



# ANNUAL WATER QUALITY REPORT

WATER TESTING  
PERFORMED IN 2015



*Presented By*  
**Highridge Water Authority**

## Meeting the Challenge

Once again we are proud to present our annual drinking water report, covering all drinking water testing performed between January 1 and December 31, 2015. Over the years, we have dedicated ourselves to producing drinking water that meets all state and federal standards. We continually strive to adopt new methods for delivering the best quality drinking water to your homes and businesses. As new challenges to drinking water safety emerge, we remain vigilant in meeting the goals of source water protection, water conservation, and community education while continuing to serve the needs of all of our water users.

Please remember that we are always available to assist you, should you ever have any questions or concerns about your water.

## 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* and other microbial contaminants are available from the Safe Drinking Water Hotline at (800) 426-4791 or <http://water.epa.gov/drink/hotline>.

## Substances That Could Be in Water

To ensure that tap water is safe to drink, the U.S. EPA prescribes regulations limiting the amount of certain contaminants in water provided by public water systems. U.S. Food and Drug Administration 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.

## 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 Authority's James F. Conway conference room at 17 Maple Avenue in Blairsville.

## 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. We are responsible for providing high-quality drinking water, but cannot control the variety of materials used in plumbing components. When 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. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at [www.epa.gov/lead](http://www.epa.gov/lead).

## Be Notified of Water Emergencies

Although Highridge is a very dependable water utility, emergencies do occur. You can be notified and updated in several ways about service interruptions.

Be sure we have a working phone number so you can be notified promptly by a recorded message.

Provide Highridge with an e-mail address and receive news alerts.

Log onto our Web site, [highridgewater.org](http://highridgewater.org), to get the latest news. You can also use this site to pay water bills, receive instructions regarding repairs, find plumbing supply stores, and obtain tips for conserving water.

### Waterline Improvements

As part of a highway safety initiative; Penn DOT determined that Route 56 just north of Armagh Borough needed to be realigned to improve sight distance for drivers. The \$8 million project included the relocation of water and sewage mains to accommodate road construction. Also relocated was a pumping station near the United School District that supplies Highridge's service areas to the west during emergencies. Construction of the new pump station was completed in late March 2016. Water line work concluded a month later. Total cost for these two activities totaled just over \$500,000.



### Other projects of note:

1. In New Florence, a water system of which Highridge assumed operation in late 2014, more than 400 water meters were replaced. Additionally, approximately 3,700 feet of 6-inch water main was built in the Squirrel Hill area to replace undersized 1 inch and 1 1/2 inch lines that had supplied thirty customers.
2. Six hydrants were replaced in the Brenizer area of Derry Township, with another six scheduled for 2016.
3. In preparation of a major renovation and painting project for the Tubmill tank in 2016, a temporary tank was built so the filter plant could operate in a limited capacity without being totally taken off-line for the 3-month period of tank work.
4. Penn DOT is rebuilding another bridge that necessitated the relocation of water lines. Similar to the new bridge built in 2013 in Seward Borough, the Route 217 bridge in Derry Borough was started in 2015. Highridge relocated approximately 500 feet for the Derry project compared with 750 feet in Seward.

## Source Water Assessment

The greatest potential threats to Highridge's water supply 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 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 are also hazards.

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

Of the 464 million gallons of water sold to its customers, 158,000 was purchased from Blairsville Municipal Authority. Those wishing to read their Source Water Assessment may wish to contact BMA directly at 724-459-5020.

## UCMR3 Sampling

In 2014 we participated in the 3rd stage of the EPA's Unregulated Contaminant Monitoring Rule (UCMR3) program by performing additional tests on our drinking water. UCMR3 benefits the environment and public health by providing the EPA with data on the occurrence of contaminants suspected to be in drinking water, in order to determine if the EPA needs to introduce new regulatory standards to improve drinking water quality. UCMR examines what is in the drinking water, but additional health information is needed to know whether these contaminants pose a health risk. Information is necessary to determine whether these contaminants maybe harmful at low levels; others may be harmful at much higher levels. Contact George E. Sulkosky at (724) 459-8033 for more information on the monitoring results.

## 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.

## 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, 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.

### **Additional Sources of Water**

Highridge purchases small volumes daily from Blairsville Municipal Authority (B.M.A.). B.M.A.'s source is located east of the village of Hillside on Chestnut Ridge in Derry Township.

## Illegal Fire Hydrant Use

The use of fire hydrants by anyone other than Highridge Water Authority employees or local fire departments is a misdemeanor of the third degree, subject to fines and punishable by up to a year in jail.

Keep in mind that all costs to produce and deliver water are passed on to customers. Our employees are trained in system maintenance, construction, and repair. By comparison, any person not qualified in the operation of a water company's facilities, including valves and hydrants, could cause not only hydrants but water mains to break. This in turn means service disruptions, dirty water, and expensive repairs.

Please report any suspicious use of fire hydrants to Highridge immediately. If your tips lead to the prosecution of offenders, we will give you a cash reward or credit on your water bill! Please call (888) 557-4343 to report use during business hours or (800) 847-6637 after normal hours.

## Sampling Results

During the past year, we have taken hundreds of water samples to determine the presence of any radioactive, biological, inorganic, volatile organic, or synthetic organic contaminants. The state requires us to monitor for certain substances less often than once per year because the concentration of these substances does not change frequently. In these cases, the most recent sample data are included for those contaminants that were detected in the water and the year in which the sample was taken. The table below shows only those contaminants that were detected in the water.

In January and July 2015, the Blairsville Municipal Authority failed to report several monitoring results in the time frame required. Despite being cited, the B.M.A. had no water-quality violations.

REGULATED SUBSTANCES									
				Highridge Water Authority		Blairsville Municipal Authority			
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	MCL [MRDL]	MCLG [MRDLG]	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
<b>Antimony</b> (ppb)	2015	6	6	0.9	0.9–0.9	NA	NA	No	Discharge from petroleum refineries; Fire retardants; Ceramics; Electronics; Solder
<b>Barium</b> (ppm)	2015	2	2	0.041	0.041–0.043	0.023 <sup>1</sup>	ND–0.046 <sup>1</sup>	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
<b>Cadmium</b> (ppb)	2015	5	5	0.2	0.2–0.2	NA	NA	No	Corrosion of galvanized pipes; Erosion of natural deposits; Discharge from metal refineries; Runoff from waste batteries and paints
<b>Chlorine [Distribution]</b> (ppm)	2015	[4]	[4]	0.762	0.462–0.762	1.02	0.24–1.02	No	Water additive used to control microbes
<b>Chlorine [Entry Point]<sup>2</sup></b> (ppm)	2015	MinRDL = 0.2	NA	0.8	0.8–1.5	0.5	0.5–1.3	No	Water additive used to control microbes
<b>Di(2-ethylhexyl) Phthalate</b> (ppb)	2011	6	0	1.1	ND–4.4	NA	NA	No	Discharge from rubber and chemical factories
<b>Fluoride</b> (ppm)	2014	2	2	NA	NA	0.785	0.27–1.3	No	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
<b>Haloacetic Acids [HAA]</b> (ppb)	2015	60	NA	31.4	16.3–89 <sup>3</sup>	15.835	6.36–30	No	By-product of drinking water disinfection
<b>Nitrate</b> (ppm)	2015	10	10	NA	NA	0.15	0.15–0.15	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
<b>TTHMs [Total Trihalomethanes]</b> (ppb)	2015	80	NA	36.07	16.4–70.7	39.225	13.2–67	No	By-product of drinking water disinfection
<b>Total Organic Carbon</b> (ppm)	2015	TT	NA	0.8	0.6–1.4	0.9	0.8–1.1	No	Naturally present in the environment
<b>Turbidity<sup>4</sup></b> (NTU)	2015	TT	NA	0.25	0.03–0.25	NA	NA	No	Soil runoff
Tap water samples were collected for lead and copper analyses from sample sites throughout the community									
				Highridge Water Authority		Blairsville Municipal Authority			
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AL	MCLG	AMOUNT DETECTED (90TH%TILE)	SITES ABOVE AL/TOTAL SITES	AMOUNT DETECTED (90TH%TILE)	SITES ABOVE AL/TOTAL SITES	VIOLATION	TYPICAL SOURCE
<b>Copper</b> (ppm)	2013	1.3	1.3	0.106	0/30	0.03 <sup>5</sup>	0/20 <sup>5</sup>	No	Corrosion of household plumbing systems; Erosion of natural deposits
<b>Lead</b> (ppb)	2013	15	0	0	0/30	8 <sup>5</sup>	1/20 <sup>5</sup>	No	Corrosion of household plumbing systems; Erosion of natural deposits

## UNREGULATED SUBSTANCES

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	Highridge Water Authority		Blairsville Municipal Authority		TYPICAL SOURCE
		AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	
<b>Bromochloromethane</b> (ppm)	2014	NA	NA	0.00676	0.003–0.01	By-product of drinking water disinfection
<b>Bromodichloromethane</b> (ppm)	2015	0.00468	0.00185–0.00793	0.0064875	0.0035–0.009	By-product of drinking water disinfection
<b>Chlorodibromomethane</b> (ppm)	2015	NA	NA	0.001525	0.001–0.002	By-product of drinking water disinfection
<b>Chloroform</b> (ppm)	2015	0.03139	0.0142–0.0634	0.0309625	0.0087–0.056	By-product of drinking water disinfection
<b>Nickel</b> (ppm)	2014	0.0016	0.0016–0.0016	NA	NA	Naturally present in the environment

## UNREGULATED CONTAMINANT MONITORING RULE PART 3 (UCMR3) - HIGHRIDGE WATER AUTHORITY

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AMOUNT DETECTED	RANGE LOW-HIGH	TYPICAL SOURCE
<b>Chlorate</b> (ppb)	2014	48	28–68	Erosion of natural deposits
<b>Chromium</b> (ppb)	2014	0.21	0.21–0.021	Erosion of natural deposits
<b>Hexavalent Chromium</b> (ppb)	2014	0.04	0.032–0.058	Erosion of natural deposits
<b>Strontium</b> (ppb)	2014	24	21–30	Erosion of natural deposits

<sup>1</sup> Sampled in 2014.

<sup>2</sup> The amount-detected value for chlorine [entry point] represents the lowest level that was detected.

<sup>3</sup> Despite one high reading, compliance is determined by the running annual average from quarterly sampling. The average for 2015 for HAAs was 31, well below the maximum level of 60 ppb.

<sup>4</sup> Turbidity is a measure of the cloudiness of the water. We monitor turbidity to check the effectiveness of our filtration system.

<sup>5</sup> Sampled in 2015.

## Definitions

**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.