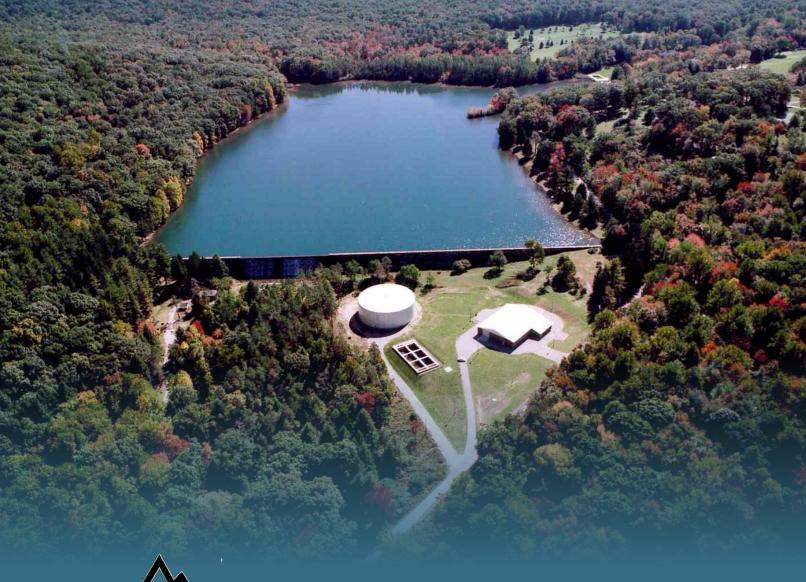
ANNUAL WATER OUALITY REPORT

Reporting Year 2021





Presented By
Highridge Water Authority

Este reporte incluye información importante sobre el agua para tomar. Para asistencia en Español, favor de llamar al teléfono (512) 261-6281.

Quality First

nce again, we are pleased to present our annual water quality report covering all testing performed between January 1 and December 31, 2021. 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.

Source Water Assessment

The greatest potential threats to Highridge's water supply sources are:

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

A copy of the assessment can be viewed at Highridge's office located at 17 Maple Avenue, Blairsville, PA 15717.

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. EPA/CDC

(Centers for Disease Control and Prevention) guidelines on appropriate means to lessen the risk of infection by *cryptosporidium* other microbial contaminants are

available from the Safe Drinking Water Hotline at (800) 426-4791 or online at: http://water.epa.gov/drink/hotline.



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, amidst 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.

Water Conservation Tips

You can play a role in conserving water and saving yourself money in the process by becoming conscious of the amount of water your household is using and by looking for ways to use less whenever you can. It is not hard to conserve water. Here are a few tips:

- Automatic dishwashers use 15 gallons for every cycle, regardless of how many dishes are loaded. So get a run for your money and load it to capacity.
- Turn off the tap when brushing your teeth.
- Check every faucet in your home for leaks. Just a slow drip can waste 15 to 20 gallons a day. Fix it and you can save almost 6,000 gallons per year.
- Check your toilets for leaks by putting a few drops of food coloring in the tank. Watch for a few minutes to see if the color shows up in the bowl. It is not uncommon to lose up to 100 gallons a day from an invisible toilet leak. Fix it and you save more than 30,000 gallons a year.
- Use your water meter to detect hidden leaks. Simply turn off all taps and water-using appliances. Then check the meter after 15 minutes. If it moved, you have a leak.

QUESTIONS? 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.





—Benjamin Franklin



and



Lead in Home Plumbing

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing.

Lead is a very soft metal and was never used to make large water mains. Although lead was used for centuries because of its resistance to pinhole leaks, it wasn't until the 20th century that the risks of lead plumbing became widely known. The U.S. Environmental Protection Agency (U.S. EPA) banned new lead service lines in the 1950s and has gradually eliminated lead in solder and household plumbing fixtures. Although HWA is responsible for providing high-quality drinking water, we cannot control the variety of materials used in plumbing components. We will, however, require that you replace lead service lines. HWA has required new water lines to be made of PVC (plastic) for more than two decades.

If your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. Lead exposure is measured in parts per billion. Water companies cannot exceed 15 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, one pinch of salt in 10 tons of potato chips, or 1 second in nearly 32 years. When drinking water is monitored according to federal and state regulations, the risk of human exposure to lead in water is negligible. 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 online at: www.epa. gov/safewater/lead.

Tip Top Tap

The most common signs that your faucet or sink is affecting the quality of your drinking water are discolored water, sink or faucet stains, a buildup of particles, unusual odors or tastes, and a reduced flow of water. The solutions to these problems may be in your hands.

Kitchen Sink and Drain

Handwashing, soap scum buildup, and the handling of raw meats and vegetables can contaminate your sink. Clogged drains can lead to unclean sinks and backed-up water in which bacteria (i.e., pink or black slime growth) can grow and contaminate the sink area and faucet, causing a rotten egg odor. Disinfect and clean the sink and drain area regularly and flush with hot water.

Faucets, Screens, and Aerators

Chemicals and bacteria can splash and accumulate on the faucet screen and aerator, which are located on the tip of faucets and can collect particles like sediment and minerals, resulting in a decreased flow from the faucet. Clean and disinfect the aerators or screens on a regular basis. Check with your plumber if you find particles in the faucet screen, as they could be pieces of plastic from the hot water heater dip tube. Faucet gaskets can break down and cause black, oily slime. If you find this slime, replace the faucet gasket with a higher-quality product. White scaling or hard deposits on faucets and showerheads may be caused by water with high levels of calcium carbonate. Clean these fixtures with vinegar or use water softening to reduce the calcium carbonate levels for the hot water system.

Community Participation

Highridge Water Authority (HWA) encourages its customers to participate in our meetings, held on the 3rd Tuesday of each month at 6:30 p.m. in the Authority's James F. Conway conference room at 17 Maple Avenue in Blairsville.



Substances That Could Be in Water

To ensure that tap water is safe to drink, the U.S. EPA and 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;

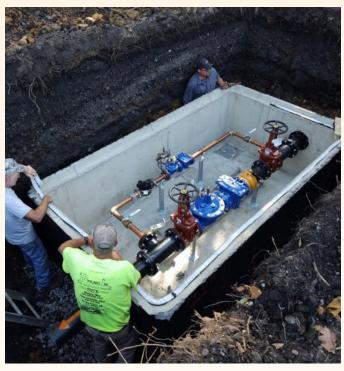
Inorganic Contaminants, such as salts and metals, which can be naturally occurring or may result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming;

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.



Derry Township Upgrade Project

Authority personnel installed a pressure-reducing pit for the village of Hillside in Derry Township. In the two previous years, customers in the community experienced numerous outages due to water main leaks. Realizing the age of those lines, Highridge decided to alleviate the water pressure exerted on the water main in hopes of maintaining the integrity and longevity of the line that supplies 105 customers, a practice which has successfully worked in other older communities of our sprawling water system. In addition we added another line along Ridgeview Road that enables us to backfeed the village, thereby limiting the number of homes adversely affected should a leak occur elsewhere in the community. Water pressure was reduced from 110 p.s.i to between 60-70 p.s.i. for everyone living along Old Route 217.

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.

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).

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

Test Results

We are please to report that your drinking water meets or exceeds all federal and state requirements.

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)	2021	2	2	0.03	0.0285-0.03	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Chlorine [Distribution] (ppm)	2021	[4]	[4]	0.94	0.72-0.94	No	Water additive used to control microbes
Chlorine [Entry Point] ¹ (ppm)	2021	MinRDL=0.2	NA	0.7	0.7–1.5	No	Water additive used to control microbes
Cryptosporidium	2018	ТТ	0	0.30	0.195-0.30	No	Naturally present in the environment
Dalapon (ppb)	2020	200	200	0.5	ND-1.5	No	Runoff from herbicide used on rights of way
Haloacetic Acids [HAAs]-Stage 12 (ppb)	2021	60	NA	30.51	8.6–74.7	No	By-product of drinking water disinfection
Nitrate (ppm)	2021	10	10	0.27	0.22–0.27	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
TTHMs [Total Trihalomethanes]-Stage 1 (ppb)	2021	80	NA	24.785	4–59.4	No	By-product of drinking water disinfection
Total Organic Carbon ³ (ppm)	2021	TT	NA	0.7	ND-1.4	No	Naturally present in the environment
Turbidity ⁴ (NTU)	2021	TT	NA	0.14	0.02-0.14	No	Soil runoff
Ton water complex ware collected for lead and conner analyses from complexities throughout the community							

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

- 1	SUBSTANCE (UNIT OF MEASURE)	1 1 1 1 1		AMOUNT DETECTED (90TH %ILE)	SITES ABOVE AL/ TOTAL SITES VIOLATION		TYPICAL SOURCE		
	Copper (ppm)	2019	1.3	1.3	0.05	0/30	No	Corrosion of household plumbing systems; Erosion of natural deposits	
	Lead (ppb)	2019	15	0	0	0/30	No	Corrosion of household plumbing systems; Erosion of natural deposits	

UNREGULATED SUBSTANCES							
SUBSTANCE (UNIT OF MEAS	URE)	YEAR SAMPLED	AMOUNT DETECTED	RANGE LOW-HIGH	TYPICAL SOURCE		
Bromodichlo	romethane (ppm)	2021	0.00233	ND-0.0048	By-product of drinking water disinfection		
Chlorodibro	momethane (ppm)	2020	0.0000425	ND-0.00069	By-product of drinking water disinfection		
Chloroform	(ppm)	2021	0.0224475	0.0033-0.0546	By-product of drinking water disinfection		
Nickel (ppm)		2021	0.00064	0.00057-0.00064	Naturally present in the environment		

OTHER UNREGULATED SUBSTANCES							
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AMOUNT DETECTED	RANGE LOW-HIGH	TYPICAL SOURCE			
Dichloroacetic Acid (ppm)	2021	0.0139475	0.0053-0.029	By-product of drinking water disinfection			
Monochloroacetic Acid (ppm)	2021	0.000275	ND-0.0023	By-product of drinking water disinfection			
Trichloroacetic Acid (ppm)	2021	0.01631	0.0034-0.0437	By-product of drinking water disinfection			

- ¹The amount-detected value for chlorine [entry point] represents the lowest level that was detected.
- ²Despite high readings in two locations, compliance is determined by the running annual average from sampling throughout the system. The average for 2021 for HAAs was 30 ppb, well below the maximum level of 60 ppb.
- ³The value reported under Amount Detected for Total Organic Carbon (TOC) is the lowest ratio between percentage of TOC actually removed to the percentage of TOC required to be removed. A value of greater than one indicates that the water system is in compliance with TOC removal requirements. A value of less than one indicates a violation of the TOC removal requirements.
- ⁴Turbidity is a measure of the cloudiness of the water. We monitor turbidity to check the effectiveness of our filtration system.