

# Annual Drinking Water Quality Report

**YATES CITY**

**IL0950700**

Annual Water Quality Report for the period of January 1 to December 31, 2018

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 YATES CITY is Ground Water

For more information regarding this report contact:

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Este informe contiene información muy importante sobre el agua que usted bebe. Tradúzcalo o 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 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 storm water 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 storm water 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 storm water runoff, and septic systems.

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

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 EPA's Safe Drinking Water Hotline at (800) 426-4791.

In order to ensure that tap water is safe to drink, EPA prescribes regulations which 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.

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. 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).

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 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 call our water operator at 309-358-1440. To view a summary version of the completed Source Water Assessments, including: Importance of Source Water; 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/cgi-bin/wp/swap-fact-sheets.pl>.

Source of Water: YATES CITY: To determine Yates City's susceptibility to groundwater contamination, a Well Site Survey, published in 1989 by the Illinois EPA, was reviewed. Seven potential sources, routes, or possible problem sites were located within the 200 foot minimum setback zone of wells #3. A total of ten potential sources or problem sites are located within the 1,000 foot survey radius of well #3. These include a water tower/reservoir, a restaurant/food service, a fire station, a grain elevator, a school, three offices, two stores/sales, a below ground fuel storage, a park, a hardware store, a feed lot, and a meat/liquor store. The Illinois EPA has determined that Yates City Wells #1 and #3 are not susceptible to IOC, VOC, or SOC contamination. This determination is based on a number of criteria including: monitoring conducted at the wells; monitoring conducted at the entry point to the distribution system; and the available hydrogeologic data for the wells.

### SOURCE WATER INFORMATION

SOURCE WATER NAME	TYPE OF WATER	REPORT STATUS	LOCATION
WELL 3 (50000)	GW	ACTIVE	BEHIND TREATMENT PLANT

**Lead and Copper**

Definitions:  
 Action Level Goal (ALG): 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.  
 Action Level: 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)	90th Percentile	# Sites Over AL	Units	Violation	Likely Source of Contamination
Copper	2018	1.3	1.3	0.14	0	ppm	N	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems.
Lead	2018	0	15	4.8	1	ppb	N	Corrosion of household plumbing systems; Erosion of natural deposits.

**Water Quality Test Results**

Definitions:  
 Avg: The following tables contain scientific terms and measures, some of which may require explanation.  
 Level 1 Assessment: Regulatory compliance with some MCLs are based on running annual average of monthly samples.  
 Level 2 Assessment: A Level 1 assessment is a study of the water system to identify potential problems and determine (if possible) why total coliform bacteria have been found in our water system.  
 Maximum Contaminant Level or MCL: A Level 2 assessment is a very detailed study of the water system to identify potential problems and determine (if possible) why an E. coli MCL violation has occurred and/or why total coliform bacteria have been found in our water system on multiple occasions.  
 Maximum Contaminant Level Goal or MCLG: 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 residual disinfectant level or 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.  
 Maximum residual disinfectant level goal or MRDLG: 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.  
 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.

## Water Quality Test Results

na: not applicable.

mrem: millirems per year (a measure of radiation absorbed by the body)

ppb: micrograms per liter or parts per billion - or one ounce in 7,350,000 gallons of water.

ppm: milligrams per liter or parts per million - or one ounce in 7,350 gallons of water.

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

### Regulated Contaminants

Disinfectants and Disinfection By-Products      Collection Date      Highest Level Detected      Range of Levels Detected      MCLIG      MCL      Units      Violation      Likely Source of Contamination

Chlorine      12/31/2018      0.6      0.22 - 1.4      MRDLG = 4      MRDL = 4      ppm      N      Water additive used to control microbes.

Halocetic Acids (HAA5)      2018      2      1.84 - 1.84      No goal for the total      60      ppb      N      By-product of drinking water disinfection.

Total Trihalomethanes (TTHM)      2018      1.1      10.95 - 10.95      No goal for the total      80      ppb      N      By-product of drinking water disinfection.

Inorganic Contaminants      Collection Date      Highest Level Detected      Range of Levels Detected      MCLIG      MCL      Units      Violation      Likely Source of Contamination

Arsenic - While your drinking water meets EPA standards for arsenic, it does contain low levels of arsenic. EPA's standard balances the current understanding of arsenic's possible health effects against the costs of removing arsenic from drinking water. EPA continues to research the health effects of low levels of arsenic, which is a mineral known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems.

2018      5.9      5.9 - 5.9      0      10      ppb      N      Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes.

<b>Barium</b>	2018	0.0038	0.0038 - 0.0038	2	2	ppm	N	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
<b>Fluoride</b>	2018	2.64	2.64 - 2.64	4	4.0	ppm	N	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.
<b>Iron</b>	2018	0.087	0.087 - 0.087		1.0	ppm	N	This contaminant is not currently regulated by the USEPA. However, the state regulates. Erosion of natural deposits.
<b>Manganese</b>	2018	1.1	1.1 - 1.1	150	150	ppb	N	This contaminant is not currently regulated by the USEPA. However, the state regulates. Erosion of natural deposits.
<b>Nitrate [measured as Nitrogen]</b>	2018	0.45	0.45 - 0.45	10	10	ppm	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
<b>Selenium</b>	2018	4.4	4.4 - 4.4	50	50	ppb	N	Discharge from petroleum and metal refineries; Erosion of natural deposits; Discharge from mines.
<b>Sodium</b>	2018	520	520 - 520			ppm	N	Erosion from naturally occurring deposits. Used in water softener regeneration.
<b>Zinc</b>	2018	0.013	0.013 - 0.013	5	5	ppm	N	This contaminant is not currently regulated by the USEPA. However, the state regulates. Naturally occurring; discharge from metal
<b>Radioactive Contaminants</b>	Collection Date	Highest Level Detected	Range of Levels Detected	MCL	MCL	Units	Violation	Likely Source of Contamination
<b>Combined Radium 226/228</b>	2018	4	4.16 - 4.16	0	5	pCi/L	N	Erosion of natural deposits.
<b>Gross alpha excluding radon and uranium</b>	2018	13	12.8 - 13.3	0	15	pCi/L	N	Erosion of natural deposits.

**IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER**  
**Elevated Fluoride Levels Detected**

This is an alert about your drinking water and a cosmetic dental problem that might affect children under nine years of age. At recommended levels, fluoride can help prevent cavities, but children drinking water containing more than 2 milligrams per liter (mg/L) of fluoride may develop cosmetic discoloration of their permanent teeth (dental fluorosis). The drinking water provided by you by the Village of Yates City (IL) public water supply has a fluoride concentration of 2.64 mg/L. This public notice covers the January 1, 2019 to December 31, 2019 monitoring period.

Dental fluorosis in its moderate or severe forms may result in a brown staining and/or pitting of the permanent teeth. This problem occurs only in developing teeth, before they erupt from the gums. Children under nine years of age should be provided with alternative sources of drinking water or water that has been treated to remove the fluoride to avoid the possibility of staining and pitting of their permanent teeth. You may also want to contact your dentist about the proper use of fluoride-containing products for young children. Older children and adults may safely drink the water.

Drinking water containing more than 4 mg/L of fluoride (the United States Environmental Protection Agency's drinking water standard) can increase your risk of developing bone disease. Your drinking water does not contain more than 4 mg/L of fluoride, but we're required to notify you when we discover that the fluoride levels in your drinking water exceed 2 mg/L because of this cosmetic dental problem.

For more information, please call our water operator at 309-358-1440. Some home treatment units are also available to remove fluoride from drinking water. To learn more about available home water treatment units, you may call NSF International at 1-877-NSF-HELP.

Please share this information with all the other people who drink this water, especially those who may not have received this notice directly (for example, people in apartments, nursing homes, schools, and businesses). You can do this by posting this notice in a public place or distributing copies by hand or mail.

This notice is being sent to you by the Village of Yates City (IL) public water supply.

Water System #0950700

Date distributed: May 2, 2019