GURRENTS

Introducing PGH2O Cares

Providing one-on-one assistance for those who need it most.

The Pittsburgh Water and Sewer Authority (PWSA) is excited to introduce its PGH2O Cares team – a group of education and outreach professionals dedicated to working directly with our most vulnerable customers to bolster enrollment in our customer assistance programs and identify ways to reduce water usage.

Our customer assistance programs, established in 2018, are still relatively new. Many people are not aware that they are available and do not know that they may qualify. In 2019, we conducted a household affordability analysis and found that approximately 20,000 customers are potentially eligible for our Bill Discount Program, which is the most widely used program, providing a 100% discount on fixed water charges. Currently, 4,300 eligible customers are enrolled.

Outreach and education are the primary focus of the PGH2O Cares team. They are passionate about the one-on-one work they will be doing with customers and look forward to building relationships with those who need extra support. Whether over the phone and eventually in person, they will sit with customers to describe our





Our PGH2O Cares team pictured from left: PGH2O Cares Coordinator, Sarah Viszneki; PGH2O Cares Analyst, Rebecca Copney; PGH2O Cares Analyst, Michael Anania

programs in greater detail and explain the benefits of enrolling.

This personalized assistance is needed now more than ever. With so many customers impacted by COVID-19 and the economic distress it has created, there is a greater need and customers are more stressed when they call.

"If we can help our customers find solutions and give them some relief, then we are doing what's needed to assist people during a difficult time," PGH2O Cares Coordinator, Sarah Viszneki, shared.

The PGH2O Cares team will also review water usage to identify where customers can reduce their monthly bill. Our water usage portal is available at no cost to every customer and provides hour-by-hour readings on daily water use. This data is extremely important to identify any potential problems and times when water use appears high. The PGH2O Cares team will teach customers how to use the portal, make sure they register, and brainstorm solutions to save on their

monthly water and wastewater bill.

PGH2O Cares is a proactive feature of our existing customer assistance programs. Members of our Low-Income Assistance **Advisory Committee** (LIAAC) expressed interest in developing an outreach driven program to increase enrollment. Through our collaboration with committee members, community stakeholders, and the Pennsylvania Public Utility Commission (PUC), PGH2O Cares was established along with several other enhancements to our customer assistance programs that were included in our 2020 rate filing and went into effect on January 14, 2021.

We are proud to expand our customer assistance programs and offer personalized support through PGH2O Cares. No one should have to choose between paying for water and other essential expenses. The PGH2O Cares team will help you determine which of our assistance programs are best for you.

COMING UP:

Next Board Meeting: March 26

For a complete list of PWSA's board and community meetings, please visit pgh2o.com/events-meetings.

Following COVID-19 restrictions, meetings are held virtually and may be tentative or postponed.

"There are many more people who we can help. Everyone who qualifies should take advantage... The programs are available for a reason, and our customers deserve this assistance."

PGH2O Cares Coordinator, Sarah Viszneki

For more information about PGH2O Cares and our customer assistance programs, please visit pgh2o.com/cap.

DIRECTOR'S CUT

By Chief Executive Officer Will Pickering



Collaboration, Transparency, and a Commitment to Equity

As a publicly-owned and managed water utility, we continue to prioritize engaging with the diverse customers we serve. Our community partnerships are aimed to learn from the diverse voices within our community to ensure we deliver our life essential services equitably.

In recent years, the Pittsburgh Water and Sewer Authority has formed advisory committees to assist us in addressing some of our most challenging problems. Representatives from a variety of sectors in our service area have come together to advise PWSA on affordability, lead in water, and stormwater management.

These issues impact many customers and if not addressed collectively, can create greater inequities. We need a collective approach to expand the conversation, bring new ideas, and increase transparency into the decisions we make. The collaboration and creativity of our advisory committees have resulted in partnerships and solutions that benefit our ratepayers and the Pittsburgh community.

In these committees, PWSA works closely with community non-profits, university partners, scientists, labor groups, environmental advocates, representatives from city, county, and state government, business associations, local foundations, and other stakeholders that bring diverse perspectives and ideas.

The Low-Income Assistance Advisory Committee (LIAAC) is one example of how the advisory groups are becoming integrated into the culture of PWSA and are assisting in developing programs that reach a vast majority of our customers. LIAAC recently launched PGH2O Cares, an education and outreach program that helps eligible customers enroll in our customer assistance programs and promotes water conservation practices. They also identify opportunities to continuously enhance our assistance programs and encourage ongoing public awareness of these programs.

The Community Lead Response Advisory Committee (CLRAC) was established to assist the PWSA lead team and provide valuable feedback on how we can best serve our customers while removing lead service lines from the water distribution system. CLRAC meets quarterly to review current Community Lead Response efforts, provide feedback to ensure the program is equitable, and connects the PWSA team with valuable community resources to help our customers.

The Stormwater Advisory Group formed in 2018 to provide guidance on how we manage and also charge for stormwater management. The advisory group, comprised of representatives from the public and private sectors, shared their diverse perspective on stormwater concerns to PWSA and provided feedback on how to equitably allocate the costs associated with necessary stormwater infrastructure improvements. They developed a series of recommendations for implementing a dedicated stormwater fee and incentive programs to fund stormwater management efforts throughout Pittsburgh.

These conversations are incredibly important. PWSA values being a strong community partner, and we want to ensure that as an organization we are always striving to serve everyone in the community and make sure everyone benefits from the great work of PWSA. We realize that there are disparities in Pittsburgh. By hearing from a variety of people, PWSA can be a better community partner.

In the coming weeks, you will hear more about PWSA's commitment to equity and the priorities we will advance so all residents can benefit from a sustainable and inclusive water future. We developed these priorities in collaboration with local and national partner organizations. PWSA has a unique opportunity to address longstanding inequities and emerge as a stronger Pittsburgh.

"We realize
that there are
disparities in
Pittsburgh. By
hearing from a
variety of people,
PWSA can be a
better community
partner."

Going above and beyond!

Snowstorm Specialist

Each winter our Operations team tackles the added challenge of keeping water main breaks from becoming an icy hazard to pedestrians and vehicles. Thanks to the dedicated efforts of folks like Vactor Operator, Kenny Welsh, customers can rest assured that their safety is in good hands until repairs are complete.

A customer from Shadyside reached out to praise Kenny, saying "I wanted to let all of you know that a wonderful gentleman, Kenny Welsh, has been here for several hours clearing the ice and snow in the cul-de-sac so pedestrians can now safely cross the street in front of our house."

The customer also noted that Kenny returned to the neighborhood with one of our plow trucks to further secure the area. Thanks, Kenny!



Disciplined Driving

A customer reached out to praise Inspector II, Ed Sadej, for his "courteous and patient" driving on East Carson Street in the South Side during a period of heavy traffic.

"Thank you for being respectful of other motorists and pedestrians in the midst of heavy traffic flow," said the customer.

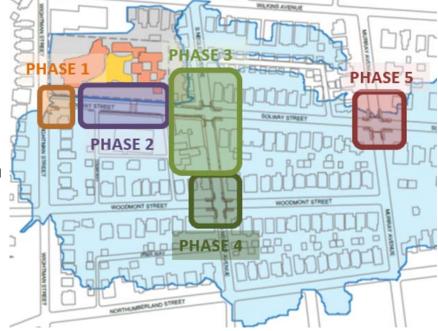
A major priority of ours is to make sure that all vehicles in the PGH2O fleet are operated in a safe and responsible manner. Thank you, Ed, for upholding this standard and your continued essential work in the field.

Stormwater Improvements Coming to Squirrel Hill

On Tuesday, February 23rd, we hosted a project update meeting about the second phase of the Wightman Park Stormwater Project. Construction of new stormwater infrastructure will begin this spring to direct stormwater to the recently completed improvements in Wightman Park.

Construction will begin at Wightman and Solway and will continue eastward ending at the intersection of Murray and Solway. The project will be constructed in five phases and is anticipated to be completed by the end of the year.

The stormwater improvements include a network of "green streets" on portions of Wightman Street, Woodmont Street, Negley Avenue, Solway Street, and Murray Avenue that will capture and direct stormwater to the park while also enhancing pedestrian safety at intersections. The retrofits include the addition of curbed stormwater "bumpout" planters at intersections, channel drains that convey stormwater under the street between planters, and upgraded sewer inlets.



There are five phases to the Wightman Park Stormwater Project. It will begin at the Solway and Negley and continue eastward to the intersection of Murray and Solway.

For more information about the Wightman Park project, please visit pgh2o.com/wightman-park-2.

PWSA Presents to Mt. Washington, Duquesne Heights Neighborhoods

Twelve water main replacements slated for Spring 2021

On February 4th, PWSA's construction project team hosted a virtual community meeting to discuss upcoming water main replacement work in Mount Washington. This project is part of the annual water main replacement program, which is currently replacing 14 miles of water mains in 10 different Pittsburgh neighborhoods.

This project will replace water mains on 12 different streets in Mount Washington and Duquesne Heights. As part of this work, PWSA will replace public and private residential lead service lines that are found while replacing the old water main. PWSA crews will coordinate with residents and complete this work free of cost. The project is estimated to be complete in late Spring 2021

For more information on the project, and on other water main replacement work happening around the city, visit

pgh2o.com/2020-water-main-replacement-project.



Work planned on individual streets throughout Mount Washington and Duquesne Heights.

2021 Southwestern Pennsylvania Engineering Outreach (SPEO) Opportunities Forum

Annual event to share business and project information to members.

On February 2nd, our Director of Engineering, Barry King, shared our upcoming contracting opportunities with SPEO members at their February Opportunities Forum. SPEO's mission includes mentoring and hosting networking events for local minority and women-owned businesses. According to the SPEO website, "The Opportunities Forum is an annual event where a variety of agencies from across the region share information with our members about how to do business with your organization and potential upcoming projects for 2021 and beyond."

Director King detailed 33 of our 2021 water, sewer, and stormwater capital projects. A large portion of the upcoming work is part of PWSA's Water Reliability Plan. The Plan focuses on a series of once-in-a-generation projects to renew key components of our water production and distribution systems. It will ensure

that critical water infrastructure such as the Aspinwall and Bruecken Pump Stations, Highland Reservoirs, and large supply mains will provide reliable, quality water service. He also spoke about the projects to upgrade and modernize the water distribution system to remove lead, prevent leaks, and minimize breaks.

PWSA thanks SPEO for inviting us to participate in this invaluable event each year.



Southwestern Pennsylvania Engineering Outreach

PWSA and University of Pittsburgh Collaborate to Find Lead Lines

New machine-learning model will more efficiently find and replace lead service lines.

Over the past year, PWSA and the University of Pittsburgh's School of Computing and Information (SCI) and University Center for Social and Urban Research (UCSUR) collaborated on a machine learning model that will help better predict the locations of remaining lead service lines in PWSA's water distribution system. Through this partnership, PWSA will better be able to predict the locations of lead lines where no reliable record is found. avoiding costly excavations and impact to our customers.

Understanding the Inventory

The ultimate goal is to replace older water mains that have a high percentage of lead lines attached that are located in areas with high concentrations of at-risk populations. To gain a clearer understanding, we have used various historical records and investigations to find lead service lines. PWSA began this collaboration with the SCI and UCSUR to create a machine learning model that would help make sense of these various streams of information.

Determining Probability

The goal of the model is fairly simple: to provide a statistical probability of a property having a lead service line, taking into consideration all the different data points available for a given property. To do this, the research team at the University of Pittsburgh tested different predictive models to find the one that provided the most accurate predictions and "meticulously interpolated missing data, balanced the data set, and pruned weak predictors," said University of Pittsburgh authors Saeed Haiisevediavadi. Dr. Michael Blackhurst, and Dr. Hassan A. Karimi.

Findings

After running the model and removing any data points that were not

increasing accuracy, researchers found that curb box inspections and tap water lead levels were most useful in providing a strong probability of a lead service line. In other words, the various historical data points alone may or may not point to a lead line, but a recent elevated water sample and curb box inspections showing lead provide the most useful results. Additionally, geographical location, building characteristics, and available historical records were among the most useful metrics.

The Future of Lead Service Line Removal

Over the next four years, PWSA will invest over \$250 million replacing aging water mains and all lead service lines attached to those old mains. To plan our replacement locations, it will be crucial to combine water main age with the findings of the machine learning model to invest ratepayer dollars wiselv.

In order to fulfill PWSA's goal of replacing all public lead lines by 2026, we need to use all sources of information to target ratepayer dollars effectively. The findings of the model will help PWSA crews more effectively find lead where they dig and avoid costly excavations where lead is not found.

To learn more, read the press release on our website.



Probability results layered over a map of the City of Pittsburgh.



Media and Press Releases

MEDIA COVERAGE

Need Help Paying Your PWSA Bill? Many Who Would Qualify For Financial Assistance Aren't Enrolled.

Utility workers anxiously waiting for COVID-19 vaccine despite no definite timeline. WPXI

Pittsburgh Water and **Sewer Authority receives** \$7.7 million from state for wastewater collection improvements, KDKA Radio

State awards low-interest loan to reduce sewage overflows to Mon and Ohio rivers, TribLive

PRESS RELEASES

PWSA Hires Tony Igwe to Lead Stormwater Program, February 9

Stay Informed About Water Service Disruptions, January 26

Employee Spotlight

Senior Group Manager of Stormwater, Tony Igwe, plans to apply his decades of experience in wet weather planning and stormwater management to help advance the PWSA stormwater program.



Prior to joining the Authority, Tony worked on projects that focused on wastewater, sewer overflows, and wet weather planning issues in large cities. In 2002, he moved to Pittsburgh to participate in the expansion of a private stormwater planning firm, Wade Trim. Through this position, he became affiliated with PWSA through 3 Rivers Wet Weather, the ALCOSAN regional flow monitoring plan, and a wet weather feasibility study.

Tony saw an opportunity to further his career by joining PWSA and apply his knowledge in stormwater planning to support the development of the stormwater program.

In his new position, Tony's goals are to implement stormwater projects identified in our five-year capital improvement program, developing the stormwater management master plan, and continuing to address obligations outlined in the Municipal Separate Storm Sewer System (MS4) Permit that we hold with the City of Pittsburgh. He also recognizes the importance of reviewing ALCOSAN stormwater plans

along side PWSA's planning efforts to determine overlapping issues and solutions. One major item that Tony wants to address is the role of climate change and the impact it may have on the future of stormwater planning.

"PWSA has had extensive studies and plans performed on wet weather planning and general stormwater plans. I want to build on those planning efforts by evaluating what was previously done and what can be used to shape the future of PWSA's stormwater program."

By working closely with PWSA since 2002, he also values the productive working relationships and friendships he has developed with members of PWSA. In his new role, Tony hopes that he can mentor and contribute his past experiences to help the stormwater program.

"Over the past several years, PWSA has undergone positive staffing changes that focus on prioritizing problem-solving and using costeffective approaches. I am excited to join an organization that puts me in a position to work with staff who value and recognize the importance of stormwater planning."

In his spare time, Tony continues to further his education by attending classes in writing from Community College of Allegheny County and taking courses at the Pittsburgh Theological Seminary School. He also likes to play soccer and spend time with his family.

"I am excited to join an organization that puts me in a position to work with staff who value and recognize the importance of stormwater planning."

Job Postings

Interested in working at PWSA? We are looking for dedicated and talented people to join our team.

Laboratory Manager

Water Quality and Compliance

Plant Operator

Water Quality & Production

Electrician

Water Quality & Production

Project Systems Specialist

Finance

Contract Specialist

Finance

Project Manager

Engineering & Construction

Associate Project Manager

Engineering & Construction

Inspector II

Engineering & Construction

Steamfitter

Field Operations

Plumber

Field Operations

Administrative Assistant - Water Production

Customer Service

Customer Service Representative

(Full-time and Part-time)

Customer Service

New Hires

WELCOME ABOARD!

Robert Bruno

Laborer

Logan Carmichael

Director of Human Resources

Christopher Day

Heavy Equipment Operator

Daniel Hagenndorf

Inspector II

Daniel Leo

Senior GIS Analyst

Robert Lieb

Laborer

R. Scott Root

Scientist I

Promotions

CONGRATULATIONS!

Michael Anania

PGH2O Cares Analyst

Anna Asturi

Clerical Specialist II

Rebecca Copney

PGH2O Cares Analyst

Brooklyn Ishman

Paralegal Supervisor

Tishla Jones

Customer Service Manager

Erich Schafrick

Chemist II

Sarah Viszneki

PGH2O Cares Coordinator

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

District Report: Water Upgrades and Sewer Rehab in District 7

Friendship, Highland Park, Lawrenceville, Morningside, Polish Hill, Stanton Heights, Strip District

Water Main Replacements

At the center of PWSA investment goals is water main replacement. This work upgrades the main components of our water system, providing more reliability to our customers and improving water quality when lead service lines are found. In June of 2020, we set out to replace 14 miles of water mains across our water distribution area, which is a \$65 million investment in our water system. Nearly a mile of these water mains were located in the Highland Park neighborhood of District 7. With street restoration to be completed in the spring, this project upgraded aging water mains and replaced all lead service lines for residential customers free of cost.

PWSA also completed two smaller water main replacement projects in Highland Park – Greystone Drive and Bunkerhill Street - that were urgently needed due to frequent water main leaks on the pipe. These smaller efforts are important because they replace old water mains, which can frequently break and require emergency repairs.

In 2021, efforts to replace aging water mains will continue, with over six miles of water mains slated for replacement. Approximately 1.2 miles of the project will take place in Highland Park, on the border of Districts 7 and 9, near our 2020 project mentioned above.

Highland Park Reservoir Improvements

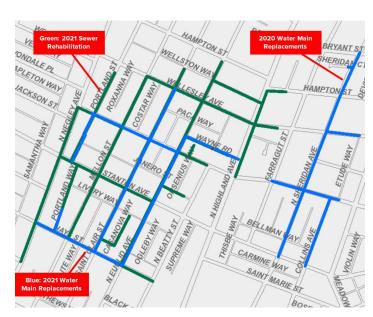
In Summer 2020, PWSA completed an important facility upgrade at our open reservoir in Highland Park. The main goal of the project was to improve the appearance, but more importantly, the security at the reservoir. Work included a new parapet wall around the reservoir, a newly paved walkway, and installation of 360-degree security cameras. Additionally, disinfection equipment was also installed in our Membrane Filtration Plant, next to the reservoir.

Sewer Rehabilitation Projects

By tracking the occurrence of sinkholes and televised footage of our sewers, PWSA takes a proactive approach to sewer work. We are focusing a majority of our approximately \$189 million capital plan over the next four years to proactive sewer work. This involves sewer rehab, that repairs small cracks and debris without a trench, and sewer relocation from risky locations like under railroad tracks or on steep hillsides.

In 2021, PWSA plans to complete sewer rehab in the Highland Park neighborhood, in the same areas as planned water main replacements. This work will largely be completed by accessing the sewer via manholes, minimizing disruption to our customers.

Learn more at our PWSA Project Overview webpage.



Graphic of 2020 water main replacement work and planned water and sewer work for 2021.

2021 Capital Spending

2021 Capital Spending Starts Strong!

The Pittsburgh Water and Sewer Authority has invested nearly \$7 million in water, sewer, and stormwater improvements this year and we are hard at work implementing an aggressive capital program to strengthen and improve the reliability of our critical water infrastructure and network of water and sewer pipes.

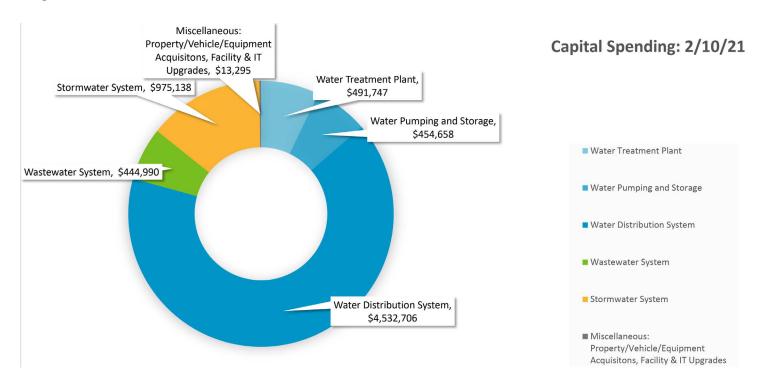
During the first two months of the year, we have invested \$2,460,532 in the small diameter water main replacement program. The strategic replacement of water mains will improve system reliability as well as improve water pressure, maintain water quality, and minimize service interruptions.

We are working towards our goal of replacing 10.1 miles of water main in 2021. This proactive program focuses on replacing aging water mains, will prioritize areas where there is a history of frequent water main breaks, and provide a more cost-efficient way to continue to remove lead service lines.

The small diameter water main replacement program is an annual program within our 2021-2025 Capital Improvement Program. These improvements to our water distribution system will increase service reliability to customers and provides consistent investment in Pittsburgh's neighborhoods.



Crews replacing a water main in a Pittsburgh neighborhood.



CURRENTS | February 2021

Digging Into Development

Introducing the Development Services team members

Back in October 2020, we introduced the idea of our Development Services team. To refresh your memory, we explained that the team was a cross-departmental group specializing in guiding applicants through the permitting process. Let's explore the role each of the seventeen team members has and how they keep development rolling.

Every permit applicant will interact with our engineering technicians (engineering techs) at some point in the process. Engineering techs fall under our Customer Service department. They are typically the first and last interaction with PWSA when submitting a permit. Their fundamental responsibilities include application intake, payment processing, initiating new customer accounts, maps and records requests, dye testing, answering phone and email inquiries, and document retention. Engineering techs are crucial members of our development team.

Next up, project reviewers in the Engineering department. Project reviewer is a generic term we use to describe the role because many of the reviewers actual titles vary. Their titles may be project manager, associate project manager, engineer, and more. Using an engineering lens, project reviewers make certain development permits meet PWSA minimum standards.

In addition to our project reviewers, our Geographic Information System (GIS) technicians and field inspectors fall

under our engineering department. GIS techs play a role in fact-checking information about our existing sewer and water line network based on record drawings. Inspectors make sure that applicants complete construction work according to the plans approved by our project reviewers.

And finally, we have two team members that are part of our Public Affairs department, our industry relations manager and development coordinator. They make sure that all of our team members work together smoothly and coordinate with engineering and operations to resolve field construction issues. They help applicants through the permitting process, suggest process improvements, assist the implementation of Authority-wide projects. They are also responsible for championing the Development Services team and their work (like newsletter articles!). They attend community meetings and development industry events.

Each team member is an equally important part of the process. Our skill sets and backgrounds in engineering, urban planning, and customer service help keep this boat afloat.

Want to learn more about careers at PWSA? Visit our career page to view open positions! pgh2o.com/about-us/careers.



Rob Herring, Project Manager and reviewer on our Development Services team looks over tap-in plans at our 1200 Penn Avenue office.



Stormwater Tip: Selectively Applying De-Icing Salts



When de-icing salts are applied to roads or sidewalks, they lower the freezing point of water on the pavement, which melts or prevents the formation of ice. While de-icing salts can improve safety, they also contain chemicals like chloride that can damage nearby plants, soils, and infrastructure. When these chemicals are carried away by melting ice or snow to our rivers and streams, they can harm the water quality and wildlife. One teaspoon of salt can pollute five gallons of water.

Follow these tips when de-icing to help reduce pollution:

- Before salting, clear away as much snow and ice as possible with a shovel or broom.
- Apply salt sparingly on icy patches, leaving about three inches between salt grains. Focus on areas with high foot traffic.
- If there is salt left on the pavement after thaws, sweep it up and apply less next time.
- Minimize use of sodium chloride (also known as rock salt), calcium chloride, and potassium chloride because they release high amounts of chloride when dissolved in water. Instead, consider using magnesium chloride products, which release less chloride.
- To help reduce salt use, consider mixing in additives like beet juice or pickle juice.
- To increase traction, sprinkle sand with or without salt. Sweep up the sand later so that it does not clog storm drains or pollute rivers and streams.

Learn more at pgh2o.com/reducing-stormwater-pollution.



Water Wise: Stay Informed about Water Service

Water main breaks can occur at any time but are more likely during cold weather and sudden changes in temperatures. The age of a pipe, its material, and accidents can also lead to a break. When a break occurs, the pressurized water in the area must be shut off temporarily to allow our crews to safely make repairs. We understand how disruptive these outages can be, which is why we encourage all customers to provide us with current contact information so we can notify them of any service disruptions.

Update your contact information by submitting the online form at **pgh2o.com/update-contact-info** or by calling Customer Service at 412-255-2423 (press 5).

Customers are notified via robocall and all service disruptions are placed on our website at **pgh2o.com/service-outages.** Robocalls are issued as soon as possible for emergencies and ahead of time for planned construction work. If an outage is extended or rescheduled, updates are provided. If you see a water main break, please report it to our 24/7 Emergency Dispatch at 412-255-2423 (press 1) to help us respond quickly and return service to normal.



broken water main prior to being shut off for repair.

PGH2O CONNECT



Customer Assistance **Programs**

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

For more information about our programs, including the Winter Shut-off Moratorium, Bill Discount, Hardship Grant, and Lead Line Reimbursements, 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/update-contact-info

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

PGHAO

Board of Directors

Currents Contributors

Public Affairs Associate

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.

in linkedin.com/company/pgh2o



f facebook.com/pgh2o

Customer Service

T 412.255.2423 (Press 5) **F** 412.255.2475

Emergency Dispatch 412.255.2423 (Press 1) Available 24/7