

CURRENTS

The Microfiltration Plant is Back in Service! Providing Quality Water, Reliable Service to Pittsburgh



Water treated by ultraviolet (UV) light disinfection flows through these pipes and is distributed through the water system to thousands of taps throughout Pittsburgh.

On Monday, September 14th, the Pittsburgh Water and Sewer Authority opened the main valve of the Microfiltration Plant in Highland Park, restarting the flow of treated water into the PWSA water supply system. The plant is fully operational – distributing approximately 2.5 million gallons of water per day to the approximately 250,000 residents served by the open Highland I Reservoir.

With the MFP back in service, PWSA has a redundant water system and can spread the demand for water across the entire water distribution network. This enhances PWSA's ability to reliably provide high quality water to customers.

The plant treats water from this historic open reservoir, which provides drinking water to customers living in Pittsburgh's eastern neighborhoods, the

Hill District, and parts of Oakland. This accounts for more than half of PWSA's drinking water customers. It also supplies water to secondary storage facilities including the Garfield Tank, Herron Hill Tank and Reservoir, Bedford Tanks, and Lincoln Tank.

The MFP was taken out of service in 2017 to meet stricter state water quality standards. Over the past three years, PWSA has made the needed changes to improve treatment methods, rehabilitate the microfiltration system, and provide greater security around the Highland I Reservoir.

The Microfiltration Plant provides the necessary re-treatment of water leaving the uncovered Highland I Reservoir before it is distributed to homes. Because the water goes to an open reservoir, it is no longer considered potable water and must be treated again before reentering distribution.

This project included adding ultraviolet (UV) disinfection technology to the treatment process. UV disinfection is one of the most effective ways to treat water – when exposed to these powerful light-rays, it rapidly and effectively kills micro-organisms such as bacteria, pathogens, and protozoa that may have come

in contact with the water. This second layer of treatment, in addition to membrane filtration, ensures the safety, quality, and reliability of our water after it leaves the open Highland I Reservoir.

The total capital cost of all the direct and indirect improvements to support the restoration of the MFP Facility is approximately \$14.5 million. Over the next several years, PWSA will invest approximately \$312 million for other large system improvements.

"Reopening this unique and state-of-the-art treatment plant allows us to focus on other previously-deferred critical projects," stated Will Pickering, PWSA Executive Director. "We appreciate our customers' patience as our team of engineering, construction, and operations experts continues to aggressively modernize our water system."



Dennis Graham, a consulting engineer with PWSA, opens the valve at the Microfiltration Plant.

IN THIS ISSUE:

- 1 MFP Back in Service
- 2 Director's Cut
- 3 In the Community
- 5 In the News
- 6 Team PGH2O
- 8 Engineering & Construction
- 10 Water Wise
- 11 PGH2O Connect

COMING UP:

2020 Board Meetings

October 23

November 20

December 18

Meetings begin at 10:00am and are open to the public. Due to COVID-19, meetings will be held via teleconference until further notice. Visit pgh2o.com/events-meetings for the most updated information.

Due to restrictions on events from COVID-19, meetings may be tentative or postponed. For the most updated information, please visit our website at pgh2o.com/events-meetings

"Completing the improvements at the MFP will ensure high quality drinking water that meets or surpasses all drinking water standards for over 250,000 residents."

PWSA Executive Director,
Will Pickering



DIRECTOR'S CUT

By Executive Director Will Pickering

The Work Ahead

This month we asked our Board of Directors to approve our Capital Improvement Plan, or CIP. This comprehensive plan lays out the next five years of major construction projects. At over \$1.2 billion, the CIP is a [public document](#) that illustrates the massive amount of work ahead of us.

Since 2016, our primary focus has been on removing lead service lines and reducing lead levels by improving our water treatment. Over the last three years, we have removed 7,800 public lead service lines and more than 4,900 private lead service lines. The addition of orthophosphate has proven to be an effective method to reduce lead levels – and we are now seeing the [lowest lead levels in 20 years](#).

We realize that there is no safe level of lead and we are working towards our goal of replacing all lead service lines by 2026.

The progress we've made on lead issues is allowing us to turn our attention to other infrastructure needs. Our CIP focuses on the replacement of water mains, the rehabilitation of aging sewer lines, and a series of once-in-a-generation projects to renew key components of our water production and distribution systems.

These projects, which culminate with the complete restoration of the Clearwell, a large, century old water storage facility, will strengthen our water system, add needed redundancy, and ensure an uninterrupted supply of quality water. The capital projects that make up our plan

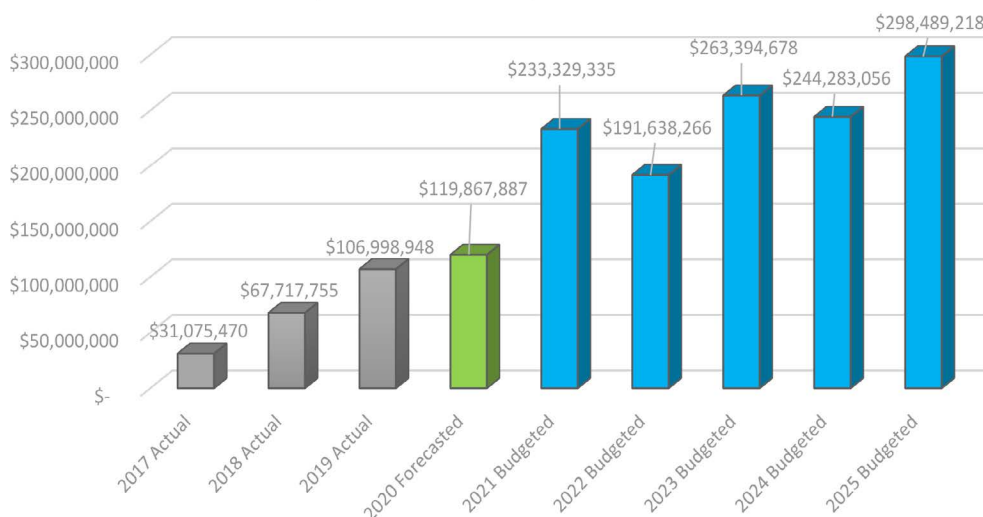
include rehabilitating the Aspinwall and Bruecken Pump Stations, replacing reservoir liners and cover systems, updating electrical and backup power systems, restoring pump stations, and repairing or replacing various large-diameter water mains throughout the system.

We shared information about these projects with the public during a live panel discussion that was organized as part of United for Infrastructure 2020. This national event, focusing on education and advocacy to build awareness about infrastructure needs across the country, provided an opportunity to begin a discussion about our plans to improve Pittsburgh's water infrastructure and the benefits it provides to the city and the region.

As the Pittsburgh economy grows, we will be prepared to meet the demands as more residents invest in their homes and businesses choose to locate and grow within the city. The investments in our CIP will ensure that our customers are provided with clean, high quality, reliable water services.

Catching up on decades of neglect will undoubtedly have an impact on the rates we charge our customers. As a publicly-owned and controlled utility, every dollar we receive from our customers is invested back into your water systems. We are doing everything possible to keep our rates affordable, and we are expanding our existing assistance programs to help insulate our most vulnerable neighbors.

Proposed Annual Capital Investment



Beginning in 2021, our capital investment is expected to exceed \$200 million dollars annually to make critical improvements in our water, sewer, and stormwater systems.

We are proud to be in a position where we can now move forward with this investment. Our water infrastructure was built at the turn of the 20th century and has served us well. It is now time to rebuild our system for the next one hundred years so we can provide the quality water services that Pittsburgh expects and deserves.

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



Asphalt Accolade

A customer residing in Perry South wrote us to praise the contractor crew that worked to restore a portion of the road to its original condition near his home. He brought the issue to our attention because he believed some additional leveling work was required, to which the crew, according to the letter, was prompt in their response.

"Your thoughtfulness and consideration is greatly appreciated," said the customer regarding the crew.

We greatly appreciate the efforts of our restoration contractors as we continue a large-scale renewal of our infrastructure. Thank you!

Dispatch Dedication

A customer residing in Homewood South gave us a ring to inform us of her satisfaction regarding a phone call she had with Dispatcher, Deborah Kenney. The customer was dealing with a personal issue at the time of a water main break repair on her street, and Deb went above and beyond to ensure that water was delivered to her for use as crews worked to resolve the issue. Deb also replied to the handful of questions she received from the customer concerning our water main break protocols in great detail. Thank you for your dedicated service, Deb!

Virtual Construction Contractors Networking Event Brings Collaboration with Local Businesses

On September 16th, PWSA held our first-ever construction contractor networking event.

Twenty-two contractors spent the afternoon getting to know each other, PWSA staff, and standard contracting procedures. Representatives from Schneider Electric, Hill International, Total Equipment Co., Wayne Crouse, Reed Building Co., Michael Baker, KS Engineering, and many others learned of our major upcoming water, wastewater, and stormwater contracting opportunities.

In the first half of 2021, we are issuing RFPs for over \$130 million in construction contracts for our major capital projects including five contracts related to our Small Diameter Sewer Rehabilitation projects. Additional projects include sewers under structures, Highland Reservoir Pump Station and Rising Main, the large diameter rising main program, Highland II Reservoir Liner and Cover Replacement, and the small diameter rising main project.

Thank you to all those who attended virtually and made the event a success! If you are interested in bidding on construction solicitations, head to our Developers, Contractors, and Vendors section of our website to learn more at pgh2o.com/developers-contractors-vendors/bids-opportunities.



PWSA Moderators from top left: Kasey Stewart, Senior Health and Safety Manager; Emily Pontarelli, Senior Manager, Performance; Will Pickering, Executive Director; and Julie Ascioffa, Industry Relations Manager.

PWSA Joins United for Infrastructure 2020, a Week of Education and Advocacy

A week-long series of events raised awareness for our country's infrastructure needs

PWSA participated in this national week of events on September 14-21, which highlighted events, media coverage, and education and advocacy efforts to elevate infrastructure as a critical issue impacting all Americans. Across the country, businesses, labor organizations and elected officials came together to spread the message that the nation must work together to #RebuildBetter.

To celebrate, we hosted two virtual events that provided an opportunity for Pittsburgh residents to learn about the improvements we are making to our water infrastructure: A panel discussion focusing on our water future and a virtual, behind-the-scenes tour of the Microfiltration Plant (MFP) in Highland Park.

The Our Water Future Panel Discussion was a high-level discussion about the future of our water infrastructure. Panelists Will Pickering, Executive Director; Jen Presutti, Deputy Executive Director; and Barry King, Director of Engineering and Construction discussed the critical water projects we will construct over the next few years to modernize our water infrastructure. Participants learned about the engineering techniques behind these improvements, how they will strengthen our overall system, and ensure the delivery of safe and reliable water services. We were delighted to have Brian K. Jensen, Ph.D. of the Allegheny Conference, moderate the discussion.

Our week-long celebration of water



infrastructure concluded with a tour of the Microfiltration Plant (MFP) in Highland Park. Watch the recorded Facebook Live video on our Facebook page, facebook.com/PGH2O, to join Project Manager, Marc Frangipani, for a fascinating behind-the-scenes look at the MFP. Marc discusses the importance of this facility, highlights the technology that is used to treat water and automate the plant, and introduces you to the operators and technicians that work on-site each day.

The pipes, pumps, reservoirs, tanks, and treatment facilities that Pittsburgh residents and businesses rely on every day to bring clean drinking water to their taps and take wastewater away from their homes were constructed nearly a century ago. They have served us well, however, we can no longer wait to upgrade these critical components of our water and sewer systems.



Panelists from top left - Barry King, PWSA Director of Engineering; Brian K. Jensen, Ph.D. of the Allegheny Conference; Will Pickering, PWSA Executive Director; and Jen Presutti, PWSA Deputy Executive Director.



PGH2O IN THE COMMUNITY

Due to restrictions on events from COVID-19, in-person meetings have been suspended to protect public health.

United for Infrastructure Week
September 14 - 22
Virtual events

Four Mile Run Community Meeting
September 15
Virtual meeting

PWSA Construction Contractors Virtual Networking Event
September 16
Virtual meeting

To schedule a future presentation in your community, go to:
pgh2o.com/request-us-event

For these reasons, we have increased our investment in our water and sewer infrastructure since 2017 and plan to continue this investment over the next several years. The improvements we are making will modernize our water system and ensure safe and reliable water services for future generations of Pittsburgh residents. United for Infrastructure 2020 is a reminder of the importance of these projects and why this investment is critical to Pittsburgh.

Find more information on PWSA's involvement in United for Infrastructure Week 2020 at pgh2o.com/united-infrastructure

PWSA's New Executive Director Looks Past Lead Crisis and Towards \$1 Billion in Upgrades



(Photo by Ryan Loew/
PublicSource) PWSA
Executive Director, Will
Pickering, was chosen to
lead PWSA because of
his ability to remain calm
through turbulent issues,
work collaboratively, and
communicate clearly. These
traits will be tested as PWSA
faces a challenging decade
ahead.

Excerpt from September 15th Public Source article by Oliver Morrison.

In June of 2020, Will Pickering took over as Executive Director of PWSA, inheriting a wide array of challenges to overcome as the authority strives to reach new and greater heights following a rocky past.

The most notable milestone achieved during Pickering's brief tenure has undoubtedly been the reduction of non-EPA-compliant lead levels in PWSA's drinking water. Although incredibly important to public health and a long time coming, Pickering views this milestone as a positive indicator that PWSA is on the right path forward.

The authority is still working to replace every lead line in our distribution system, so customers can rest assured that Pickering isn't letting his foot off the gas on the lead issue even as he strives to tackle other important challenges facing PWSA.

One such upcoming challenge will be balancing the need for major, wide-reaching infrastructure improvements while working to keep PWSA's rates affordable. The global COVID-19 pandemic has only exacerbated the issue, forcing PWSA to delay certain projects in order to lessen the impact on ratepayers during these unprecedented times. Navigating this

balancing act to keep customers happy and PWSA on the right path will be difficult, but these are the kind of challenges that Pickering was promoted to address.

Pickering's eight years of experience at District of Columbia Water and Sewer Authority (DC Water) provided him with valuable experience in managing relationships with dozens of neighborhood commissioners, the city council, and the mayor's office.

Read the full article at publicsource.org/pwsa-water-bill-infastructure-upgrades-lead-crisis-new-leader.

"The only way to find a path forward is to build honest and trusting relationships even with people who may disagree with you. I think those are his strengths."

George Hawkins, former CEO and general manager of DC Water



Media and Press Releases

MEDIA COVERAGE

Southwestern Pa. Commission grants help fund 16 transit projects worth \$110 million,
Pittsburgh Post-Gazette

Free, on-demand lead service line replacements still available to income-qualified customers,
South Pittsburgh Reporter

South Side Park work continues,
South Pittsburgh Reporter

As PWSA looks past the lead crisis, its new leader faces \$1 billion in upgrades and rising water bills,
PublicSource

PRESS RELEASES

Stream Restoration Completed at Two Sites in Saw Mill Run,
September 11

PWSA joins United for Infrastructure 2020, A Week of Education and Advocacy,
September 16

Employee Spotlight

PWSA Senior Health and Safety Manager, Kasey Stewart, oversees occupational safety for all PWSA employees, including the development and implementation of health and safety programs that abide by the standards of various regulatory agencies.



After spending nearly seven years working closely with us in a safety consulting role, Kasey officially became our new senior health and safety manager on September 1st, 2020. Kasey's new role also involves working with our Operations Management Team to improve the security of our physical facilities and critical assets, with a focus on emergency management and planning.

Unexpectedly, Kasey entered the field of Safety Management after graduating college as a business major and working in positions related to his degree. However, towards the end of the 2000s, he started working for a local health and safety consulting firm.

"As business increased, the owner began asking me to do safety training and other tasks for different clients and my career in safety took off from there. I went on to get several safety certifications over the next few years and have been in environment, health, and safety (EHS) consulting for over 12 years now," said Kasey.

The variety of work related to our operations and the opportunity to improve employee safety are examples of why Kasey enjoys being a member of Team PGH2O. He said that over the past few years he has seen a great deal of positive change in the organization and leadership team and, as a result, is thrilled to be part of our ongoing renewal. Kasey also greatly values the productive working relationships and friendships he has developed with fellow team members so far.

Kasey's favorite challenges to tackle are those that have a profound impact and are meaningful to people. The task associated with upholding health and safety standards can certainly be described as such.

"Most importantly, my duty is to reduce employee injuries and send our employees home safe. I've seen the overall devastating impact that injuries can have on people's lives and their families, and I truly believe that my efforts will have a considerable positive impact in terms of incident prevention."

In his free time, Kasey enjoys the

company of his wife and two young daughters and said he loves being a girl dad!

To round out the rest of his time, he plays ice hockey, is involved in his church and helps lead in our youth program, and operates a side business of renovating and renting properties.

"I received a lot of gratification in the improvements we have made as a team and from feedback from employees who have shown appreciation in having a safer work environment."

September 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 of each individual within the Authority. These selfless individuals set a high standard and inspire our team to go above and beyond expectations. Congratulations to the following employee:

CONGRATULATIONS!

Project Manager, Robert (aka Rob) Herring: Rob officially started as a full time employee in January 2020, however, began working with the Authority as a consultant in June of 2019. At this time Rob supported the Development Services Group and took it upon himself to create standard operating procedures and forms to streamline the technical reviews and ensure each review was meeting the same standards. Additionally, Rob recruited additional support staff (now known as Rob Army) to shorten the review time and meet the Authority's metric for reviews.

New Hires

WELCOME ABOARD!

Trevor Lofton

Inventory Control Specialist I

Job Postings

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

Director of Water Quality, Administration

Senior Counsel - Environmental, Administration Law

Senior Group Manager, Stormwater,
Engineering & Construction

Senior Group Manager, Wastewater,
Engineering & Construction

Project Manager, Engineering & Construction

Associate Project Manager, Engineering & Construction

Inspector II, Engineering & Construction

Plant Operator, Water Quality & Production

Electrician, Water Quality & Production

Steamfitter, Field Operations

Plumber, Field Operations

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

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

District Report: Getting the Lead Out and Replacing Storm Drains in District 2

Banksville, Chartiers City, Crafton Heights, Duquesne Heights, East Carnegie, Elliott, Esplen, Fairywood, Mount Washington, Oakwood, Ridgemont, Sheraden, West End, Westwood, and Windgap.

Lead Service Line Replacements

Since 2017, when we began our long-term project to replace all lead service lines in our distribution system, District 2 has been part of our planning. Based on our records and other statistical analysis, we found a concentration of lead records. We used that data to plan work across the Mt. Washington and Duquesne Heights area.

- Total properties within designated work areas: 1,299
- Public lead service lines replaced: 613
- Private lead service lines replaced: 499

The second phase of this work includes concrete, asphalt, and landscaping restoration work where lead service line replacements were completed. Our Restoration Contract is completing a record amount of work, with over a dozen crews operating across our service area.



Blue lines show portions of water main that will be replaced in early 2021.

Water Service Main Replacements

In 2021, lead service line work will continue via our water main replacement program. As we replace water mains, we will install all new public service lines and replace any private lead lines we find during our work. Beginning in early 2021, we will complete water main replacements on the following Mt. Washington and Duquesne Heights streets:

- Idan Street
- Westwood Street
- Meta Street
- Smith Way
- Wyola Street
- Clarence Street
- Mann Street
- Rubicon Street
- Cuthbert Street
- Guerdon Way
- Gaskell Street
- Grace Street
- Beam Way

For more information on our Water Main Replacement Program, visit pgh2o.com/2020-water-main-replacement-project.

New Storm Drains

While water main and lead service line replacements are very visible to our customers, PWSA also does more routine work throughout our service area that is less noticeable. One important annual project is Catch Basin Replacement, which identifies our oldest and most worn storm drains and inlets throughout the sewer system to replace with new grates, concrete, and pipes leading to the sewer mains. This year alone, we are investing \$8.5M in storm drain improvement and replacement, ensuring that stormwater makes its way to the sewers instead of staying above ground, which can cause street flooding.

In District 2, we have steadily increased our investment since 2017 to replace nearly 300 storm drains.

- 2017: 5
- 2018: 86
- 2019: 131
- 2020 (to-date): 76

For more information on work happening in District 2, and the rest of the PWSA service area, visit pgh2o.com/projects-maintenance.



Crews install new underground components of storm drain.

University Partnership Supports Exploration of New Innovations

With so much work before us, tapping into the talent of Carnegie Mellon University's (CMU) Metro21: Smart Cities Institute provides additional support to assist with innovations we may want to explore.

This pairing provides the opportunity to identify real world applications for university research and new technology ideas. The City of Pittsburgh partnered with Metro21 on several projects including predicting commercial fires to better target commercial fire inspections and optimizing snowplow routing. In addition to the City of Pittsburgh, Metro21 also partners with Allegheny County, the Pittsburgh International Airport, and other government agencies.

As part of our involvement in Metro21 we'll have an opportunity to pitch some of our challenges and CMU will likely approach us with ideas that they think we might be interested in exploring. We are excited for the opportunity to collaborate with CMU and look forward to seeing the creative solutions these students will present.



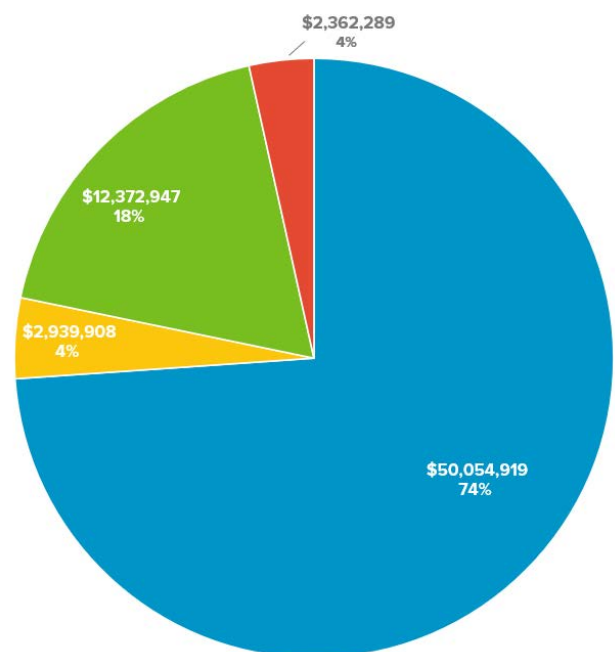
Collaborating with local college students will help PWSA identify new solutions and innovative ideas to apply to projects and programs throughout the organization.

2020 Capital Spending

Amounts reflect total expenditures from January 1 - September 16, 2020

- Water
- Sewer
- Stormwater
- Other

TOTAL: \$68,077,579





WATER WISE

Pick Up Pet Poop!

Pet poop left on the ground isn't just a smelly nuisance – it also harms human health and the environment. When it rains, pet waste on the ground is washed away into storm drains and pipes to our streams and rivers. Water contaminated by pet waste is unsafe for swimming or other recreational activities, since the bacteria, parasites, and viruses in pet waste can cause serious health problems in humans. The nutrients in pet waste can also cause algal blooms and reduce oxygen levels in the water – harming fish and other wildlife.

Help protect our community, rivers, and streams:

- When walking your pet, always bring a bag to scoop up waste. You can tie bags to your pet's leash or store a few in your car.
- Don't let your pet use streets, sidewalks, or other paved areas as a bathroom - choose a grassy area instead.
- Make sure to clean up after your pet in your own yard, especially before it rains.
- Dispose of bagged pet waste in a trash can. Never place in a compost pile.



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



Uncover Savings Opportunities with Water Use Calculators

Reducing water waste at home can help you save money on your bills. Free online water use calculators are a great tool for estimating how much water your household uses. These water use calculators guide you through a series of questions about your water use habits and provide recommendations for actions you could take to save water:

- The United States Geological Survey (USGS) Water Use Questionnaire at water.usgs.gov/edu/activity-percapita.html
- GRACE Communications Foundation Water Footprint Calculator at watercalculator.org
- Alliance for Water Efficiency Water Use Calculator at home-water-works.org
- Southwest Florida Water Management District Water Use Calculator at swfwmd.state.fl.us/conservation/water-use-calculator

In addition, free online drip calculators can help you estimate how much water is wasted by dripping faucets in your home:

- American Water Works Association (AWWA) Drip Calculator at drinktap.org/water-info/water-conservation/drip-calculator
- The United States Geological Survey (USGS) Drip Calculator at water.usgs.gov/edu/activity-drip.html



Learn more at pgh2o.com/water-conservation.



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.

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Will Pickering
Executive Director

Rebecca Zito
Acting Senior Manager of Public Affairs

Julie Asciolla
Industry Relations Manager

Rachel Rampa
Senior Public Affairs Coordinator

Mora McLaughlin
Construction Communications Project Manager

Elaine Hinrichs
Education and Outreach Associate

Hali Hetz
Public Affairs Associate

Nick Letzkus
Public Affairs Associate

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[nextdoor.com](https://www.nextdoor.com)

Penn Liberty Plaza 1
1200 Penn Avenue
Pittsburgh, PA 15222

Customer Service

T 412.255.2423 (Press 5)

F 412.255.2475

info@pgh2o.com

Emergency Dispatch

412.255.2423 (Press 1)
Available 24/7