

HIGHRIDGE
WATER
AUTHORITY



ANNUAL WATER QUALITY REPORT

Reporting Year 2023



Presented By
Highridge Water Authority

Our Commitment

Once again, we are pleased to present our annual water quality report covering all testing performed between January 1 and December 31, 2023. As in years past, we are committed to delivering the best-quality drinking water possible. To that end, we remain vigilant in meeting the challenges of new regulations, source water protection, water conservation, and community outreach and education while continuing to serve the needs of all our water users. Thank you for allowing us the opportunity to serve you and your family. We encourage you to share your thoughts with us on the information contained in this report. After all, well-informed customers are our best allies. For more information about this report, or for any questions relating to your drinking water, please call George E. Sulkosky, Executive Director, at (724) 459-8033.

Source Water Assessment

The greatest potential threats to HWA's water sources are:

1. Accidents and spills along the roadways within the assessment area.
2. Potential contamination due to discharge from a small residential wastewater plant.
3. Potential nonpoint source contamination associated with farming.
4. Activities involving pesticides or herbicides, mining, logging, or road de-icing.
5. Leaks or spills from an underground fuel storage tank.

A copy of the assessment can be viewed at the HWA office, 17 Maple Avenue, Blairsville.

Community Participation

Highridge Water Authority (HWA) encourages its customers to participate in our meetings, held on the third Tuesday of each month at 6:30 p.m. in the James F. Conway Conference Room at 17 Maple Avenue in Blairsville.

Important Health Information

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants may be particularly at risk from infections. These people should seek advice about drinking water from their health-care providers. The U.S. Environmental Protection Agency (EPA)/Centers for Disease Control and Prevention (CDC) guidelines on appropriate means to lessen the risk of infection by *cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline at (800) 426-4791 or <http://water.epa.gov/drink/hotline>.



Lead: What Is It? Is It A Problem?

Lead is a naturally occurring metal found in the innermost crust of the Earth. It has been used in the past in gasoline, lead acid batteries for automobiles, paints, solder, water pipes, and indoor plumbing and water fixtures. Lead is currently outlawed for these uses. Although banned since the 1950s, it was originally preferred as a useful service pipe because of its resistance to pinhole leaks. It has been replaced by copper, plastic, and galvanized pipe. For the past 25 years, HWA has used only plastic water lines.

Are you at risk?

No. First, HWA has used a food-grade additive called orthophosphate since 1996 that coats the inside of all pipes and creates an insoluble barrier between them and the water. This greatly reduces the risk to customers who may have lead service lines and leaded solder in their homes. Boston, Philadelphia, Pittsburgh, Cleveland, and Milwaukee are just some of the larger cities that use this corrosion inhibitor.

Second, lead exposure is measured in parts per billion (ppb). Analogies for 1 ppb would be one sheet of toilet paper in a roll of paper stretching from New York to London, or one second in nearly 32 years. If their water complies with federal regulations, people would have to drink a massive volume to be adversely impacted.

HWA will be surveying its system this year to collect an inventory of all service lines. If your home is more than 70 years old, take note of the service line entering the house. If you believe it to be lead or are unsure and would like us to inspect it, please call our office. Regardless, HWA monitors your drinking water according to federal and state regulations and has never received a violation notice for exceeding these limits.

Government officials warn that elevated levels of lead can cause serious health problems, especially for pregnant women and young children. One way to minimize the potential for lead exposure is to flush your tap for at least 30 seconds before using the water for drinking or cooking. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline at (800) 426-4791 or www.epa.gov/safewater/lead.

Think Before You Flush!

Flushing unused or expired medicines can be harmful to your drinking water. Properly disposing of unused or expired medication helps protect you and the environment. Keep medications out of our waterways by disposing responsibly. To find a convenient drop-off location near you, please visit <https://bit.ly/3IeRyXy>.

Route 217 Service Extension Project Underway

Residents along Route 217 in Burrell Township should have public water before the end of 2024 now that a water extension project has finally kicked off. Homeowners with quantity and quality issues actively sought assistance from township and state officials for money to build the 13,000-foot extension. Burrell Township supervisors subsequently designated \$400,000 in federal COVID relief funds, and HWA received an \$850,000 grant from the Commonwealth Financing Authority - compliments of Senator Joe Pittman's efforts - for the project. HWA will construct the water line and finance the balance of the project.

“When the well is dry, we know the worth of water.”
—Benjamin Franklin

Violations Lead to Dismissal of Testing Laboratory

During 2023, Highridge was cited by DEP for several reporting errors after the laboratory retained to analyze testing results failed to submit results within the required time frame established by the Pennsylvania regulating agency.

Testing for Chlorine, Radium and adjusted gross alpha particle activity was completed and later in the fourth quarter after testing for haloacetic acids and trihalomethanes acids, the lab did not process the samples in a timely fashion in either instance leading to reporting violations assessed to Highridge. Since neither was an exceedance violation, but simply a reporting violation, there was no impact on public health and safety and no corrective actions were necessary.

Nevertheless the laboratory, PACE Analytical, was dismissed by Highridge and replaced by another firm that promises to better serve our needs and protect Highridge's reputation as a first class water supplier.

How Long Can I Store Drinking Water?

The disinfectant in drinking water will eventually dissipate even in a closed container. If that container housed bacteria prior to filling up with the tap water the bacteria may continue to grow once the disinfectant has dissipated. Some experts believe that water could be stored up to six months before needing to be replaced. Refrigeration will help slow the bacterial growth.



Drinking Water Safety

To ensure that tap water is safe to drink, the U.S. EPA and Department of Environmental Protection (DEP) prescribe regulations limiting the amount of certain contaminants in water provided by public water systems. U.S. Food and Drug Administration and DEP regulations establish limits for contaminants in bottled water, which must provide the same protection for public health. Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of these contaminants does not necessarily indicate

that the water poses a health risk.

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals, in some cases radioactive material, and substances resulting from the presence of animals or from human activity. Substances that may be present in source water include:

Microbial Contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, or wildlife;

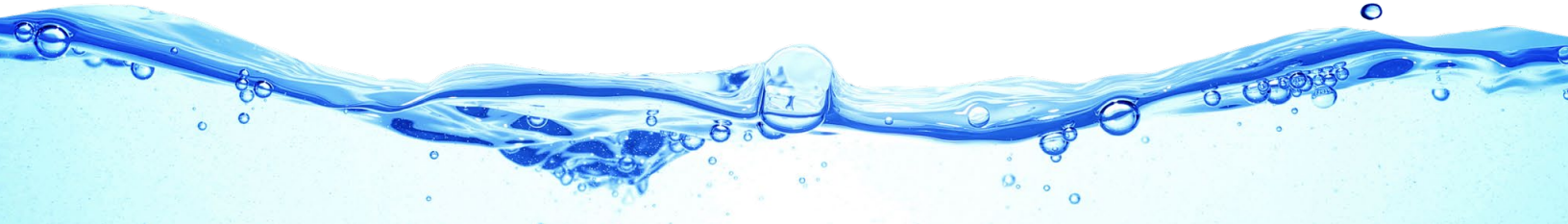
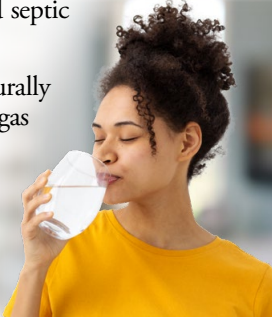
Inorganic Contaminants, such as salts and metals, which can be naturally occurring or may result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming;

Pesticides and Herbicides, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses;

Organic Chemical Contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production and may also come from gas stations, urban stormwater runoff, and septic systems;

Radioactive Contaminants, which can be naturally occurring or may be the result of oil and gas production and mining activities.

For more information about contaminants and potential health effects, call the U.S. EPA's Safe Drinking Water Hotline at (800) 426-4791.



BY THE NUMBERS



5.1
TRILLION

The dollar value needed to keep water, wastewater, and stormwater systems in good repair.



12
THOUSAND

The average amount in gallons of water used to produce one megawatt-hour of electricity.



2

How often in minutes a water main breaks.



47.5
TRILLION

The amount in gallons of water used to meet U.S. electric power needs in 2020.



1.7
TRILLION

The gallons of drinking water lost each year to faulty, aging, or leaky pipes.



33

The percentage of water sector employees who will be eligible to retire in 2033.

Water Sources of Highridge

The water system is currently supplied by a series of mountain reservoirs with a combined total raw water storage capacity of approximately 400 million gallons. These reservoirs, amid western Pennsylvania's Laurel Mountains, are located on Tubmill Creek south of New Florence and on Big Springs Run and Little Sugar Run outside the borough of Seward.



Definitions

90th %ile: The levels reported for lead and copper represent the 90th percentile of the total number of sites tested. The 90th percentile is equal to or greater than 90% of our lead and copper detections.

AL (Action Level): The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

GW: Groundwater source.

MCL (Maximum Contaminant Level): The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

MCLG (Maximum Contaminant Level Goal): The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

MinRDL (Minimum Residual Disinfectant Level): The minimum level of residual disinfectant required at the entry point to the distribution system.

MRDL (Maximum Residual Disinfectant Level): The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

MRDLG (Maximum Residual Disinfectant Level Goal): The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

NA: Not applicable.

ND (Not detected): Indicates that the substance was not found by laboratory analysis.

NTU (Nephelometric Turbidity Units): Measurement of the clarity, or turbidity, of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

ppb (parts per billion): One part substance per billion parts water (or micrograms per liter).

ppm (parts per million): One part substance per million parts water (or milligrams per liter).

ppq (parts per quadrillion): One part substance per quadrillion parts water (or picograms per liter).

ppt (parts per trillion): One part substance per trillion parts water (or nanograms per liter).

SW: Surface water source.

TT (Treatment Technique): A required process intended to reduce the level of a contaminant in drinking water.



Test Results

Our water is monitored for many different kinds of substances on a very strict sampling schedule, and the water we deliver must meet specific health standards. Here, we only show those substances that were detected in our water (a complete list of all our analytical results is available upon request). Remember that detecting a substance does not mean the water is unsafe to drink; our goal is to keep all detects below their respective maximum allowed levels.

The state recommends monitoring for certain substances less than once per year because the concentrations of these substances do not change frequently. In these cases, the most recent sample data are included, along with the year in which the sample was taken.

REGULATED SUBSTANCES

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	MCL [MRDL]	MCLG [MRDLG]	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Barium (ppm)	2023	2	2	0.0336	0.0331–0.0336	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Benzo(a)pyrene [PAH] (ppt)	2023	200	0	10	ND–23	No	Leaching from linings of water storage tanks and distribution lines
Chlorine [distribution] (ppm)	2023	[4]	[4]	0.94	0.59–0.94	No	Water additive used to control microbes
Chlorine [entry point] (ppm)	2023	MinRDL: SW=0.2/ GW=0.4	NA	1 ¹	1–1.5	No	Water additive used to control microbes
Cryptosporidium (ppq)	2018	TT	0	0.30	0.195–0.30	No	Naturally present in the environment
Dalapon (ppb)	2023	200	200	0.5	ND–1	No	Runoff from herbicide used on rights-of-way
Haloacetic Acids [HAAs]–Stage 1 (ppb)	2023	60	NA	33.535	6.6–69.3 ²	No	By-product of drinking water disinfection
Nitrate (ppm)	2023	10	10	0.325	0.325–0.331	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
TTHMs [total trihalomethanes]–Stage 1 (ppb)	2023	80	NA	36.17	7–72.1	No	By-product of drinking water disinfection
Turbidity (NTU)	2023	TT	NA	0.14	0.03–0.14	No	Soil runoff

Tap water samples were collected for lead and copper analyses from sample sites throughout the community

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AL	MCLG	AMOUNT DETECTED (90TH %ILE)	SITES ABOVE AL/ TOTAL SITES	VIOLATION	TYPICAL SOURCE
Copper (ppm)	2022	1.3	1.3	0.059	0/30	No	Corrosion of household plumbing systems; Erosion of natural deposits
Lead (ppb)	2022	15	0	ND	0/30	No	Corrosion of household plumbing systems; Erosion of natural deposits

UNREGULATED SUBSTANCES

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AMOUNT DETECTED	RANGE LOW-HIGH	TYPICAL SOURCE
Bromodichloromethane (ppm)	2023	0.00343	0.00094–0.0057	By-product of drinking water disinfection
Chloroform (ppm)	2023	0.032745	0.006–0.0669	By-product of drinking water disinfection
Dichloroacetic Acid (ppm)	2023	0.0137575	0.0063–0.0266	By-product of drinking water disinfection
Nickel (ppm)	2023	0.00054	0.00054–0.00054	Naturally present in the environment
Trichloroacetic Acid (ppm)	2023	0.019785	ND–0.0427	By-product of drinking water disinfection

¹Lowest level detected.

²Despite high readings in three locations in third quarter 2023, compliance is determined by a running annual average from sampling throughout the system. The average for 2023 for HAAs was 33.53 ppb, well below the maximum level of 60 ppb.