

# ANNUAL DRINKING WATER QUALITY REPORT

BEARDSTOWN

IL0170150

Annual Water Quality Report for the period of January 1 to December 31, 2016

This report is intended to provide you with important information about your drinking water and the efforts made by the water system to provide safe drinking water.

The source of drinking water used by BEARDSTOWN is Ground Water.

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Este informe contiene información muy importante sobre el agua que usted bebe. Tradúzcalo ó hable con alguien que lo entienda bien.

## SOURCE OF DRINKING WATER

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, the water may dissolve radioactive material. Water can also 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 system, agricultural livestock operations and wildlife;
- Inorganic contaminants, such as salts and metals, which may be naturally occurring or 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 byproducts of industrial processes and petroleum production, and may also come from gas stations, urban stormwater runoff and septic systems; and
- Radioactive contaminants, which may be naturally occurring or be the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, EPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. FDA 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 health effects can be obtained by calling the USEPA's Safe Drinking Water Hotline (1-800-426-4791).

Some people may be more vulnerable to contaminants in drinking water than the general population.

Immuno-compromised 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. USEPA/CDC guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the USEPA's Safe Drinking Water Hotline (1-800-426-4791).

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 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 <http://www.epa.gov/safewater/lead>.

### Source Water Information

Source Water Name	Type of Water	Report Status	Location
Well 13 (52070)/Local #1	Ground Water	Active	Cass County
Well 14 (52071)/Local #2	Ground Water	Active	Cass County
Well 15 (52072)/Local #3	Ground Water	Active	Cass County
Well 16 (52073)/Local #4	Ground Water	Active	Cass County

### Source Water Assessment

We want our valued customers to be informed about their water quality. If you would like to learn more, please feel welcome to attend any of our regularly scheduled meetings. The source water assessment for our supply has been completed by the Illinois EPA. If you would like a copy of this information, please stop by City Hall or call our water operator at 1-217-323-5744. To view a summary version of the completed Source Water Assessments, including: Importance of Source Waters, Susceptibility to Contamination Determination, and documentation/recommendation of Source Water Protection Efforts; you may access the Illinois EPA website at <http://www.epa.state.il.us/egi-bin/wp/swap-fact-sheets.pl>.

To determine Beardstown's susceptibility to contamination, the following document was reviewed: a Well Site Survey, published in 1989 by the Illinois EPA. Based on the information obtained in this document there are 43 potential sources of groundwater contamination that could pose a hazard to groundwater utilized by Beardstown's community water supply wells. These potential sources include: 1 car wash, 2 auto repairs, 6 below ground fuel storage tanks, 1 landscape waste pile, 1 quarry, 3 lumber storage sites, 1 hazardous material storage facility, 4 above ground fuel storage tanks, 2 fertilizer warehouses, 1 surface impoundment, 1 military installation, 3 retail stores, 1 laundromat, 1 trainyard, 2 grain elevators, 1 manufacturer, 2 warehouses, 2 cement companies, 1 recycling facility, 1 animal feed supplier, 1 autobody, 1 unidentified waste site, 1 sanitary sewer, 1 printer, 1 small engine repair, and 1 parking lot. In addition, information provided by the Leaking Underground Storage Tank and Remedial Project Management Sections of the Illinois EPA indicated additional sites with on-going remediation which may be of concern. Based upon this information, the Illinois EPA has determined that the Beardstown Community Water Supply's source water is susceptible to contamination. The land use within the recharge areas of the wells was analyzed as part of this susceptibility determination. This land use includes agricultural properties.

## 2016 Regulated Contaminants Detected

### Lead and Copper

Definitions:

Action Level Goal (ALG):

Action Level (AL):

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

The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

Lead and Copper	Date Sampled	MCLG	Action Level (AL)	90 <sup>th</sup> Percentile	# Sites Over AL	Units	Violation	Likely Source of Contamination
Copper	06/25/2014	1.3	1.3	0.19	0	ppm	No	Erosion of natural deposits; leaching from wood preservatives; corrosion of household plumbing systems.
Lead	06/25/2014	0	15	1.5	0	ppb	No	Corrosion of household plumbing systems; erosion of natural deposits.

### Water Quality Test Results

Definitions:

Maximum Contaminant Level Goal (MCLG):

Maximum Contaminant Level (MCL):

Maximum Residual Disinfectant Level Goal (MRDLG):

Maximum Residual Disinfectant Level (MRDL):

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.

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.

MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

The highest level of a drinking water disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

### Regulated Contaminants

Disinfectants and Disinfection Byproducts	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Chlorine	12/31/2016	1.9	1-2	MRDL G = 4	MRD L = 4	ppm	No	Water additive used to control microbes.
Haloacetic Acids (HAA5)*	2016	2	2.18-2.18	n/a	60	ppb	No	Byproduct of drinking water chlorination.
Total Trihalomethanes (TTHM) <sup>1</sup>	2016	8	7.9-7.9	n/a	80	ppb	No	Byproduct of drinking water chlorination.

Inorganic Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Barium	10/06/2014	0.17	0.17-0.17	2	2	ppm	No	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits.
Fluoride	10/06/2014	1.02	1.02 – 1.02	4.0	4.0	ppm	No	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories.
Manganese <sup>2</sup>	10/06/2014	10	10-10	150	150	ppb	No	Erosion from naturally occurring deposits.
Nitrate (Measured as Nitrogen)	2016	0.03	0.03-0.03	10	10	Ppm	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
Sodium <sup>3</sup>	10/06/2014	55	55-55	n/a	n/a	ppm	No	Erosion from naturally occurring deposits; used in water softener regeneration.
Zinc	10/06/2014	0.018	0.018-0.018	5	5	ppm	No	Erosion from naturally occurring deposits.
<b>Radioactive Contaminants</b>								
Combined Radium 226/228	01/17/2011	1.66	1.66-1.66	0	5	pCi/L	No	Erosion of natural deposits.
Gross alpha excluding radon and uranium	01/17/2011	0.458	0.458-0.458	0	15	pCi/L	No	Erosion of natural deposits.
<b>Volatile Organic Contaminants</b>								
cis-1,2-Dichloroethylene	2016	1	0.66-2.6	70	70	ppb	No	Discharge from industrial chemical factories.

<sup>1</sup> Not all sample results may have been used for calculating the Highest Level Detected because some results may be part of an evaluation to determine where compliance sampling should occur in the future.

<sup>2</sup> This contaminant is not currently regulated by the USEPA. However, the state has set an MCL for this contaminant for supplies serving a population of 1,000 or more. There is no state or federal MCL for sodium. Monitoring is required to provide information to consumers and health officials that are concerned about sodium intake due to dietary precautions.

Abbreviations:

n/a: not applicable

ppb: parts per billion or micrograms per liter (µg/L)

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

Note: Some contaminants are sampled less frequently than once a year; as a result, not all contaminants were sampled during the CCR calendar year. If any of these

contaminants were detected the last time they were sampled for, they are included in the table along with the date that the detection occurred.

Note: This report includes raw, finished and distribution water sample results.