



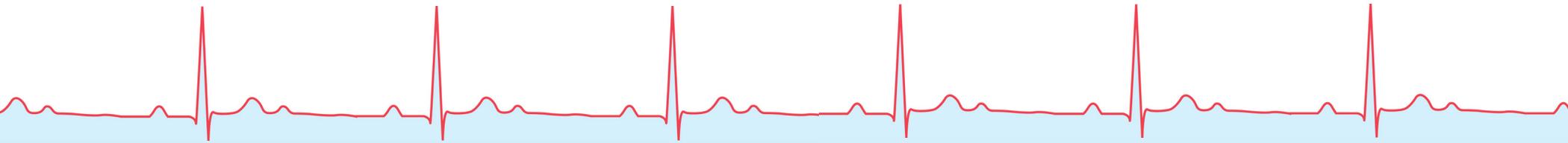
**ONE
WATER**

&

HEALTH

OUR WATER

OUR HEALTH



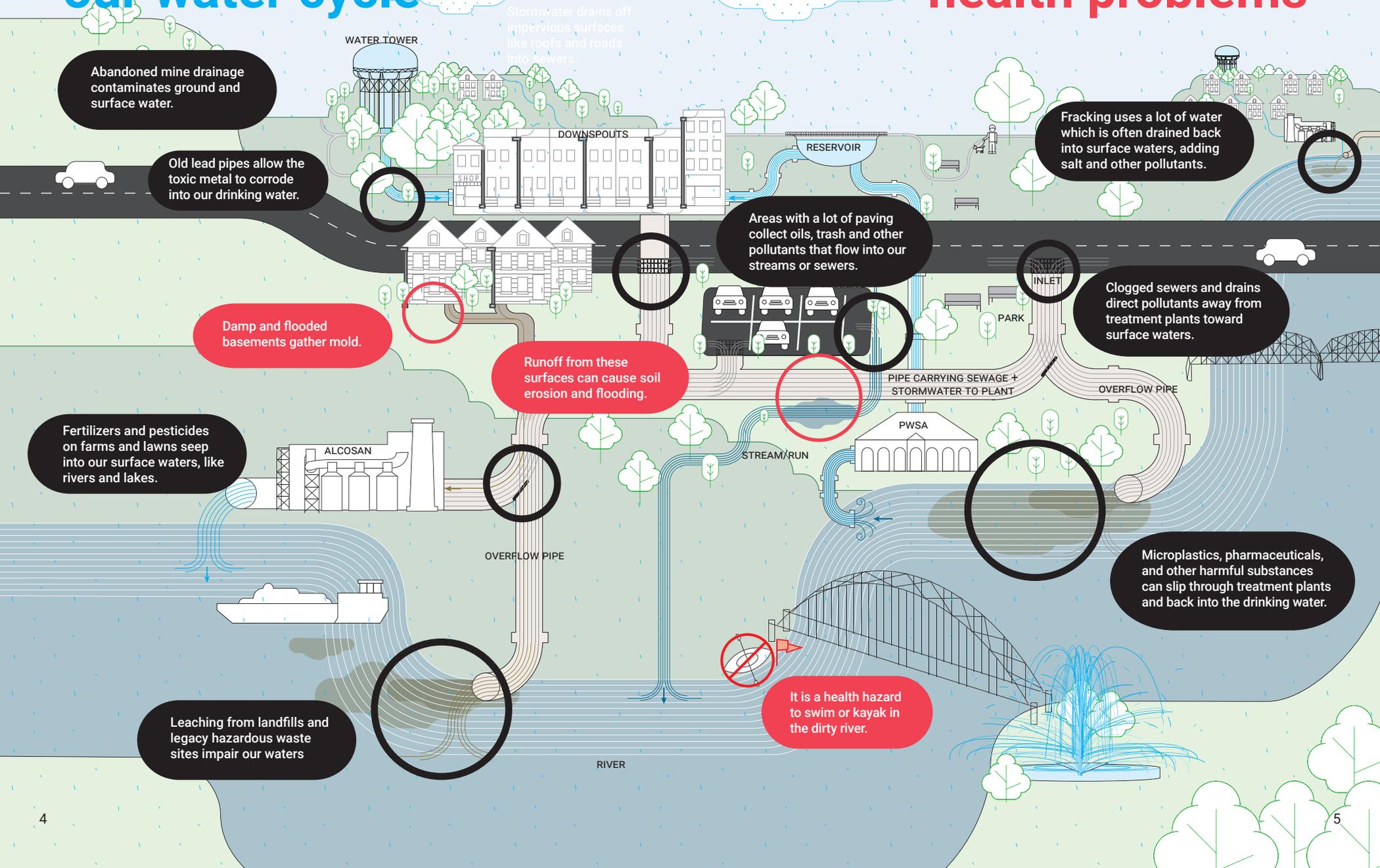
**Life is made of water.
Its management
impacts our health,
and the health of our
environment.**

Healthy waters mean a healthy home, for wildlife and for humans. From the water we drink to the water we swim in, this precious substance is at the core of our wellbeing. On the other hand, problems in drinking and stormwater systems can lead to personal illness and environmental degradation. Lead in pipes or mold in basements will make us sick. Flooding and landslides are a public health risk. And pollutants regularly circumvent treatment systems, entering our waterways and harming the whole planet.

Many agencies across the public and private sectors are working to improve these conditions. Pittsburgh Water and Sewer Authority (PWSA), Allegheny County Sanitary Authority (ALCOSAN) are tasked with ensuring clean and safe water in Pittsburgh and are investing millions of dollars in water infrastructure. These infrastructure investments, both grey and green, are critical for the wellbeing of all Pittsburghers.

Contaminants from many sources enter our water cycle

and mismanaged water can result in health problems



Abandoned mine drainage contaminates ground and surface water.

Old lead pipes allow the toxic metal to corrode into our drinking water.

Stormwater drains off impervious surfaces like roofs and roads into sewers.

Fracking uses a lot of water which is often drained back into surface waters, adding salt and other pollutants.

Areas with a lot of paving collect oils, trash and other pollutants that flow into our streams or sewers.

Damp and flooded basements gather mold.

Runoff from these surfaces can cause soil erosion and flooding.

Clogged sewers and drains direct pollutants away from treatment plants toward surface waters.

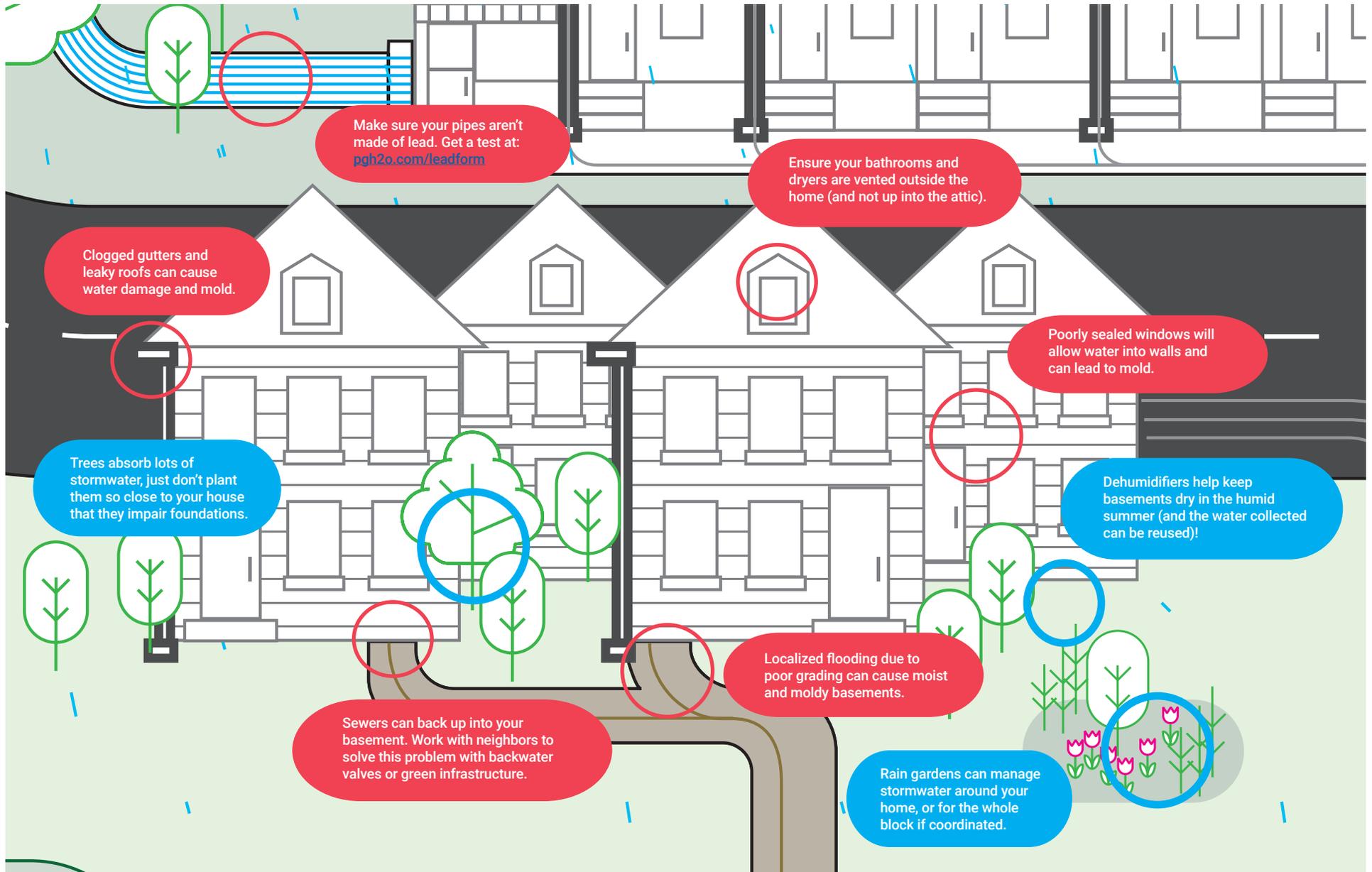
Fertilizers and pesticides on farms and lawns seep into our surface waters, like rivers and lakes.

Microplastics, pharmaceuticals, and other harmful substances can slip through treatment plants and back into the drinking water.

Leaching from landfills and legacy hazardous waste sites impair our waters

It is a health hazard to swim or kayak in the dirty river.

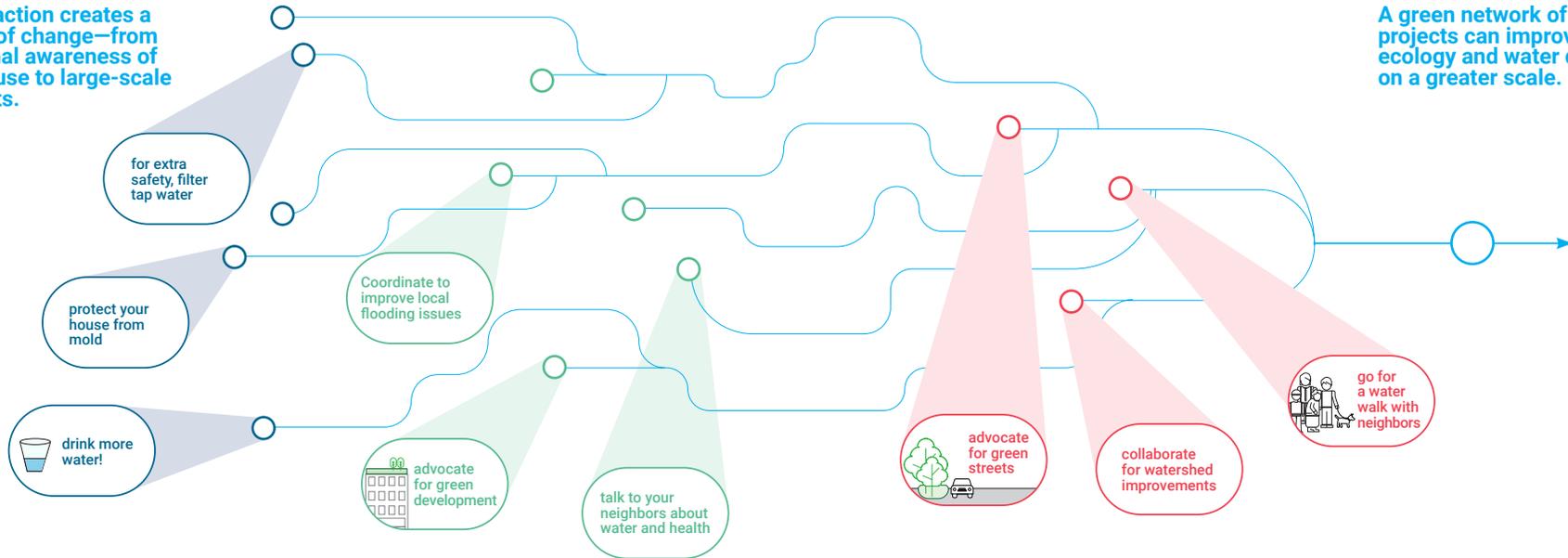
Be mindful of water at home



Acting together

Every action creates a ripple of change—from personal awareness of water use to large-scale projects.

A green network of many projects can improve ecology and water quality on a greater scale.



Individual

Human beings are mostly water (roughly 60%). Clean water is foundational to personal health, as well as environmental health. The water we drink comes from our rivers, and there is only one water cycle. Contaminants can enter this cycle at any point, but there's a lot you can do to ensure that your water and our water remain safe, healthy, and refreshing! Learn more at

womenforahealthyenvironment.org

Your health is related to water infrastructure – removing standing water reduces mosquito risks, remediating mold in your basement is good for your respiratory system. Gutter, plumbing, and piping repairs and upgrades can be financed like any other home improvements. Pittsburgh has homeowner improvement low-interest loan programs that are a source of financing.

ura.org/pages/housing-opportunity-fund-programs

PWSA has been assisting with lead line replacement programs.

lead.pgh2o.com

Block or Project

Lead line replacement is done on a block by block basis to capture obvious efficiencies. Streets are torn apart only once to replace the water main and all connecting private service lines at the same time.

Addressing stormwater by block can also be more efficient. For example, without neighbor collaboration, it is possible that installing a back-water valve could just shift basement flooding issues to other basements. Success is more likely if entire blocks or microsheds of homeowners organize to address basement or localized flooding at the same time.

Chicago has implemented a neighborhood basement flooding mitigation project.

chicago.gov/city/en/depts/bldgs/supp_info/disconnect_your_downspout.html

chicago.gov/city/en/depts/water/supp_info/basement_floodingpartnership.html

Neighborhood and Watershed

Home and neighborhood improvements combined with larger projects can lead to healthier watersheds that are good for human health. Green Infrastructure benefits community health by addressing water-related problems while also providing related benefits like improved park spaces, better connectivity, and more biodiversity.

For more about watershed-scale improvements and their co-benefits, see RAND Corporation's study of Negley Run:

rand.org/pubs/research_briefs/RBA564-1.html

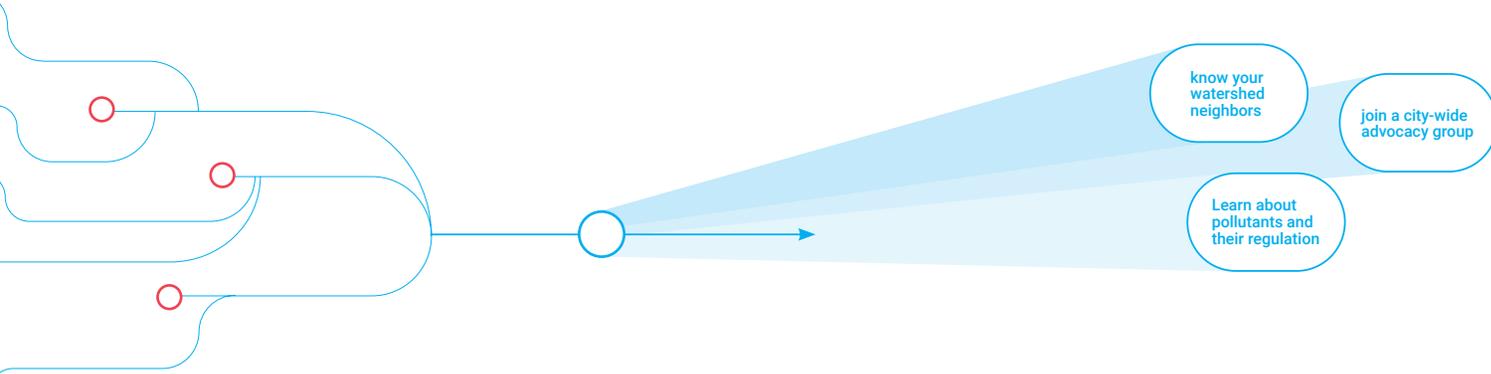
Water infrastructure investments should be prioritized based on broader need. Organizations like Upstream Pittsburgh are developing tools to site green infrastructure improvements to bring benefits where they're needed most:

upstreamphgh.org/projects/nine-mile-run-environmental-equity-study

Watersheds are also a great way to organize around issues like pollution and runoff, since all of these issues run to the same place in a watershed.

Organizing in multi-neighborhood groups, watershed task forces have begun looking at the water problems in their shed holistically. More information about these groups, including how to get involved, can be found at livingwatersphgh.org

Acting together: City-wide



PGH₂O Pittsburgh Water & Sewer Authority (PWSA)

PWSA is rapidly replacing lead service lines and is developing a stormwater master plan for their entire service area. pgh2o.com



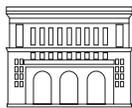
Allegheny County Sanitary Authority (ALCOSAN)

ALCOSAN treats raw sewage and industrial waste from 83 municipalities in Allegheny County. Learn more at 3riversproud.com



City of Pittsburgh

Several departments share responsibility for water and stormwater planning. pittsburghpa.gov

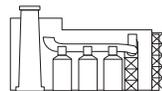


Allegheny County Health Department

ACHD's Plumbing Program inspects and permits new building plumbing systems to ensure compliance with the County Plumbing Code, including the International Residential Code. The plumbing code extends to stormwater but does not encourage neighborhood or cluster design for stormwater management. For instance, the Code requires that all stormwater be directed to subsurface stormwater sewers and prohibits the open flow of stormwater from structures and parcels to adjoining lands or rights-of-way.

The Health Department enforces state-issued discharge permits issued to sewage treatment facilities, such as ALCOSAN.

alleghenycounty.us/healthdepartment



Pennsylvania Department of Environmental Protections (DEP)

The State Department of Environmental Protections issues Pollution Discharge Permits to factories and other establishments that discharge pollutants into the waters of the Commonwealth. This includes sewage treatment facilities, which receive a special permit. dep.pa.gov

Allegheny County Conservation District

The Allegheny County Conservation District is an urban conservation district whose mission is to conserve, promote, and improve Allegheny County's natural resources. The Conservation District works to reduce non-point source pollutants through technical assistance, resources, leadership, and enforcement when needed.

conservationssolutioncenter.org



More Local & Regional Resources

Pittsburgh Parks Conservancy (PPC)
pittsburghparks.org/park-events +
pittsburghparks.org/volunteer

3 Rivers Wet Weather
3riverswetweather.org

Our Water Campaign:
a program of Pittsburgh United
pittsburghunited.org/ourwater

Women for a Healthy Environment
womenforahealthyenvironment.org

Southwestern PA Commission Water Resource Center spcwater.org

National Resources

Clean Water Action
cleanwateraction.org

Environmental Protection Agency (EPA)
epa.gov/environmental-topics/water-topics

Urban Waters Learning Network
urbanwaterslearningnetwork.org



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