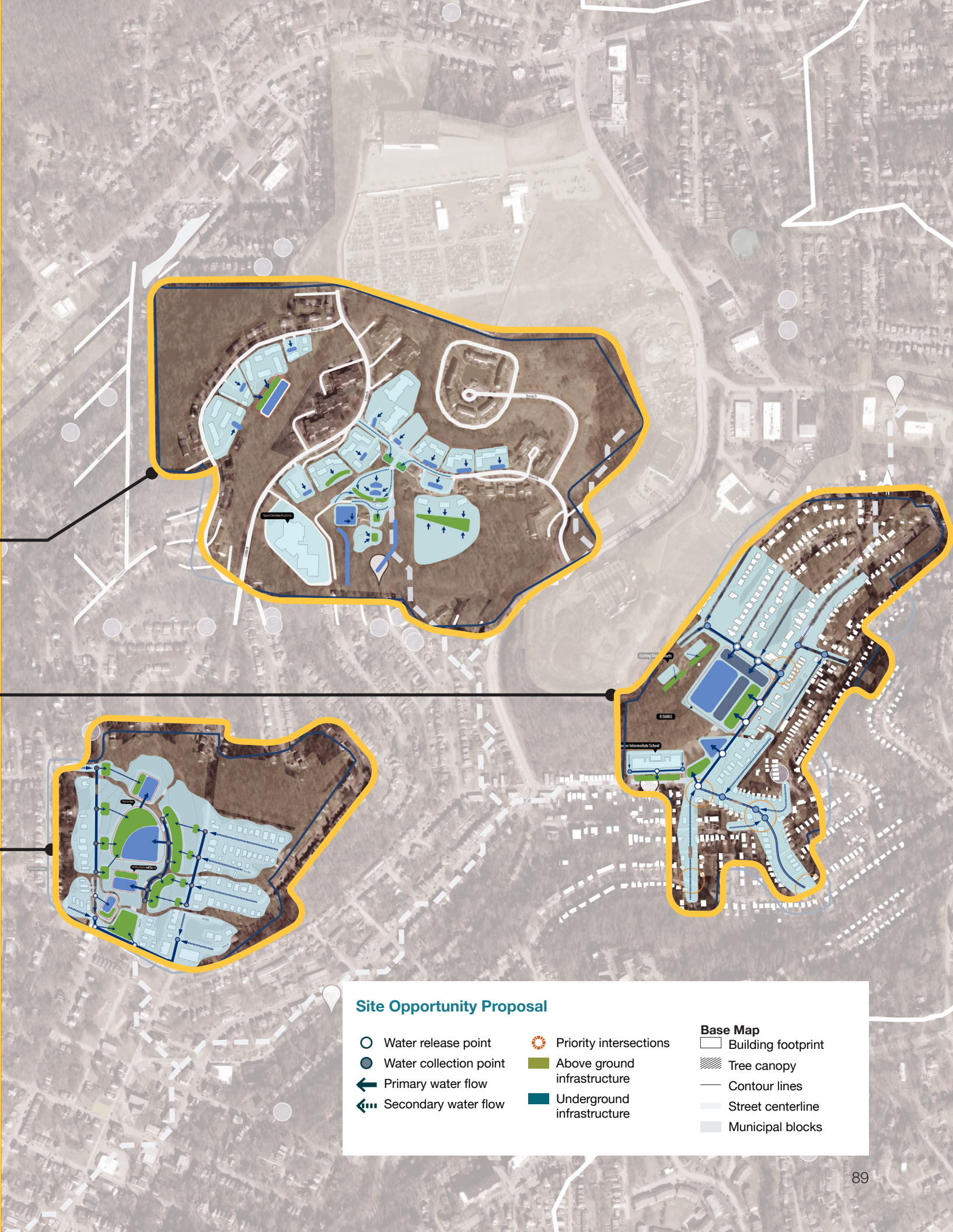
With thoughtful investment, these parks could provide significant benefits for both water management and neighborhood life.



East Hills Park and Park Hill Drive

Turner Intermediate School

Hunter Park



Valley Park Projects

Select Community Feedback

[Hunter Park] Many of the community members engaged were not concerned about flooding near and around Hunter Park, although there were a few homes experiencing issues. The primary concern people shared were the abandoned homes in the area and pests like raccoons. There are also opportunities to connect with local efforts to build a nature trail through alleyways in the area. Wilkinsburg Borough is planning to make updates to the park, which could be an opportunity to integrate green infrastructure with those changes.

[Turner] “Please visit our area (Laketon Montier Clark Wright intersection) and see for yourself what a heavy rain looks like at the corner. No one seems to care about this Ward.”

“The intersection of Montier and Wright streets. Water floods down from that area onto our curbs unto yards and driveways constantly. Maybe the sewer system isn’t working at Clark and Wright therefore water streams and floods us! This has happened for years and is getting much worse. Rocks and sediment live our sidewalks and driveways after each rain.”

[East Hills] The Department of Public Works (DPW), in partnership with Ethos Collaborative and the East Hills community, is planning comprehensive upgrades to East Hills Park. Improvements include a new playground and picnic area, repairs to the basketball courts, pavilion, spray park, and athletic field, plus better accessibility,

lighting, circulation, and stormwater management. Community feedback from the public survey and community meetings included prioritized safety, new amenities such as benches and tables, enhanced athletic facilities, and the addition of necessary bathrooms and water features (slip-and-slide, pool, and water park).

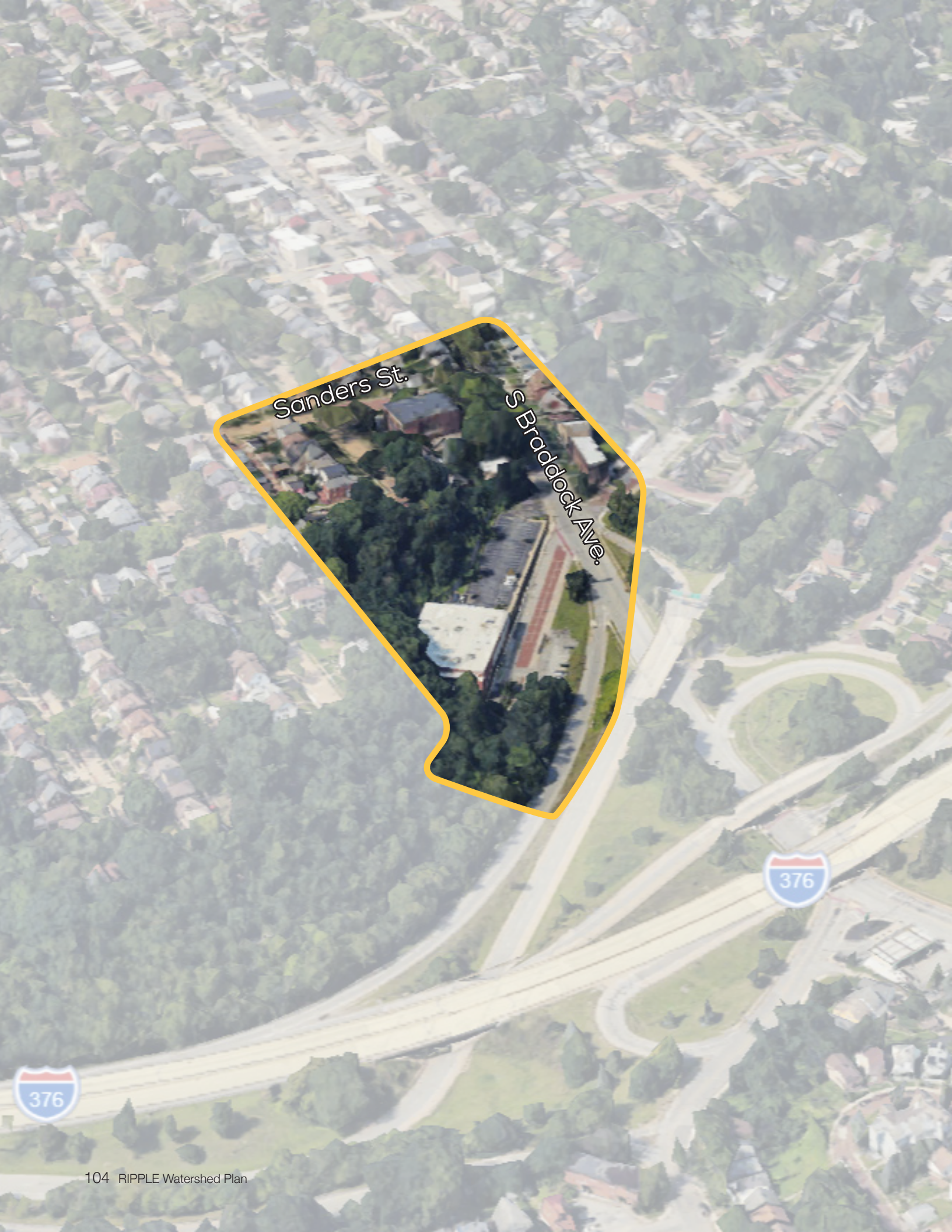
[Nine Mile Run] “too many abandoned residential and industrial properties or with absentee landlords and or owners who live out of state or are not nationals. Too few local rehab contractors with awareness of available sustainable resources.”

“Brick streets such as LaClair and Macon and Trevanian which are pitched toward Frick Park but do not divert much stormwater away from the combined sewer drains and into the park.

Hillsides with dead or dying trees such as Green Ash Black Locust that easily topple over in warm winter storms and do not effectively stabilize the hillsides from landslides.

Street tree pits in residential and business districts that do not effectively capture storm water. For example there are approximately 20 tree pits along Braddock avenue with low curbs (due to roadway build up) that do not retain storm water but allow it to run over and across them washing dirt and mulch onto the sidewalk.”





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Nine Mile Run Outflow



Time Frame

long term

Location

The properties and streets are near the entrance of the highway and where the stream emerges from the culvert.

GSI Strategy

Private parcel GSI, Public Right-of-Way Improvements

UpstreamPgh's Role

watchdog, advocate, support, partner

Potential Partners

PennDOT, City of Pittsburgh, Borough of Wilkinsburg, DOMI, Edgewood, Swissvale, PGH20, adjacent property owners, Regent Square CBOs, ALCOSAN

Further Investigation

What is PennDOT's role in the channel degradation? Need modeling in this area.



0.1 Miles

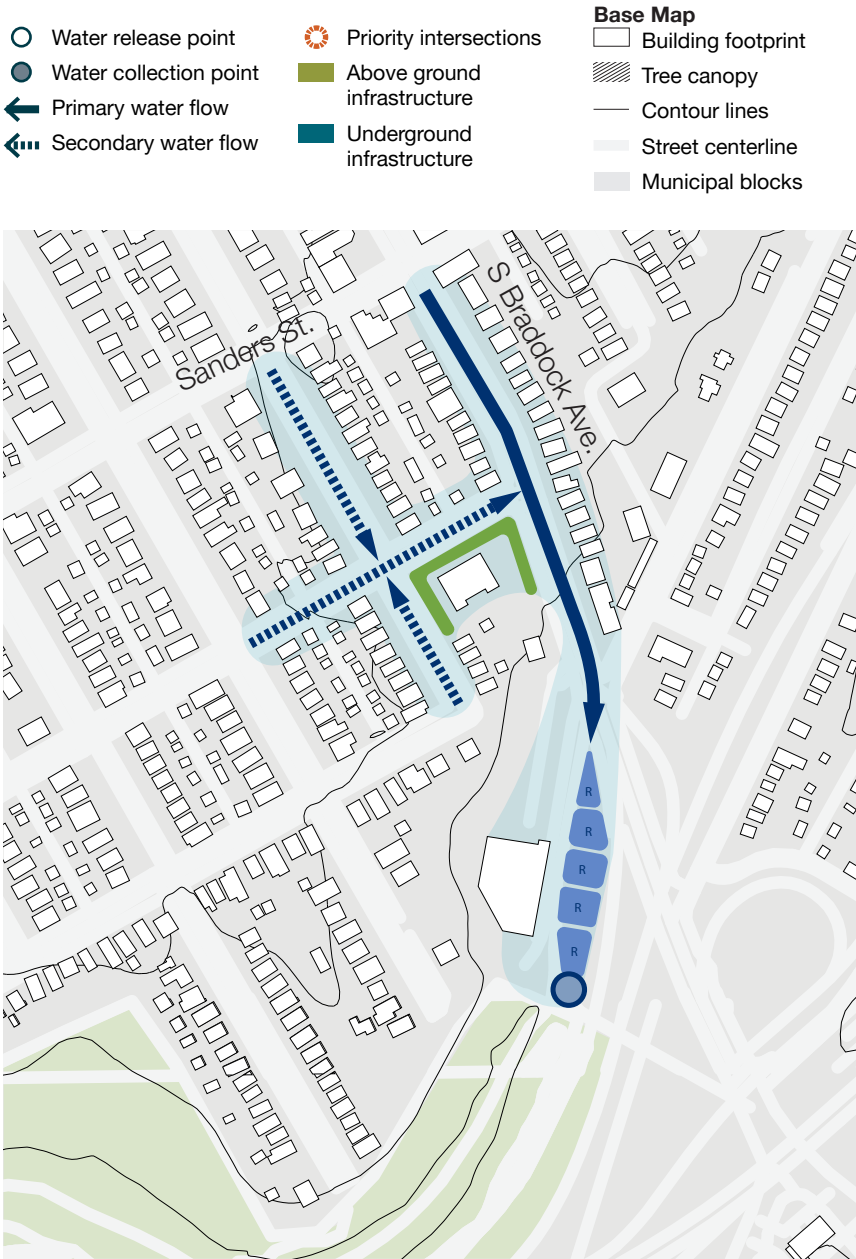
LEFT Aerial photo of the CLASS Building at the headwaters of Nine Mile Run and the trailhead of Braddock Trail (UpstreamPgh)

Nine Mile Run Outflow

This forgotten entrance to Frick Park has long been a focus for UpstreamPgh but municipal boundaries and the culvert outflow make it one of the most complex project in the shed.

The project was featured in the original 1999 Re-Evaluating Stormwater Plan and hosts many acute issues, including (from the low point upward): high velocity exiting of the water from the culvert and downstream slope destabilization, surface flow with erosion along the roads and across the parking area, clogged sewers, parcel runoff.

Site Opportunity Proposal

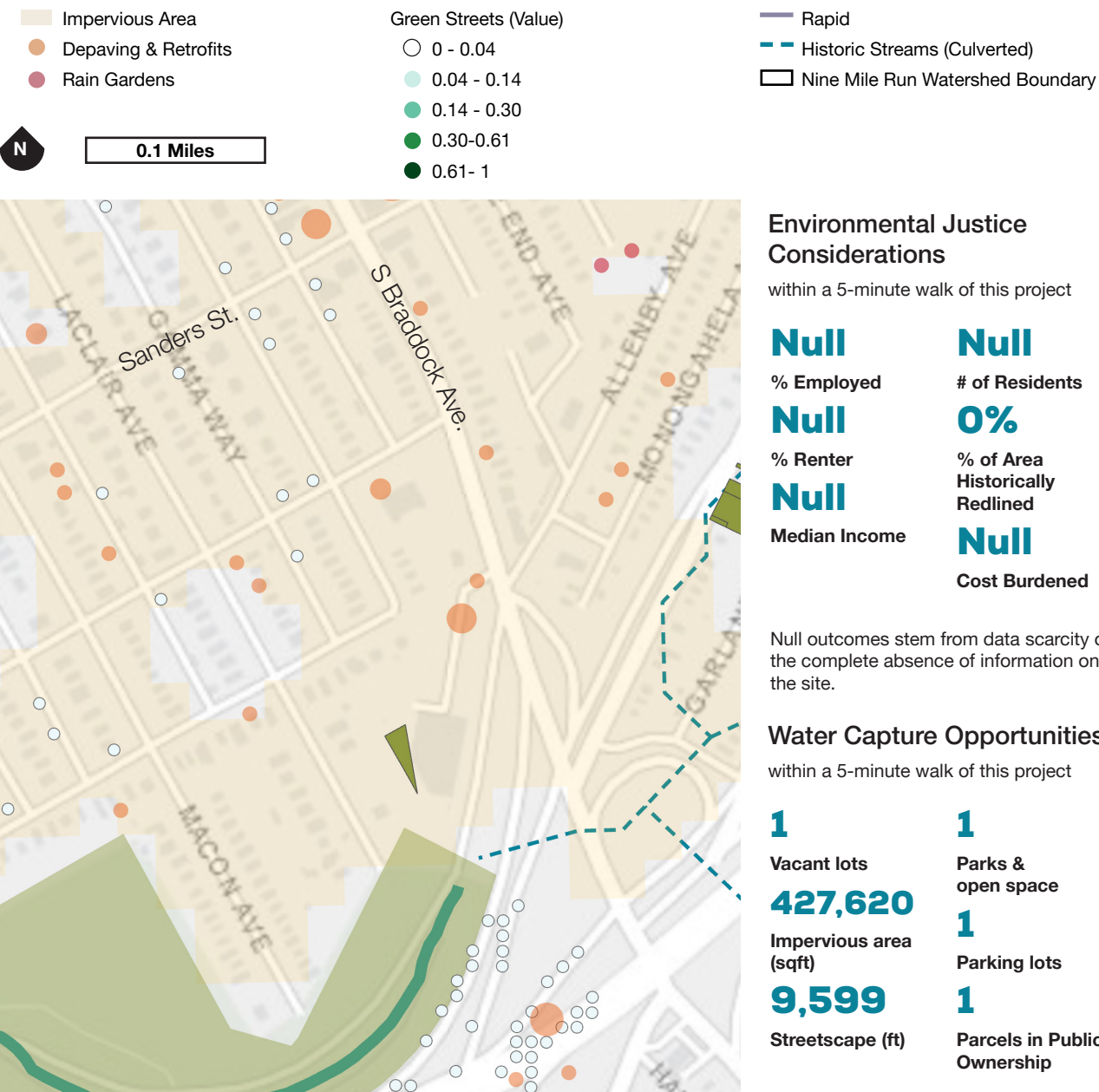


This area has two areas of concern: In the Nine Mile Run channel and culvert area, there is continued degradation of the channel immediately below the outflow and the integrity of the culvert itself is continuing to degrade. In the upslope neighborhood, the surface runoff from private property and in the public right-of-way can overwhelm the lower commercial property and cause surface flooding.

Nine Mile Run channel and culvert flow. Advocate for maintaining or reconstructing the culvert, given its orphan status among municipalities. Consider who will be the most affected. Confirm that the culvert is being monitored for structural integrity and function.

Open Channel Risk. The City will have to deal with slope failure if the erosion continues. PennDOT's edge is hardened, but the highway is not without risk if a slope failure occurs on the city side.

Computational Map



Culvert Risk. A culvert failure would affect all upslope municipalities -- they would all suffer if the major water artery to the river is clogged.

Upslope neighborhood surface runoff. Rain events can quickly overwhelm the system; thus, more upslope retain-age is recommended. However, many of the adjacent properties have small, sloped lots. The amount of retained water, ongoing maintenance of small, distributed systems, and issues such as slope stability

will pose challenges. Modeling and further investigation into slope stability should be done before recommending a blanket application of GSI systems.

The lower lot area receives water from the upslope streets. Maintaining the catch basins will prevent surface flooding but will not reduce the volume of water reaching the culvert, and thus will not limit CSO mixing or the destructive force of the water in the open channel.

Previous plans showed linked bioswales in the green area adjacent to the highway (assumed PennDOT). This can slow the water and fully contain small rain events with a properly sized network. The current flow would likely overwhelm the system in large events, requiring an overflow area.

It is possible that a culvert rebuild would enable a more extensive green-grey system in the lower lot. Manage investment in this area, with a view to a future rebuild.