COURTERING 2020 WITH A HEALTHIER WATER

Our diligent team of professionals spent 2019 making crucial water, sewer, and stormwater upgrades to provide a higher quality of service to our customers. With over \$100 million invested in our infrastructure, 2019 was our most productive year ever, and we're poised to continue to deliver for our customers in 2020.

Sewer Improvements

Our sewer system has served us well for over a century, but we must begin to rehabilitate these pipes to avoid dangerous situations like backups or flooding. In 2019, we lined nearly five miles of sewer. which adds decades of life to the line by creating a new barrier, or sleeve, inside the old pipe. Additionally, over 1,700 storm drains were cleaned and 800 were replaced, ensuring that our sewers can properly channel stormwater away from streets, homes, and businesses around the city. We will line an additional 16 miles of sewers in 2020.

Water System Rehabilitation

We worked to rehabilitate some of our larger water facilities, like the Lanpher Reservoir that serves the northern neighborhoods Pittsburgh. We're also working to return the Microfiltration Plant in Highland Park back into service, which serves many of our





PWSA's Mission Pump Station in the South Side

customers in the east end of the city. Ultraviolet disinfection systems have been installed and we will continue our project to upgrade the walkway, wall, and railing around the open reservoir in Highland Park. Continuing our progress into 2020, we're also busy designing over 15 miles of new water mains.

New Solutions to Stormwater Issues

Our approach to stormwater challenges is dynamic, as there is not a single solution for every neighborhood. We're collecting data on the pattern of flooding, basement backups, and geological shifts caused by the increased number of heavy storm events. In 2019, we implemented stream bank restorations in Brookline, rain gardens in Carrick, and stormwater sensors in Four Mile Run to help us manage excess water naturally. We are currently designing 24 projects, some of which will begin in 2020, all in effort to

reduce the negative effects of increased stormwater in the area. These projects will help reduce pollution in our waterways and improve public health and safety for our customers.

A Stronger PWSA

These crucial improvements to our water, sewer, and stormwater systems require investment from our customers. This also means we need improvements to our assistance programs that make our services affordable for all customers. We continued to expand and promote all our income assistance programs and will continue to learn from experts and water providers around the country to create the best assistance programs possible.

With a successful 2019 behind us, we look forward to continuing to improve and taking on new challenges in 2020. To follow our progress, visit pgh2o.com/ projects-maintenance and headwaters.pgh2o.com

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COMING UP:

2020 Board Meetings February 28 March 27 April 24 May 22 June 26 July 24 No August Meeting September 25 October 23 November 20 December 18 Meetings begin at 10:00 am at 1200 Penn Avenue and are open to the public.

Manchester Citizens Corporation

January 30 Manchester Citizens Corporation; 6:00 pm

Hill District Consensus Group February 4 Hill House; 5:30 pm

Bloomfield-Garfield Corporation February 18 Bloomfield-Garfield Corporation; 6:00 pm

RAW TALK By Executive Director Robert A. Weimar A Few Good Women and Men to Lead Us into the Future



As you will read in this month's *Currents*, 2019 was the Pittsburgh Water and Sewer Authority's most productive year ever. We invested nearly \$107 million to improve our critical infrastructure and facilities. We replaced over 3,000 lead service lines, upgraded our water treatment to protect against corrosion from old lead pipes, improved customer service, added new technologies to make our work more efficient, replaced over 10,000 outdated water meters, and kicked off an over \$1 billion plan to renew our water and sewer system.

Equally as important, we bolstered our workforce by promoting stellar performers and adding over 45 individuals to our team, including senior leaders in engineering and construction, customer service, field operations, finance, and program management. In addition to new hires, we provided training and development opportunities for our existing employees so they can learn new skills and improve the services they provide our customers. This larger team is helping us meet the increased expectations of our regulators at the Pennsylvania Public Utility Commission.

As we enter 2020, our team will explicitly align everything we do with our organizational goals, which are:

- Protect Public Health and the Environment
- Ensure Customer and Stakeholder Satisfaction
- Improve Infrastructure Reliability
- Maintain a High Performing Workforce
- Be an Effective and Accountable Publicly-Owned and Managed Organization

I'm not sure about you, but each time I read our goals, I am struck by their criticality. Our neighbors and our families are relying on us to achieve them. Failure is not an option. Meeting and exceeding our goals will undoubtedly require resources from our customers so we can build and renew our infrastructure. We're also pursuing and have received funding from foundations and the state and federal government to alleviate the cost burden placed on our ratepayers. However, money alone will not ensure our success. We need people who are dedicated to our mission to drive the projects and initiatives to the finish line.

Last year we made significant strides building this core team of experienced leaders and technical experts, but we're still looking for a few good women and men to join us. If our goals are something you or someone you know would be inspired to work toward, please monitor our job openings at pgh2o.com/about-us/careers. If you do not see a position relevant to your background, but think you could bring value to our organization, send over a copy of your resume to hr@pgh2o.com.

I hope you share my excitement for the opportunities to improve in the new year. With a core team of experienced leaders and technical experts in place, our customers can be assured that we will continue to Get Stuff Done (GSD) for them in 2020 and beyond.



PWSA's Customer Service Department

"2019 was the Pittsburgh Water and Sewer Authority's most productive year ever. We invested nearly \$107 million to improve our critical infrastructure and facilities."

Getting Stuff Done (GSD): Going above and beyond!

Our staff is hard at work in the winter months responding to multiple water main breaks, frozen service lines, and higher volume of customer requests. We appreciate the time people take to thank them for all the hard work they put in to take care of every request quickly!

Leak Found!

A customer reached out to praise Water Repair Foreman John Leckie, Senior Manager of Field Operations Luke Erny, and their crews finding and fixing a leak that was both tough to locate and posed a risk to electrical equipment in the basement of their property. They wrote that "the crew was on site within an hour and they corrected the issue shortly after" the leak was located. Thanks for your persistence, guys!

Lead Contractor Kudos

Our lead service line replacement contractors are continuing to Get Stuff Done despite wintry conditions. A customer in the Perry South neighborhood, left us a voicemail to extend their gratitude to the crews for their professionalism as they replaced his lead service line. We'd like to thank them for all their hard work as they continue to help us make strides toward a lead-free Pittsburgh.

Operations Excellence

Two customers wrote us a letter to recognize Chief of Operations Rick Obermeier; Utility Workers Derek Forrester, Brad Monjack, Damon Gray, and Chris Huber; Heavy Equipment Operator Delron Higgins; Truck Drivers Richie Mason and Joe Mercer; and Sewer Plumbing Foreman Chris Sciulli for assistance in the work to separate their water line so both of their units would have a direct connection to our water main. They said that these employees were "pleasant, professional, and worked together like a 'well-oiled machine.'"

Customer Service Success

Our Customer Service Department works tirelessly to address each issue they receive from any customer across our vast service area. An appreciative customer from Brighton Heights expressed satisfaction with the service she received every step of the way until a leak on her curb box was resolved. The process started with Senior Customer Service Manager Sharon Gottschalk, who got the ball rolling and reported



the complaint to our Operations Department. Following the report, Senior Managers of Field Operations Joe Tewell and Luke Erny, and Utility Worker Chris Huber, were able to resolve the issue. Thanks for your hard work!

Tremendous Teamwork

We have a team of dedicated experts who make up our Lead Help Desk. At the end of 2019, a customer residing in Morningside called us to thank Lead Help Desk Customer Assistance Dominique Nunley, Tasha Butler, and Donna Martrano for being "very respectful, pleasant, helpful, and courteous" during the process that led to the replacement of her lead water service line. They answered all her questions and went above and beyond as professionals.

Proud Partners

On a daily basis, our network of approximately 25,000 storm drains need to be monitored, cleaned, and replaced. We often work with the City of Pittsburgh's 311 Response Center to resolve issues. 311 representatives reached out to thank Stormwater Superintendent Eric Taper and Dispatcher Mark Madero for "not skipping a beat as far as getting requests completed" and expressed gratitude to have

> such a productive working relationship with us. We are equally lucky to have such great partners at the City!

Quick Water Main Correction

A City Council staffer reached out to us to thank Water Repair Foreman Chris Bruecken; Utility Workers Melissa Bizub, Jon Zelina, and Wayne Blumling; Engineering Tech II Jason

Gehringer; Truck Drivers Tim Rochford and Tim Whealdon; and Plumber Dustin Saltzman for their great work repairing a water main break on Edgemont Street in Mount Washington. Thanks for braving the cold to Get Stuff Done, folks!

Helping Businesses

Our crews repaired a leak that was affecting the water service of businesses on Butler Street in Lawrenceville. Following a successful repair, a business operations manager in the area reached out to us to praise Senior Manager of Field Operations Luke Erny and Leak Detection Specialist Debra Hearn for their help in restoring water service to their facility. We greatly appreciate your hard work!

Japanese Delegation Visits PWSA

Representatives from the Tokyo Metropolitan Sewer District met with Executive Director Weimar to talk about the challenges and opportunities facing publicly owned utilities.

In late 2019, representatives from the Tokyo Metropolitan Sewer District and researchers from the Japanese think tank Mizuho traveled to Pittsburgh to meet with PWSA Executive Director Robert A. Weimar to learn about PWSA's efforts to address industry-wide challenges such as aging infrastructure and the increased stress placed on sewer systems by extreme weather resulting from climate change.

Like Pittsburgh, Tokyo has an older sewer system in a dense urban area that requires significant investment. Tokyo has also been experiencing larger and increasingly frequent storm events. At PWSA, we are working to address the same challenges. Executive Director Weimar and the Tokyo delegation discussed PWSA's efforts to prioritize, plan, and perform major sewer and stormwater projects, and shared lessons learned and best practices from our respective programs.



PWSA Executive Director Robert A. Weimar (middle) and Senior Manager of Public Affairs Jake Pawlak (far right) with visiting representatives from the Tokyo Metropolitan Sewer District and researchers from the Japanese think tank Mizuho



PWSA IN THE COMMUNITY

Over the past month, we engaged with the community at the following meetings and events:

South Side Park Stormwater Project Update January 15 Brashear Association

Dollar Energy Fund Cool Down for Warmth Fundraiser January 23-24 *Market Square*

Operation Better Block January 23 *Operation Better Block*

To schedule a presentation in your community, Visit pgh2o.com/request-us-event

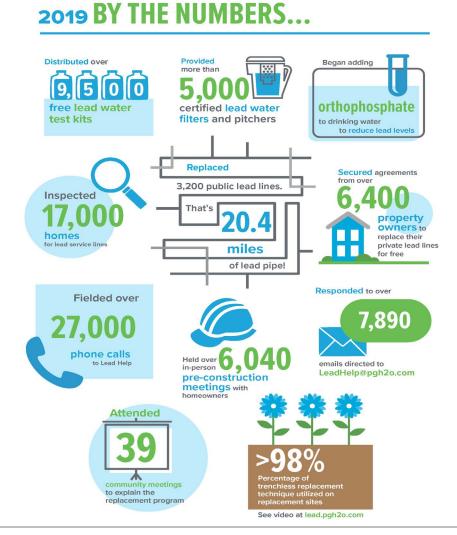
Community Lead Response Wraps up a Successful 2019

Thousands of lead lines replaced have improved water quality.

We are pleased to announce continued success with the Community Lead Response by again surpassing the number of lead line replacements required by the Pennsylvania Department of Environmental Protection (DEP). In 2019, we replaced a total of 3,202 public lead service lines, which far exceeded the DEP requirement to replace 855 lead lines between July 1, 2019 and June 30, 2020. More than 2,054 lead water service lines were replaced in 2018.

The 2019 Lead Service Line Replacement Program kicked off in spring of 2019, funded by a \$49 million low-interest loan and grant from The Pennsylvania Infrastructure Investment Authority (PENNVEST). Under this program, we replaced public lead service lines as well as private lead lines when they are found connected to a public lead line. These replacements, as well as plumbing upgrades that are required as a result of the work, come at no cost to the customer. Since our lead line replacement program first began in 2016, over 6,100 public lead service lines have been removed from the water system.

You can read more about our Community Lead Response at lead.pgh2o.com.



Media and Press Releases

MEDIA COVERAGE

Rebuilding Trust in Pittsburgh Water & Sewer Authority, *American Water Works Association Journal*

PWSA chair says all lead lines will be replaced by 2026, *TribLive*

How What's Under The Street May Affect Pittsburgh's BRT, WESA

Pittsburgh reducing carbon footprint through renewable energy sources, *TribLive*

Water authority to start drainage channels in Schenley Park and Greenfield, *Post-Gazette*

PRESS RELEASES

Follow our progress with Headwaters, January 15

PWSA's Community Lead Response Wraps up a Successful 2019, January 7

Employee Spotlight

Sewer Service Foreman Mike Dusch ensures that his crews operate as a well-oiled machine while inspecting Pittsburgh's underground infrastructure.



Every workday, you can find Mike and his crew traveling across our sewer service area, which covers the entire city limits and certain parts of the 20plus bordering neighborhoods that tie into our sewer system. Typically along for the ride with Mike are one of our three TV trucks and a vactor truck. Our TV trucks are equipped with cutting edge, 360-degree imaging technology that allows us to televise and record both publicly and privately owned sewer infrastructure. A vactor truck is a high-powered, vacuum vehicle used to clear our sewer main of obstructions that are found during an investigation.

Before joining our team, Mike spent 18 years as a union laborer. Interested in opportunities for advancement, Mike joined the water division of our Operations Department. Mike draws on this experience when he occasionally provides coverage as a water service foreman, when necessary.

When PWSA took over maintenance of the sewer system from the City of Pittsburgh's Department of Public Works in 1984, Mike hopped over to the newly formed sewer division where, before his promotion to his current role, he spent 17 years working to monitor our sewer system with duties such as operating the TV truck and logging sewer overflow events.

Mike enjoys the challenge of investigating issues of all varieties no matter rain, shine, or snow. "There are no rainouts here at PWSA. We are out here 40 hours a week, guaranteed," he explained. Also, interacting with the PWSA crew, contractors, and customers involved in the process of resolving a problem is something he looks forward to every day. In his time outside of PWSA. Mike serves as a state constable under five different magistrates and helps raise funds for the Western Pennsylvania Police Benevolent Foundation, whose mission is to provide assistance to the families of police officers injured or killed in the line of duty. At home, he spends time with his wife and his three children, one of whom was adopted following the earthquake that occurred in Haiti in 2010. Lastly, one can assume that if Bruce Springsteen has a tour stop in Pittsburgh, Mike will most definitely be there.



PWSA T.V. Truck Specialist Jason Auge inspects live video as he guides a camera through a sewer main.



PWSA's vactor truck



A small camera prepares to be lowered into a manhole to televise the condition of a sewer pipe.

January 2020 Gold Drop Awardees:



We are applauding our employees' exceptional efforts with a small but significant token of appreciation, the PGH2O Gold Drop. The PGH2O Gold Drop is a pin in the shape of a water drop that symbolizes the shining example each individual is within the Authority. These selfless individuals set a high standard and inspire our team to go above and beyond expectations. Congratuations to the following employees:

Sharon Gottschalk, Senior Customer Service Manager Alexandra Wasko, Senior GIS Analyst Chuck Schmitt, Truck Driver Chris Huber, Utility Worker Damon Gray, Utility Worker Derek Darwin, Laborer Russell Kirk, Utility Worker Michael Kovacic, Utility Worker Thomas Conlin, Heavy Equipment Operator Donald Blanhard, Truck Driver Thoryn Simpson, Senior Contract Specialist Rebecca Zito, Communications Project Manager Ryan Allard, Laborer

New Hires

Emily Pontarelli Senior Manager - Performance Linda Leopold Project Manager, Laboratory II **Timothy Whealdon** Heavy Equipment Operator **Martin Foor** Plumber **Joseph Reffert** Laborer **Phillip Trantor** I aborer **Michael Anania** Customer Service Representative I Ashleigh Abrams-White Customer Service Representative I

CONGRATULATIONS!

William Chinko, Laborer

Job Postings

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

Document Management Specialist, Legal Project Manager, Engineering & Construction Administrative Assistant, Engineering & Construction Associate Project Manager, Engineering & Construction Plant Operator, Water Quality & Production Electrician, Water Quality & Production Project Manager, Water Quality & Production

Visit pgh2o.com/about-us/careers to learn more.

Program Manager – Capital Projects, Finance

Budget Analyst, Finance

Superintendent of Sewers, Field Operations

Plumber, Field Operations

Help Desk Technician II, Information Technology

IT Security Analyst, Information Technology

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

Predicting Future Water Needs

A Water Distribution Master Plan is in the works.

It's no secret that the population of the Pittsburgh region has decreased by half since 1960. Drive through almost any neighborhood, and you will see vacant lots and abandoned buildings. At the same time, certain neighborhoods in the city are seeing an increase in new residents and developments. City planners are grappling with the best way to reconcile reinvestment and manage growth – a term often referred to as "rightsizing."

An overlooked aspect of recent population trends is rightsizing the region's water system. The system was built to serve giant steel mill industrial complexes and dramatically different population distributions. Current water storage, pressure, and pipe size may not be best suited for the Pittsburgh of today and surrounding municipalities.

Furthermore, PWSA must meet water quality requirements from the Department of Environmental Protection and infrastructure replacement schedules regulated by the Public Utility Commission. Regular system upgrades are required to provide high-quality water. A Capital Improvement Plan (CIP) is created to inform the public and regulators about proposed projects and timelines for system upgrades. We include a CIP budget update in every issue of *Currents*.

Standard Criteria to Evaluate Projects

To better predict what underground infrastructure should be included in the CIP, we have hired a consultant to create a Water Distribution Master Plan (WDMP). The WDMP is a study of all PWSA's transmission mains, distribution mains, pump stations, regulating valves, and storage facilities. It does not include the Aspinwall Water Treatment Plant or the Bruecken Pump Station. Priority projects may consist of reducing reservoir storage, resizing pipes, replacing highrisk segments, etc. The projects will then be incorporated into future CIPs in addition to our annual maintenance contracts to replace hydrants, valves, small water mains, meters, and lead service lines.

The method of evaluation varies based on the type of infrastructure. For example, all 900,000 feet of our transmission mains are being ranked based on size, material, age, whether other pipes are available to provide water in case of a break, impact of a break on neighboring areas, and the amount of water it carries. Is it close to a highway? Does it run under a river? Is it the only pipe to

Continued on Page 9



Herron Hill Water Tank located near the Herron Hill Reservoir

Predicting Future Water Needs

Continued from Page 8

supply a whole neighborhood? In other words, what is the risk and criticality of each pipe segment? For equipment that is above ground such as pump stations and storage facilities, physical condition assessments are conducted in addition to data analysis.

Water Audit Training

The American Water Works Association (AWWA) established an industry standard for evaluating the amount of water loss any water system may experience called a water audit. As part of the WDMP, the consultant is conducting a baseline water audit of PWSA's water system and recommendations for water loss reduction. In December, the AWWA provided a two-day training to PWSA staff on how to conduct a water audit internally. Each year, a new audit will take place to see what recommendations are working to prevent water loss and where to put additional resources.



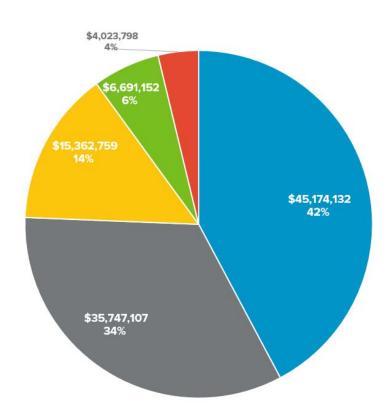
Pumping system at Bruecken Pump Station

2019 Capital Spending

We invested a record \$106,998,948 in capital improvements to the system in 2019, exceeding the previous high of \$69,187,804 in 2018. A total of \$204,264,954 is budgeted for 2020, for much needed upgrades to our critical water and sewer infrastructure.

- Water
- Lead
- Sewer
- Stormwater
- Other

TOTAL: \$106,998,948



PGHOO WATER WISE

My Pipes Are Frozen! Now What?



Pipes in unheated interior spaces are the most at risk from freezing, such as basements, attics, and garages. But even pipes running through cabinets or exterior walls can freeze.

The following are a few steps you can take to thaw our your pipes once they are frozen:

- Use a hairdryer. The easiest tool for thawing a pipe is a hairdryer. Wave the warm air along the pipe, not on one spot. If you don't have a hairdryer, wrap the frozen section with rags or towels and pour hot water over them.
- Do you know where the freeze occurred? If you think you do and want to thaw it yourself, do not under any circumstances use a torch with an open flame which would create a dangerous fire hazard. Also, overheating a single spot can burst the pipe. Heating a soldered joint could allow it to leak or come completely apart.
- Turn off the master shutoff valve. Before attempting to thaw frozen pipes, turn off the master shutoff valve. Once the pipe is thawed, a leak could be exposed if the pipe is broken.



Winter Stormwater Tips

Stormwater management isn't just a warm weather concern. Most de-icing salts won't melt ice when the temperature is below 15 degrees Fahrenheit. After the ice melts, the remaining materials can get into our storm sewers and pose a threat to the health of our waterways.

The following tips can help manage ice and snow on driveways and walkways:

- Remove, drain, and store outside garden hoses. Close the valves inside that control the water supply to the outside hose attachment (known as a bib). Open the outside hose bib to allow any remaining water to drain.
- Know your home. Locate your water meter, main shut-off valve, and individual fixture valves inside your home.
- Insulate water pipes, faucets, and water meters located in unheated areas. Open cabinet doors to allow warm air to circulate around pipes.
- If you are leaving your home for the winter, or an extended period of time, consider closing your main shut-off valve and draining your pipes.
- If your pipes have a tendency to freeze in the winter, consider allowing water to drip slightly.



PWSA CONNECT



Customer Assistance Program

Our Customer Assistance Programs are designed to provide financial relief for income-qualified residential customers who are having difficulty paying their water and sewer bill.

For more information about our programs, including the Winter Shut-off Moratorium, Bill Discount, Cash Assistance, and Free Private Lead Line Replacements, please visit pgh2o.com/CAP or call Dollar Energy Fund at 866.762.2348.



Do We Have Your Number?

Did you know that we call customers during water emergencies and outages? It is important to verify that we have the best number to reach you. You can even add multiple numbers for your account, so your entire household is informed about our work.

HOW DO I UPDATE MY CONTACT INFORMATION?

Call PWSA Customer Service: 412.255.2423 (Press 5) Or visit our website: pgh2o.com/pay

PWSA is committed to maintaining and protecting the confidentiality and privacy of our customers and will not share your information with third party vendors.

Stay in the know with PGH2O!

Join our email list to make sure you're getting the latest news and updates. Signing up is simple at pgh2o.com/subscribe or view online at pgh2o.com/newsletters.

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