



Highland Sewer & Water Authority

2017 Annual Water Quality Report

NORTHERN END WELL SYSTEM PWS ID #: 4110016

This report details water quality in the **Northern End Well** portion of the Highland Sewer & Water Authority (HSWA) system. If you have questions about this report or your water utility, please contact **Tom Kunko at 814-266-3146, ext. 116**. HSWA wants you to be informed about your water supply. If you would like to learn more, please attend any HSWA's regularly scheduled meetings held on the first and third Tuesday of every month at the HSWA Office, 120 Tank Drive, Johnstown, PA 15904. See www.highlandwater.net for details.

Este informe contiene informacion muy importante sobre su agua de beber. Traduzcalo o hable con alguien que lo entienda bien. (This report contains very important information about your drinking water. Translate it, or speak with someone who understands it.)

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 can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/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 (800-426-4791).

General Educational Information

The sources of drinking water (both tap 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 and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity. Contaminants 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, and wildlife.
- **Inorganic contaminants**, such as salts and metals, which can be naturally-occurring or result from urban stormwater run-off, 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 can also come from gas stations, urban stormwater runoff, and septic systems.
- **Radioactivity contaminants**, which can be naturally-occurring or the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, the United States Environmental Protection Agency (EPA) and Pennsylvania Department of Environmental Protection (PADEP) prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. The United States Food and Drug Administration (FDA) and PADEP 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 contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential effects can be obtained by calling the EPA Safe Drinking Water Hotline (800-426-4791).

2004 Source Water Assessment

A Source Water Assessment of HSWA's water sources was completed in 2004 by the PADEP. The Assessment found that our water sources are potentially most susceptible to accidents and spills along the roadways within the assessment areas and non-point source contamination from residences, pesticide use, and past mining practices. Overall, our sources have moderate risk of significant contamination. Summary reports of the Assessment are available by contacting the HSWA Office and posted on the PADEP website at <http://www.dep.state.pa.us> (Keyword: "DEP source water"). Complete reports were distributed to municipalities, water suppliers, local planning agencies, and PADEP offices. Copies of the complete report are available for review at the PADEP Southwest Regional Office, Records Management Unit (412-442-4000).

NORTHERN END WELL SYSTEM

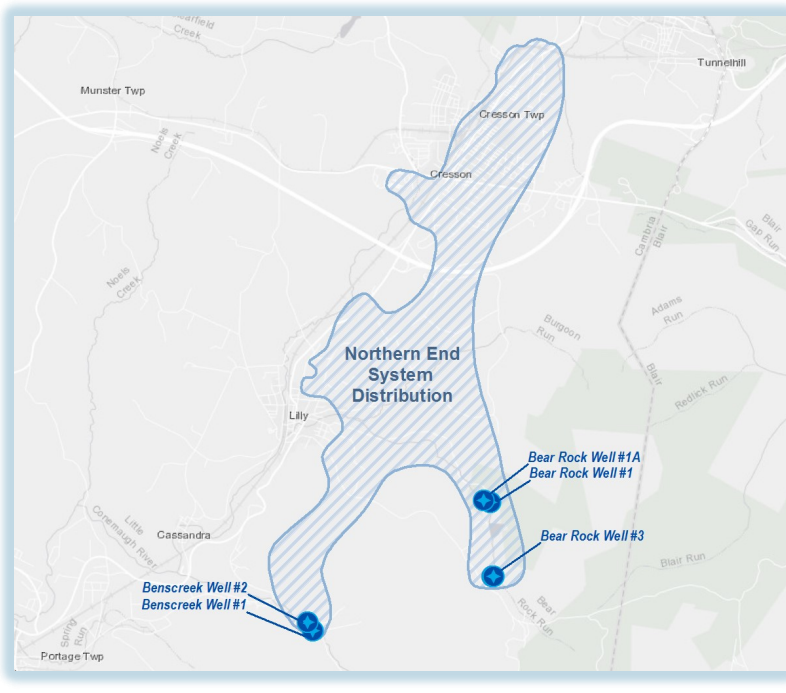
Water Sources

Bear Rock Wells #1, #1A and #3

Groundwater wells located north of Lilly in Washington Township, Cambria County.

Benscreek Wells #1 and #2

Groundwater wells located in Portage Township, Cambria County.



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

Maximum Contaminant Level (MCL)

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.

Maximum Containment Level Goal (MCLG)

The level of containment in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

Maximum Residual Disinfectant Level (MRDL)

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.

Maximum Residual Disinfectant Level Goal (MRDLG)

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.

Minimum Residual Disinfectant Level (MinRDL)

The minimum level of residual disinfectant required at the entry point to the distribution system.

Treatment Technique (TT)

A required process intended to reduce the level of a contaminant in drinking water.

Mrem/year = millirems per year (a measure of radiation absorbed by the body)

pCi/L = picocuries per liter (a measure of radioactivity)

ppb = parts per billion, or micrograms per liter (ug/L)

ppm = parts per million, or milligrams per liter (mg/L)

ppq = parts per quadrillion, or pictograms per liter

ppt = parts per trillion, or nanograms per liter

Monitoring Your Water

HSWA routinely monitors for contaminants in your drinking water according to federal and state laws. The following tables show the results of our monitoring for the period of **January 1 to December 31, 2017**. The State allows us to monitor for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of our data is from prior years and is in accordance with the Safe Drinking Water Act. The sample date has been noted in the sampling results tables

2017 DETECTED SAMPLE RESULTS

ENTRY POINT DISINFECTANT RESIDUAL

Contaminant	Minimum Disinfectant Residual	Lowest Level Detected	Range of Detections	Sample Date	Violation	Sources of Contamination
Chlorine Entry Point 102	0.40 ppm	0.00 ppm	0.00 - 2.27 ppm	5/4/17	No*	Water additive used to control microbes
Chlorine Entry Point	0.40 ppm	0.00 ppm	0.00 - 2.03 ppm	5/2/17	No*	Water additive used to control microbes

*A violation occurs when the entry point disinfection residual is below your minimum disinfectant residual value for more than 4 hours Compliance achieved

MICROBIAL

Contaminant	MCL	MCLG	Highest # or % of positive Samples	Violation	Sources of Contamination
Total Coliform Bacteria	2 or more total coliform-positive samples in the same month	0	0	No	Naturally present in the environment
Fecal Coliform Bacteria or E. Coli	0	0	0	No	Human and animal fecal waste

RAW SOURCE WATER MICROBIAL

Contaminant	MCLG	Total # of	Dates	Violation	Sources of Contamination
E. Coli	0	0	2017	No	Human and animal fecal waste

CHEMICAL CONTAMINANT

Chemical Contaminant	MCL in CCR Units	MCLG	Level Detected	Range of Detections	Sample Date	Violation	Sources of Contamination
Chlorine	MRDL = 4	MRDL = 4	1.589 ppm Highest Monthly Average (09/2017)	1.247 - 1.589 ppm	Daily	No	Water additive used to control microbes
Barium Entry Point 102	2 ppm	2 ppm	0.157 ppm	0.157 ppm	3/4/2015	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Barium Entry Point 104	2 ppm	2 ppm	0.187 ppm	0.187 ppm	3/4/2015	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Nitrate Entry Point 102	10 ppm	10 ppm	0 ppm	0 ppm	6/15/2017	No	Run-off from fertilizer use
Nitrate Entry Point 104	10 ppm	10 ppm	0 ppm	0 ppm	6/15/2017	No	Run-off from fertilizer use
Haloacetic Acids (HAA5)	60 ppb	N/A	2 ppb Running Annual Average	2 ppb	7/15/2015	No	By-product of drinking water chlorination
Trihalomethanes (TTHM)	80 ppb	N/A	6 ppb Running Annual Average	6 ppb	7/15/2015	No	By-product of drinking water chlorination

LEAD and COPPER

Contaminant	Action Level (AL)	MCLG	90th Percentile Value	# of Sites Above AL of Total Sites	Violation	Sources of Contamination
Lead	0.015 ppm	0 ppm	0 ppm (Samples collected in 2016)	0 out of 5	No	Corrosion of household plumbing
Copper	1.3 ppm	1.3 ppm	0.898 ppm (Samples collected in 2016)	0 out of 5	No	Corrosion of household plumbing

Information About Lead

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. HSWA is 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 your 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 EPA Safe Drinking Water Hotline, provided on Page 1 of this report, or at <http://www.epa.gov/safewater/lead>.

Violations: None