



**Four Mile Run Stormwater Project
Community Meeting Notes
6:30 – 8:30 p.m. on Monday, November 14, 2022**

**International Union of Operating Engineers (IUOE) Local 95 Union Hall
Virtual on Zoom**

Attendees

The 74 meeting participants included residents, representatives from community organizations, City Councilmember elect Barb Warwick, and members of the project team. 37 of the participants joined in person and 37 joined virtually.

Presentation

Rebecca Zito, Senior Manager of Public Affairs at the Pittsburgh Water and Sewer Authority (PWSA), welcomed attendees to the meeting. Will Pickering, CEO of PWSA, reaffirmed PWSA's commitment to the Four Mile Run Stormwater Project.

Tony Igwe, Senior Group Manager for Stormwater at PWSA, reviewed the project background and permitting challenges. Kate Mechler, Deputy Director of Engineering at PWSA, explained the requirements of PWSA's Water Reliability Plan and its impacts on a previously planned water main relocation in the Four Mile Run area. Tony Igwe then discussed the Four Mile Run Stormwater Project's new direction, to reduce flooding in The Run neighborhood through the installation of new stormwater pipes, while affirming PWSA's long-term commitment to green infrastructure in Pittsburgh.

Erin Tobin, Community Engagement Manager at the Pittsburgh Parks Conservancy (PPC), provided an overview of the PPC's involvement with the Four Mile Run project over time and the creation of the Four Mile Run watershed task force. Annie Quinn, at the Mon Water Project, introduced this new community organization that aims to conserve, restore, enjoy, and protect tributary waters to the Monongahela River in Oakland, Squirrel Hill, Greenfield, The Run, Hazelwood, and Glen Hazel.

Rebecca Zito finished the presentation with an overview of PWSA's next steps for the Four Mile Run Stormwater Project, which include finalizing the revised design and submitting a new permit application. The presentation slides and a recording of this meeting are available at www.pgh2o.com/4mr.

Discussion

- **Community member:** It's encouraging to hear that the flood work is moving forward, but it's discouraging to hear that the green infrastructure piece isn't a part of this anymore. There are a lot of opportunities down here for green infrastructure, not necessarily in Schenley Park, including the playground redo that's going to happen. We are inspired by Wightman Park. Is there a plan to create

a schedule for green infrastructure phases of this project and communicate that plan to the neighborhood?

- **Tony Igwe, PWSA:** The first step of the green infrastructure plan for this project is actually a strategic plan for the entire city, not just the Four Mile Run neighborhood but also other areas that flood. We need to evaluate what it would take for PWSA to offer a specific level of service for flood reduction across the city and what the cost would be. PWSA needs to make sure that the green infrastructure that we build going forward goes to the next level of helping us control stormwater in neighborhoods, rather than only addressing the combined sewer overflows (CSOs) that ALCOSAN's upcoming tunnel project will address. This is to avoid spending ratepayer dollars twice. We are working on this strategic plan.
- **Community member:** We'd also like to hear more about potential partnerships with the City, like what happened at Wightman Park. Our playground is getting redone within the next year or so and there's a lot of opportunity there to put in some green infrastructure. So, anybody that we can contact to advocate for that would be great.
- **Laura, community member:** I've been working on water solutions down here in The Run for almost 20 years because we've been flooding for as long as I've lived here. I have two properties down here and both of my basements have flooded extensively, four, six, or eight feet depending upon the floods. I've worked on my properties. Both my basements have zero windows and zero doors - they've all been blocked up and rubberized. I have backflow valves installed so no sewer water can come in, which means now I have inches of water when we flood. But that has cost me thousands of dollars. I've been waiting for solutions for a long time and it's sad. I have done these things to protect my property, and you talk about green infrastructure or bigger pipes or digging up the streets but not much has happened. We were told that it would happen this summer and now you're telling me it's happening next summer. When the manhole covers blow off, I move my car. When will solutions be built?
 - **Tony Igwe, PWSA:** The commitment PWSA has made is to continue to work through whatever obstacles we encounter, to the extent possible, to make this project happen.
 - **Laura:** What about my neighbors who haven't done what I've done? It's really hard to clean sewage water eight feet high in your basement.
 - **Tony Igwe, PWSA:** Part of the reason for the shift in direction for this project is that we looked at the entire project with the stream daylighting and other features, and we recognized that those components would take much longer to work through with the railroad and the Pennsylvania Department of Environmental Protection (PA DEP). We decided that the core of the Four Mile Run project is to try to alleviate the flooding situation, and we are moving forward with that portion first.
- **Barb Warwick, City Councilmember elect:** With these new stormwater fees and stormwater projects happening across the city, has there been any talk of a fund to help residents who are having to replace their boilers or having their cars fill up with water due to flooding, as a stopgap until projects are built?
 - **Tony Igwe, PWSA:** Sewers in this area of Pittsburgh were built back in the early 1900s, before increases in development. Across most of the sewer system in Pittsburgh, the

level of service controls less than a 2-year storm. That means on average, you could expect a storm greater than the sewers could control once or twice a year. In recent years, storms have gotten worse though. The stormwater fee, in effect right now, barely covers the maintenance and projects we have already gone through. That is why we need the stormwater strategic plan, to start to look at the problem differently. PWSA did not become an official stormwater agency until 2019. 100 years ago, when the sewer system was being designed, nobody envisioned this problem. Those of us who are now here are saying let's look at the problem and do the best we can to solve it. But we still have to answer to the PA DEP, the Pennsylvania Public Utility Commission (PA PUC), and other entities.

- **Community member:** Can you quantify for us what was lost in the capacity to capture stormwater through green methods? The way that we're going forward is basically stripping everything except the gray stormwater-only pipe. It sounds like the railroad may have changed their mind and that PWSA pivoted as far as its goals. Part of suspicion out here is that since the Mon Oakland Connector was rejected, there's no reason to give us the extra storm water infrastructure. To put our minds at ease and let us fixate on our goal, where can we get back what been lost since the last iteration?
 - **Tony Igwe, PWSA:** In terms of the stormwater level of control for The Run, nothing has changed. In previous meetings, we showed you how high a 10-year flood in the simulation would have gone and we showed you what the reduction would be. There's no change in that flood control number. Previously, we were planning to daylight a small stream that flows through the combined sewer to the ALCOSAN plant, make it nice for people to look at, but then still put the stream back in a sewer downstream. Now, we aren't planning to put that stream water into the new storm sewer. We're still going to reserve space for that stream water, in case that part of the project moves forward later. We're not saying that the stream part of the project is dead, never to be revisited. We're going to cut that stream work off and do the storm sewer portion first, because we think it will be easier for us to move forward and provide relief to people in need more quickly. We'll work out the details of the green infrastructure around the storm sewer later. Nothing is lost in terms of level of control for flooding.
- **Chris Zurawsky, community member:** First, why can't we do something like Wightman Park down here in The Run? I think it's important to remember the political clout that went into that project. We do have a new City Council member who might be effective. You said PWSA was not a stormwater organization until 2019, but the Wightman Park project was planned for many years and PWSA was a partner there. So, I don't get what changed in 2019. We can talk about the parks, services, and PWSA, but where's our city government in this project? Another point is about the Panther Hollow Lake. The lake is not acceptable in the current condition. We need to continue to focus our attention on the lake. Just because it's not part of this project doesn't mean it's not an important element. Finally, I know PWSA does many great stormwater projects around the city – why don't you promote those more? PWSA did the project up on the Bridle Trail. There was another project with boulders to catch water. If we can do it in these other parts of the city, why can't we have a nice, public facing engaging, beautiful little stormwater project in The Run to get the public excited about green infrastructure?

- **Tony Igwe, PWSA:** Many of PWSA's recent and ongoing stormwater projects were spurred by our Green First Plan. The Green First Plan was a pushback against only building tunnels, to prioritize doing green projects first to try to replace the tunnels. This was before PWSA became a stormwater agency. While those projects from the Green First Plan were in process, we learned ALCOSAN was going to build the tunnels. The tunnel will capture the first 3/4 of an inch of rainfall to manage CSOs. If we build green infrastructure that captures 1 inch of rainfall, then the tunnel is sitting empty. From a cost standpoint, it doesn't make sense to spend a billion and a half dollars to build a tunnel and then still build green infrastructure that manages the same stormwater. With the tunnels being built, our focus is turning from CSOs to other types of stormwater issues like flooding. Going forward, we need new green infrastructure to manage stormwater at a higher level, like two inches of rainfall or more. We need to carefully select PWSA's green infrastructure locations and designs to ensure we aren't double counting stormwater that the tunnels will be managing.
 - **Andrea Boykowycz:** That project with the boulders was the City, Chris
- **Community member:** If that's the case, where does Four Mile Run fall in that prioritization?
 - **Tony Igwe, PWSA:** It is not a prioritization by location. It's a prioritization that we look at the ALCOSAN tunnels and recognize that the work we do upstream of the outfalls will need to capture more than the first ¾-inch to first inch of rain. You then ask, how much will it cost to capture an extra two inches, an extra inch, or extra ½-inch of rain. This can become expensive for ratepayers and we need to consider how that level of service will transfer to the stormwater rate. Will it be affordable for customers? These are the questions we need to ask before we construct additional green infrastructure. The projects need to be cost effective because it's ratepayer dollars that we are handling.
- **Jon Burgess:** Given that some of the design/permitting/legal issues involved in Four Mile were known back in the conceptual phase (or shortly thereafter), what has PWSA learned about green infrastructure development that will inform realistic planning and community engagement from the conceptual phase going forward?
 - **Tony Igwe, PWSA:** We have learned a lot. Each project is unique, with different locations and different things that permitting reviewers are looking at. PWSA now has a variety of comments from reviewers on our projects that help us know that certain types of questions or requests will be made for certain types of projects. This helps us take those potential issues or comments into consideration as we move forward for future projects. Another thing that is important is working with the actual property owners, whether that be the City for parks or developers.
- **Erin Tobin, PPC:** I blanked when I was speaking about the taskforces and meant to say that the 5 additional taskforces were created based on the 5 priority sewersheds as outlined by the Green First Plan... sorry for not being clear!
- **Andrea Boykowycz:** Question regarding consent decree negotiations - I just got off a development activities meeting zoom with the University of Pittsburgh regarding one of their cold water

recycling/stormwater capture projects (a gray infrastructure cistern under Mazerowski Field) - and the Pitt architect wasn't able to say whether PWSA is reckoning the 9.6 million gallons/year that Pitt is taking steps to remove from the 4MR runoff load into their calculations. Any observations about stormwater reduction actions being taken by university partners, in terms of analyzing the load that remains for PWSA to deal with in this watershed?

- **Tony Igwe, PWSA:** That is a good question to follow up on. Andrea, we will email you to get more information.
 - **ACTION:** PWSA will email Andrea Boykowycz to get more information about stormwater reduction actions being taken by university partners, for the purposes of analyzing the runoff load for the Four Mile Run watershed.
- **Thomas:** Hello—bike pedestrian infrastructure also runs through Four Mile Run and is a crucial link in city transportation network. We would like to be sure disruptions are minimized and safe alternative routes are considered as part of project timeline.
 - **Tony Igwe, PWSA:** Yes, that is part of what we've done in the past and plan to continue. We have met with Bike Pittsburgh and other people that would be impacted to make sure that the impacts are minimized.
- **Holley:** The Swinburne bridge rebuild has a target date for construction approximately the same timeline as this flood control plan. How will you coordinate with the City on that?
 - **Tony Igwe, PWSA:** We had coordination meeting with PennDOT's Engineers regarding their 376 bridge project, we actually had a meeting this afternoon with the designers to review their plans and the timing of construction. We need to coordinate further with the City regarding the Fraser St/Swinburne Bridge.
 - **Andrea Boykowycz:** PennDOT is handling the deck expansion project for the 376 bridge. The Frazier St./Swinburne Bridge is DOMI. And DOMI and PWSA have both been asked about coordination regarding the bridge projects for literally years.
- **Ray Girard, community member:** Some residents in the neighborhood submitted questions but couldn't be here. Can we submit these to you via e-mail and get answers from these questions?
 - **Tony Igwe, PWSA:** Yes, we've typically done that, and we'll answer your questions
 - **Ray Girard:** I believe one of our allies is online. She's going to dump them all into the chat. So just so that you know, we think it's important that the public see our questions and the answers given as well.
<https://docs.google.com/document/d/1Tr32CTM3mw7Je1-R2vbwtYo1MtU0EZJW/edit>
 - **ACTION:** PWSA will respond to the question via email as well.
- **Ray Girard:** Tag along in this Swinburne Bridge project. Can you share what they shared with you? Some of the concerns that people have is that there's only one way in and one way out of the neighborhood. There's concern about overlap of the two projects. If the road is closed and there's only one way in and one way out, what kind of arrangements could be made if there is a medical emergency down there?
 - **Mallory Griffin Consultant Design Project Team:** The design will not allow us to close Saline Street. One-way traffic will be maintained at all times. Traffic flaggers and

emergency vehicles will be able to get in and out. There will be a very deep trench next to the road, so it's going to be a lot of police, a lot of work. It won't be years. We're estimating several months though to get that pipeline in and that's still in design.

- **Ray Girard:** And then the other question was, what about possible shutoffs of water and sewage service during this project?
 - **Mallory Griffin:** We are going to build a separate stormwater pipe, so the existing sewer won't be disturbed. It'll be in service the whole time. There will be some water main relocations that have to happen, and service might be disrupted one at a time. But the construction team will go door to door and coordinate those shutoffs.

- **Ray Girard:** And then the last question that I have will you restore the neighborhood after completion as required?
 - **Mallory Griffin:** PWSA will restore the project area. Everything will be put back as it is today. You probably already noticed that People's Gas did the gas mains last year. They've already put the sidewalks back. We do not intend to touch again. We did partner with them to make sure that work was done and doesn't have to get ripped up a second time.

- **Ziggy Edwards, community member:** We've been having these conversations for a few years now and one of the things that we have criticized PWSA for - only 20% of the of the water was coming from the park and 80% is actually coming from the other side of the watershed. With this change, are there potentially opportunities to address some of that 80%?
 - **Tony Igwe, PWSA:** A fair question. We're wanting to concentrate on doing the project that I showed. It's easy, once you start looking at that additional stuff, to get into mission creep. We are trying to just really focus on the stormwater pipeline and try to get this part done.

- **Ziggy Edwards:** I will admit that I don't have a full understanding of the level of service concept. It sounds to me like a level setting – that the amount of coverage has to be somewhat equalized over all the ratepayers in the service area and nobody should monopolize the resources PWSA has to address the problems. Whatever the calculation is, does it take into consideration neighborhoods like The Run? There are a lot of places that get flooding in Pittsburgh, but The Run is one of the few places where that level of flooding happens and there's a residential community down here that's really affected. I feel like some people who are outside the situation might say, well why do you live down here? A lot of the problems are caused by development in these upstream communities and we didn't have anything to do with that – that's more a comment than a question.
 - **Tony Igwe, PWSA:** To address the level of service, it's about understanding the minimum amount of protections you can afford to provide across the service area. Within Pittsburgh, there are at least 30 to 40 areas that have the same kind of bowl phenomenon. When you're in the bowl and it rains, two and a half or three inches of rain is usually a problem not just with overland flooding, but in some cases overland and basement flooding. You want to make sure that you can afford to build to that minimum threshold across the service area. When you begin planning and doing the work, some

things might change. However, before you start spending money, you want to know what that cost exposure would be if you had to do the same work at 30 to 40 locations across the city. Can you afford it or more precisely, how much (what level of service) can we afford? That's the question we need to answer.

- **Barb Warwick, City Councilmember elect:** Addresses earlier comment about role of government.

I want to answer Chris's question about what government can do in terms of the green infrastructure versus gray infrastructure. From my understanding and as a run resident and listening to Laura and all the other neighbors here is, we need the solution here in the ground down in the basement, in The Run. That is what this is, right? That is what this is and that is the thing that can be done sooner rather than later. And all of the park issues, the Mon Oakland Connector, I've been there with you guys for six years fighting those things, so I understand. But now we're here and this is sort of the kind of get'er done solution so that we do not have sewage water blowing off manhole covers down in the basin of The Run. That is what this is about.

As far as the green infrastructure, I'm hoping, Annie Quinn, that the Mon Water Project will be sort of the birth of that in our community, where we can get this fixed, get past this awful flooding that we have right here, then start to think about the bigger picture.

In terms of just the nuts and bolts of the project – Mallory - correct me if I'm wrong - I'm assuming that when you're digging, I assume you're going to do it one section at a time. Cars will be able to get in and out there will be someone flagging two directions. Similar to what were used to with other things. I am committed to working with you to make sure everyone knows about the disruptions.

This is not something I can promise, but it's certainly something I'm interested in. Maybe we can talk about it, Will. The idea to find a few \$100,000 to help people with damage and things in their basement. That's something I'm interested in looking into. It could make a huge difference for a resident, especially someone down here in The Run and it isn't that much when we're looking at the grand scheme of things.

- **Tony Igwe, PWSA:** This is great, what I'm looking forward to with Annie's organization among other things, I think that whole translation piece [level of service and other stormwater concepts] is going to be very important. I think that's really going to be important going forward.
- **Community member:** I noticed on one of the slides it said something about a joint permit. I don't understand why it's a joint permit. When the Mon Oakland Connector was attached to the plan, we heard that it had to be a joint permit because there's a roadway. Can you explain that?
 - **Tony Igwe, PWSA:** A joint permit is a type of permit that includes multiple reviewing agencies, not necessarily multiple submitting organizations. In this case, the PA DEP and the US Army Corps of Engineers are the reviewers for the joint permit application. Different agencies are reviewing different pieces of the project. For example, the US Army Corps of Engineers reviewed where the sewer comes out into the river. The PA DEP reviewed all the way up the sewer, including anything else that has to do with the stormwater (for example, wetlands). In the past, all the permits had to be submitted independently to the different

reviewing agencies, but now they've compiled the different permits into one permit application to multiple agencies.

- **Roy Weil:** Since the dam is now classified as a high hazard, has anybody looked at the status for the dam? When will or will fail?
 - **Andrea Boykowycz:** @Roy - the high hazard status would adhere to the dam re-design, if I understood Tony correctly. Meaning, if Panther Hollow Lake were re-built to hold more water, the dam would have to be stronger.
 - **Roy Weil:** My question still stands: "What is the status for the dam? When will or will fail"
 - **Tony Igwe, PWSA:** Right now, PWSA is concentrating on this stormwater project, not the Panther Hollow Dam. That's a separate question. We would have to look into the current dam status.

- **Andrea Boykowycz:** It seems like PWSA is allowing the perfect to be the enemy of the good with regards to green infrastructure. What additional incentives can PWSA offer to individual property owners in the watershed to capture water on their properties? What incentives can PWSA offer through the stormwater management fees to actively reduce impervious surface in the watershed? What smaller-scale projects can PWSA sponsor in the park to slow runoff? What partnerships can PWSA cultivate with the City and local organizations to put city roads on diets, reduce lawn area in favor of deeper-root landscaping, restore hillsides, reduce the deer population, etc.?
 - **Tony Igwe, PWSA:** The short answer is that yes, as part of the stormwater fee, PWSA is incentivizing not just individuals, but also organizations and developers, to get rebates on their fees if they do substantive stormwater controls. As part of the strategic planning, one of the ideas PWSA is going to put forward is partnering with other entities that are actually doing this work, seeing how we can work with them to implement more green infrastructure.
 - **Community member:** How can customers access the program to get rebates?
 - **Tony Igwe, PWSA:** Visit www.pgh2o.com/stormwater and there is stormwater fee page underneath that will walk you through the steps for applying for the stormwater credit program.

- **Roy Weil:** What is the level of service for the lines that you have drawn? [Referencing stormwater pipeline depicted in the map from the presentation]
 - **Tony Igwe, PWSA:** We looked at the largest sewer we can construct and worked backwards. We are able to manage up to a 10-year storm, it reduces the flood level from approximately 3 1/2 feet to about 3 inches. We are in fact limited by the pipes that are there now, so you end up with a restriction of installing a stormwater only pipeline that can manage a 10-year storm.

- **Andrea Boykowycz:** Also, not 100% understanding why PWSA's applications for permits for the gray infrastructure lines under The Run haven't already been submitted? Why another 18+ month wait before construction could begin? The sewer lines have been part of the project since the beginning, wouldn't applications for those permits have been submitted two years ago?

- **Tony Igwe, PWSA:** The permit that was submitted 2 years ago and is considered to be for a different project. Since we removed part of the project, the permit reviewers look at it as a new project. So, we must re-submit the permit to them and start from scratch in their review timelines.

- **Rebecca Kiernan, City of Pittsburgh:** ALCOSAN's tunnels will only address flooding to a 2003 'typical year' when the tunnels are finished in 2036. Will PWSA's strategic planning for additive green infrastructure address ALCOSAN's far off timeline and account for the gap in stormwater management using future climate scenarios, or at least current conditions? There's unprecedented federal funding for infrastructure, how is PWSA planning to take advantage of that funding to help ease our flooding issues and keep our rates low?
 - **Tony Igwe, PWSA:** PWSA does plan to, to the extent we can, try to access as much funding as we can moving forward. In terms of climate change, that's also something that we need to factor into our analysis once we start looking at all the level of service conversations we've been having. As we're sitting here talking, each year that goes by those numbers change. Because of climate change, we have to factor that in. In fact, we've had a few studies by Rand to help give us an idea of some of the ways to do that - the plan is to factor those into the planning as you move forward.

- **Andrea Boykowycz:** Pittsburgh Parks Conservancy spearheaded years of studies that looked at up-stream green infrastructure and capture strategies. PWSA can't pretend that nothing has been done, that you're starting from scratch. However much it will cost you today to capture the extra 1" or 1.5", it will cost more tomorrow. If we're concerned about saving money, seems like we could start with not starting design efforts over from scratch - we can build on work that's been done before.
 - **Tony Igwe, PWSA:** The issue with the work that was done before by the Parks Conservancy is really very simple. Again, we keep talking about two different things when you talk about one inch or a half-inch of rainfall in 24 hours, you're talking water quality. You're not talking about flood management; you're not talking about water quantity. If you get that one-inch or a half-inch in 15 minutes, now you're talking water quantity and you're talking flooding when that one-inch or a half-inch shows up in 15 minutes versus when it shows up in 24-hours. Green infrastructure can easily manage the one-inch or a half-inch when it falls over a 24-hour period, but when it falls in 15-minutes you have problems. Your conveyance can't even get it to the green infrastructure. So those are the kinds of things that we need to work through. You must keep those two things in your head separate - quantity vs. quality.

- **Roy Weil:** If you have a railroad involved, forget it.

- **Mary Shaw:** Will you ask the Planning commission to require new projects to NOT make the problem worse? For example requiring on-site water management, not increasing the amount of pervious surface etc. In other words, will you work on upstream development to prevent projects from making the problem worse?
 - **Tony Igwe, PWSA:** The City has redeveloped their new standards that developers have to meet, and those new standards factor in stormwater management.

- **Jon Burgess:** How is PWSA looking at advanced climate projections and enhanced capacity to design the current slate of projects. Or are Pennsylvania Department of Environmental Protection (DEP) Best Management Practice (BMP) design and City of Pittsburgh stormwater standards the standard for planning?
 - **Tony Igwe, PWSA:** The City of Pittsburgh's standards will stand when we do our evaluation. Like I said, by the time some of those evaluations are done, you may be looking a year, two years from now in terms of the strategic plan, maybe even longer. The climate change numbers are going to change, and whoever is doing the modeling at that time will have to use the latest numbers to help us with the modeling, the sizing and so forth.