

CURRENTS

Lead Line Replacements Gain Momentum

As part of its Community Lead Response, the Pittsburgh Water and Sewer Authority (PWSA) and its contractors have replaced over 1,200 residential lead service lines. The program has reached new levels of productivity, with five contractors and over a dozen separate work crews replacing full lead lines in neighborhoods across PWSA's drinking water service area. The program has also replaced over 300 privately-owned lead service lines, thus avoiding potentially harmful partial lead service line replacements.

The current rate of replacement places PWSA on track to meet the Pennsylvania Department of Environmental Protection (DEP) mandate to replace 1,341 public lines by June 30, 2018. The pace of replacements has increased due to favorable weather conditions, additional contractor and in-house PWSA crews, and extending working hours to evening and weekends. PWSA dedicated \$44 million to replacing residential lead service lines in 2018. The Authority must replace an additional 1,341 lines from July 1 to December 30, 2018.

"Our recent progress on removing lead lines from our system reflects PWSA's steadfast commitment to protecting the public's health. Our leadership team is tackling this program with every resource available, and we are grateful to our customers for allowing us into their homes to reduce their risk of exposure to lead in water," said PWSA Executive Director Robert A. Weimar.

Water service lines are made up of two parts – a public side that runs from the water main to the curb, and a private side running from the curb into the home. PWSA has ownership and maintenance responsibility for the public side, but replacing only a portion of a lead line can temporarily raise lead levels in homes.

Homes identified under PWSA's 2018 replacement program can have both portions replaced at no cost to the customer. Property owners eligible for a private lead line replacement are contacted by PWSA and must provide consent and access to the home before contractors can replace their private lead line. Performing full line replacement entails

multiple layers of coordination between customers and construction crews who must work in public roads and inside private property. To meet this demand, PWSA has established a 30-person, cross-functional team of engineers, plumbers, customer service representatives, and communications specialists dedicated to replacing as many full lead service lines as possible.

Contractor lead line replacement work to-date has taken place in Mount Washington, Beltzhoover, Perry North, Squirrel Hill, and the Hill District. Additional neighborhoods will be added throughout the year and PWSA's in-house crews are performing replacements across the Pittsburgh and Millvale. Work areas can be found at pgh2o.com/leadmap.



PWSA contractor excavates a lead line in Mount Washington

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COMING UP:

2018 Board Meeting Dates
July 27 (no August meeting)

South Side Planning Forum
June 25
Brashear Center

Perry Hilltop Fineview Citizens Council
June 26
Fineview Park

Wightman Park Public Meeting
June 27
Jewish Community Center

Maytide Green Public Meeting
July 12
Fair Haven Church

Polish Hill Arts Festival
July 15

Lawrenceville 9th Ward Block
July 19
Our Lady of the Angels Parish

Squirrel Hill Urban Coalition
July 17
Children's Institute

Mt. Washington Community Meeting
July 19
122 Virginia Avenue

RAW TALK

By Executive Director **Robert A. Weimar**



We Get Stuff Done (GSD) with P3s

Since taking the helm at PWSA, I've made it plain that we cannot go at it alone as we renew our organization and the water systems we manage. We must benefit from the experience and expertise external partners can offer the Authority as we develop and implement our \$1.1 billion, five-year construction and strategic plans. Some call these relationships with external experts innovative public private partnerships (P3s), but in reality, they're what we're already doing at PWSA every day.

We're enlisting bright and experienced minds to partner with us across the entire organization. For Engineering, we're sourcing expertise from over ten national and international engineering consulting firms. These organizations bring experience from other major water, sewer, and stormwater utilities which helps assure that our projects are taking advantage of the lessons learned from other cities.

These are the same firms that design and build complex water treatment facilities for both municipal authorities and privately-owned water companies across the country. We partner with these firms on a project-basis, so that we avoid hiring full-time employees to fill temporary needs. Most importantly, these partners are helping to educate and train PWSA staff, so that when they leave, our in-house team is prepared to operate and maintain the newly-constructed facilities.

Another example of a current P3 is with CWM Environmental. Late last year they were brought on

board to manage and improve our laboratory operations. The partnership is structured so that PWSA retains ownership of the lab, but CWM manages its operations.

Already, the partnership has generated improvements like a complete overhaul of operating procedures, upgraded equipment, improved reporting to regulators, and the adoption of new lab management software. Thanks to this P3, PWSA will soon begin to perform in-house lead and copper testing, which will reduce costs and improve response time for customer-requested analysis. While CWM is managing the Lab, they're training PWSA staff to build our internal capacity, with the expectation that lab management functions will be returned to the Authority at the end of the contract term.

Workplace safety and the safety of our field crews is of the utmost importance. We partner with the safety firm, CMI, to provide ongoing training to field operations. This ensures that they are aware of the latest safety regulations and procedures.

Late last year, PWSA became the first municipal authority in Pennsylvania to be regulated by the Public Utility Commission (PUC). This transition to PUC oversight is establishing a litany of new financial and operational requirements upon PWSA that needed to be met in an extremely short period of time. In response, PWSA partnered with the consulting firm Raftelis to help develop our required tariff filing and compliance plan.

Raftelis has a breadth of experience partnering with publicly-owned utilities to improve their performance and finances. Raftelis is also assisting PWSA as we establish our performance metrics and monitoring, as well as standing up an office devoted to internal performance improvement and training. Like the other partnerships, our engagement with Raftelis is short-term and designed to allow PWSA employees to take the baton when their projects are completed.

Earlier this week, PWSA leadership visited with our counterparts at the District of Columbia Water and Sewer Authority (DC Water) to learn how they evolved into a first-class professional utility while maintaining public ownership and control. I was pleased, but not surprised, to learn that they leverage many public private partnerships like those I've described above. I left the visit with a sense of enthusiasm and affirmation that we're on the right track.

The public should share my confidence that we have the team and expert partnerships at PWSA to surpass the turnaround achieved in the nation's capital. As the cover story on our Community Lead Response demonstrates, PWSA is Getting Stuff Done for the public. I welcome anybody who has ideas for furthering PWSA's progress through partnerships and collaborations to contact me and our leadership team.

Putting Water In Its Place

A new way to manage stormwater

Pittsburgh receives nearly 40- inches of rainfall each year, an amount commonly experienced in tropical regions. That's a lot of rain! And we are all familiar with the challenges it brings. Many Pittsburgh neighborhoods experience basement backups and local flooding. Then there are the more severe events that lead to road closures, flash floods, and – tragically – fatalities.

Managing stormwater is challenging, and in 2015, PWSA, the City of Pittsburgh, ALCOSAN, and many community and neighborhood groups began considering ways to manage stormwater in a more holistic manner. In 2016, the draft Citywide Green First Plan was introduced. It identified six priority sewershed areas to focus the first round of green stormwater infrastructure projects.

Since its inception, PWSA, in collaboration with many of our partner agencies, has started planning, designing, and constructing green stormwater infrastructure projects in the South Hills, the Hill District, Garfield, Polish Hill, the North Side and Woods Run, the South Side, Shadyside, and along Four Mile Run, Negley Run, Nine Mile Run, and Saw Mill Run.

These projects will help to capture and retain stormwater keeping it from entering our rivers and streams. In doing so, we will meet stricter regulations set by the Environmental Protection Agency and the State. And critically, as PWSA implements green solutions and evaluates the effectiveness of these projects, we are also in the process of establishing a dedicated stormwater division.

This summer PWSA will begin an outreach and education campaign to provide customers, business



The recently completed Centre and Herron Green Stormwater Infrastructure is the second of four pilot projects completed by PWSA.

stakeholders, government agencies, and the community with an overview of the Green First Plan, as well as information to help understand the effectiveness of green stormwater infrastructure solutions.

The purpose of the outreach and education campaign is to provide a common vocabulary and better understanding of how green solutions function and why they are good for Pittsburgh.

“We are looking forward to making this an interactive campaign for our customers and stakeholders by providing them with multiple ways to learn about stormwater and the green solutions we are implementing,” Robert A. Weimar, PWSA Executive Director stated.

As we establish the campaign, we will launch online and digital materials, so the community can learn about stormwater. We also plan to host pop-up events, speaker forums, and have one-on-one discussions with key community groups directly impacted by stormwater and our proposed projects. We will share more information this summer as the campaign evolves.

Please contact Rebecca Zito, Communications Project Manager at rzito@pgh20.com with questions about the outreach and education campaign.



PWSA IN THE COMMUNITY

**PWSA engaged with the
community at the following
meetings:**

**Mairdale Avenue Riverview Park
Green Stormwater Infrastructure
Project Update**
June 4
Perry High School

**Morningside Area Community
Meeting**
June 6
Morningside VFW

**Shadyside Action Coalition
Community Meeting**
June 14
Winchester Thurston School

**Highland Park Community
Meeting**
June 21
St. Andrews Church

PWSA Customer Feedback

Going above and beyond to help customers.



The Green Building Alliance toured the Water Treatment Plant on June 7. The group was amazed by the facility and the water treatment process.

Touring the Water Treatment Plant

PWSA recently hosted the Green Building Alliance for a tour of our Water Treatment Plant in Aspinwall. They reached out to thank us for the informative and well-planned day. Alliance staff relayed that while they do tons of tours, one member said it was their favorite tour this far. We're honored!

Gratitude and appreciation for Customer Service

Recently, a woman who came to our Strip District office worked with Joyce and Ramika. They were patient and informative with her, and she reached out to extend her gratitude for the time they spent. Thank you to Joyce, Ramika, and the other Customer Service team members who act as the face of our Authority when working the front desk – your kindness and work ethic reflect positively on the entire Authority!

An Oakland woman recently reached out via handwritten letter to thank our Customer Service staff for their help with a billing issue. She said the young woman she worked with was kind and patient.

"We need kind people," she said. We couldn't agree more!

Recognizing a quality job

PWSA recently completed lead service line work in the North Side and received some great feedback from a resident who received a full lead line replacement. The customer was worried about pulling together the funds to do this work and was grateful for service provided by the PWSA employees and contract crews.

"The contractors and city employees that worked in our area and in our new home were polite, helpful, and it really felt like everyone was trying to do a quality job," said the resident. Thank you to all those who work so hard to make this large, complex project work every day throughout the City.

Kudos to our Field Crews

A North Side resident recently reached out to extend a thank you to Casey, one of our plumbers, who worked with her to replace her meter. She thought Casey was polite, timely, and efficient. It's great to hear that our crews are representing PWSA so well out in the field.

Our sewer crews recently went out to investigate a backup at a woman's property. After finding nothing wrong with our public sewer, it was determined there was an issue with the private lateral. With conflicting information coming from the customer's private plumber, our Superintendent Tom not only worked with the plumber but with the customer's insurance company to ensure the issue was solved correctly. The clog on the private lateral only took about 45 minutes to clear and the issue was resolved. She reached out to us on social media to commend Tom for his attention to her problem and for going above and beyond to make sure she got a fair deal. Thank you, Tom!

Implementing Orthophosphate as Corrosion Control

What to expect

PWSA has determined, through extensive testing mandated by the Pennsylvania Department of Environmental Protection (DEP), that orthophosphate, a chemical additive to the water treatment process, will be the most effective way to combat corrosion and bring lead levels down in tap water.

Why is corrosion control important?

Corrosion control is added in the treatment process and acts to coat the pipes as the water moves through the system. This coating acts as a barrier between water and the lead service lines running between the water main in the street and the home. This barrier will prevent lead from leaching into the water. PWSA's current corrosion control treatment is not optimal and we have found that changing to orthophosphate will be much more effective.

Preparing Pipes for Orthophosphate

There are many steps we must take now to implement this new chemical, one of them being flushing the system of old water to make way for the new, orthophosphate treated water. In the months to come, you may see PWSA crews and contractors flushing water from hydrants throughout the city. This is a routine step in the process and is not a cause for concern.



Robocalls will be sent to customers to notify them of this work and maps and other information will be posted to the web and on social media. Water service to your property will not be affected during this time.

We thank you for your understanding as we work to implement this system-wide improvement. Flushing our water mains to allow for this new treated water will help to lower lead levels and improve the quality of water for those with lead service lines.



Media and Press Releases

MEDIA COVERAGE

[Pittsburgh council angles to keep voice on PWSA board](#)

Post-Gazette

[Chemical to be added to Pittsburgh's drinking water to reduce lead contamination](#)

Tribune-Review

[Pittsburgh will add chemical to water to reduce lead risk](#)

WESA

[PWSA preparing to expand its lead line replacement on Mount Washington](#)

South Pittsburgh Reporter

[PWSA to offer water filters for homes with high lead test results](#)

Post-Gazette

[Sewer project to tie up Strip District parking, traffic](#)

KDKA

[Activists point to 'green' sewer fixes to handle sewage, runoff](#)

Post-Gazette

[After 20-years, Highland Park Lake ready for fishing.](#)

Tribune-Review

PRESS RELEASES

[Lead Line Replacements Reach Peak Productivity](#)

We're Containing Stormwater. Not Our Excitement!

[PWSA Breaks Ground on Smallman Street Water and Sewer Improvement Project](#)

[PWSA Makes Progress on Treatment Upgrades to Reduce Lead in Water](#)

Highland Park Water System Improvement Projects



These projects will improve the distribution of water, modernize existing infrastructure, and add redundancy to our water system.

Several critical infrastructure projects will take place in Highland Park and are needed to modernize our water system. They are currently in their design phase. Construction will begin as early as summer 2018 and will continue through 2021.

Orthophosphate Facilities

We will construct two small buildings to store and distribute orthophosphate to the water system. Orthophosphate is used to reduce corrosion in existing lead pipes and will prevent lead from entering the water system. The buildings will meet design standards to fit the character of Highland Park and will be constructed near the vicinity of the Microfiltration Plant.

UV Treatment at Microfiltration Plant

The Microfiltration Plant was taken offline because it no longer met water quality standards as determined by the DEP. To meet current water quality standards an extra layer of ultraviolet treatment (UV) must be added.

Securing Highland Park Reservoir I

To ensure the protection of the Highland Park Reservoir I, DEP is also requiring PWSA to secure the open reservoir. The measures include placing a security guard at the reservoir, installing cameras, and repairing the reservoir's wall. These measures along with UV Treatment will enable PWSA to put Reservoir I and the Microfiltration Plant back into service.

Highland Park Rising Main and Pump Station

The new rising main and reconstruction of the Negley Avenue Pump Station will modernize the distribution of water to the Garfield Tank water supply system. The existing pump was taken out of service and a temporary pump is supplying this service area. A new pump station will supply the Garfield area and will have the capacity to

distribute 50 million gallons of water per day to PWSA customers.

The new rising main will provide the system of pipes needed to connect the new pump station to the Highland I Reservoir. The rising main will be constructed in the general area of Mellon Terrace, Bunkerhill Street, and Highland Avenue. This location was chosen to minimize the impact to existing trees.

Highland Park Reservoir II

While these projects are under construction, PWSA will also replace the existing cover on Highland Park Reservoir II and replace the main that distributes water from this reservoir to the pump station.

Coordination and Outreach

PWSA is coordinating these projects with the City of Pittsburgh, Port Authority, the Pittsburgh Parks Conservancy, and the Pittsburgh Zoo to identify opportunities to enhance services and amenities around Highland Park. PWSA met with the Highland Park community on June 21 to share information about these projects. The Arts Commission will begin reviewing plans for the orthophosphate facilities at their June 27 meeting. For more information visit www.pgh2o.com/highlandpark.

2018 YTD Expenditure

Report includes all paid vendor invoices and contractor pay applications from January 1, 2018, to June 19, 2018, as well as invoices received but not yet finalized/approved.

Capital	\$ 21,702,070
Operations	\$ 10,502,912
TOTAL	\$ 32,204,982



New Hires

Ryan Dappen

Business Intelligence Analyst

Nicole Dickun

Sr. Contract Specialist

Nicholas Letzkus

Communications Intern

Jacey Martini

Safety Intern

Keith Orth

Stationary Engineer

Sandra Reid

Clerical Specialist II

Melissa Schrepfer-Nelson

Customer Service Representative I

Paul Spara

Systems Administrator

Halie Stewart

Clerical Specialist II

WELCOME ABOARD!



Job Postings

Interested in working with us? PWSA is looking for dedicated people to join our team.

Plant Operator, Water Treatment Plant

Project Systems Specialist, Engineering & Construction

SCADA Technician, Water Production

Customer Service Representative, Full-time and Part-time
Customer Service

Accounting Specialist, Finance

Director Water Production, Field Services

Director Engineering & Construction,
Engineering and Construction

Visit www.pgh2o.com/employment to learn more.

PWSA Employee Spotlight

Alex Wasko: Senior GIS Analyst



Alex Wasko has a burning passion for data, maps, and thinking about things spatially. Her career path in Geographic

Information Systems (GIS) was an obvious choice as she became more familiar with its possibilities and the ability to share complex topics with people through mapping.

"I can get lost in analyzing data and plotting that information on maps," she exclaimed. "I love making a good looking, informative map. They can really help people understand their relationship to the complex topics we are trying to solve."

Alex studied archaeology in college where she was introduced to GIS. She has a bachelor of arts degree in geography with a concentration in GIS and Emergency Management. She saw more opportunities with GIS and upon graduation worked in the oil and gas industry. Her career took her to Mott MacDonald where she worked with stream monitoring and mitigation data related to coal mining. These positions were all in areas of GIS and eventually paved the way to her role at PWSA where she was able to focus on the lead program.

She became a full-time PWSA employee in October 2017. She is continuing to work on the lead program and is thrilled to be part of the GIS team. This program is "her baby," she stated. She's been involved with it from the onset and has watched

it evolve into the program that it is today. She has a unique perspective on the data.

"You can look at customer location points and see the story of that particular service line," she explained.

Each entry includes the associated historic record. It then shows the results of the curb box inspection and, when needed, a replacement work order is assigned to the location point.

"The data shows the various steps associated with each service line, and from beginning to end tells an interesting story of how lead lines have impacted our customers and what it took to make the needed replacements."

One of our recent projects was to add historic record data to the lead map available on our website. The historic records were contained in a database that needed to be matched to individual records already on the map.

Alex's role was to ensure that the database appropriately corresponded to the mapped customer location points. The historic records were incorporated into the online map. Now, when web users view the map, they can click on a record to see the material of the service line.

Several people worked on compiling the historic records. From the collecting data, verifying it, incorporating it into the map, and ultimately getting it online, it was a tremendous undertaking for the GIS team. Once the map went live, it was well received by the community – within the first few weeks the map received over 30,000 views.

"The lead map is an example of how GIS can be used to inform and engage the community in some of the projects and programs we are addressing," Alex stated.

Alex will eventually spend less time on lead and move onto other responsibilities within GIS. She is interested in being part of the program's evolution and sees opportunities for the development of the entire team. She hopes to further push the capabilities of GIS out to the community.

"I'm excited to make GIS more accessible to our customers. It's a powerful way to share information and explain a complex subject," Alex stated.

Alex's enthusiasm for GIS and mapping is contagious! However, those aren't her only interests. When not working she enjoys music, going to concerts, and spending time with her boyfriend. Right now, her favorite pastime is reading in her hammock and she currently enjoys eating at Wingharts for a particular pizza – *Rachel's Trip to Greece*.



A map containing historical data of lead service lines is available on our website www.pgh2o.com/leadmap.

Visit www.pgh2o.com/employment to learn more.

PGH₂O WATER WISE

Stormwater Tips

Car Washing: Consider the rivers before you shine your machine.



Summertime often means breaking out the bucket and hose and washing your car for a weekend drive. Be mindful of the relationship between non-

commercial car washing and stormwater pollution.

Soapy water used for car washing can contain environmentally-harmful chemicals such as phosphates. This and other pollutants from cars like exhaust fume residue, gas, rust particles, and motor oils often run off into storm drains in the street from your driveway. This water can run into our rivers, streams, and creeks.

Car Washing Tips:

- Avoid using an excessive amount of water. This can be done by attaching a flow-restriction device to a hose.
- Do not empty wash buckets outdoors. Dumping into sinks and toilets ensures that this wastewater will be treated via entering the sewer system.
- Use water-based, biodegradable cleaners.
- Try washing on a surface that absorbs and filters water (i.e. gravel).



Water Wise Tip

What is a retention (r) tank?

R-tanks are a tool used in green stormwater infrastructure to capture and hold water during peak rain events to slow-release it back into the ground, or sewer system, slowly. They are very simple structures and look like a milk crate. They sit below green infrastructure systems to capture the water.

Why are R-tanks used by PWSA?

They are particularly useful in Pittsburgh's green stormwater infrastructure systems to send water slowly back into the sewer systems. We don't divert the water back into the ground because the region has particularly dense soil – the water does not re-absorb very well. [R-tanks](#) can be connected to the sewer system to reduce sewer overflows during fast, heavy rain events.

How does the water get to the r-tanks in the first place?

Green infrastructure systems can be created by using absorbent soils and plants that are able to take up a lot of water. Stormwater can filter through these engineered green systems and then into the r-tanks below.



Stay in Touch with PWSA!

Subscribe to our mailing list to receive press releases and community announcements.



Please take a minute to join our mailing list at pgh2o.com/subscribe to receive press releases, our monthly newsletter, and other announcements you won't want to miss. Our goal is to establish an ongoing dialogue with customers and the Pittsburgh community.



PWSA wants to have an ongoing dialogue with our customers and the Pittsburgh community. One of the easiest ways to share information is on social media and through our email subscription. Join us in any or all of the following ways to receive the latest about water and sewer services, projects and initiatives, our newsletter, and announcements.

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