



Forsyth Public Water Supply 2016 Drinking Water Quality Report

Forsyth Public Water Supply Annual Drinking Water Quality Report

FORSYTH
IL1150200

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 FORSYTH water system to provide safe drinking water. The source of drinking water used by FORSYTH is Ground Water. For more information regarding this report contact:

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Este informe contiene informacion muy importante sobre el agua que usted bebe. Traduzcalo 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 groundwater 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

A Source Water Assessment summary is included below for your convenience.

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 Village Hall or call our water operator at 217-877-7182.

To view a summary version of the completed Source Water Assessment, 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.epastate.il.us/cgi-bin/wp/swapJact_sheets.pL

To determine Forsyth's susceptibility to ground- water contamination, a Well Site Survey, published in 1989 by the Illinois EPA, and Source Water Protection Plan were reviewed. Based on the information contained in these documents, eight potential sources of groundwater contamination are present that could pose a hazard to groundwater pumped by the Forsyth community water supply wells. These include an above ground fuel storage, a water treatment plant, a store/sales, an auto body, an exterminator, an auto repair, a grain elevator, and a fertilizer warehouse. Based on information provided by Forsyth's water supply officials, the following facilities, also indicated as potential sources in the site data table, have changed their status: Keller Oil Co. is now Bigfoot #45 Novia Scotia, Beddingfield Buick GMC BMW is now Poage Auto Mall Inc, Isringhausen Imports Decatur is now Coziahr Harley Davidson, Edwards Fertilizer is not in the vicinity of the wells, and a new fuel station has been built on the north side of Book Barn. Based upon this information, the Illinois EPA has determined that Forsyth Wells #3, #4, and #5 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. In anticipation of the U.S. EPA's proposed Ground Water Rule, the Illinois EPA has determined that Forsyth's community water supply wells are not vulnerable to viral contamination. This determination is based upon the evaluation of the following criteria during the Vulnerability Waiver Process: the community's wells are properly constructed with sound integrity and proper site conditions; there is a hydrogeologic barrier that restricts pathogen movement; all potential routes and sanitary defects have been mitigated such that the source water is adequately protected; monitoring data did not indicate a history of disease outbreak; and the sanitary survey of the water supply did not indicate a viral contamination threat. However, having stated this, the U.S. EPA is proposing to require States to identify systems in karst, gravel and fractured rock aquifer systems as sensitive. Water systems utilizing these aquifer types would be required to perform routine source water monitoring. Because the community's wells are constructed in a confined aquifer, which should provide an adequate degree of protection to prevent the movement of pathogens into the wells, well hydraulics were not considered to be a significant factor in the vulnerability determination.

Source Water Information

| Source Water Name | Report Status | Type of Water | Location |
|-------------------|---------------|---------------|--------------------------------|
| WELL 3 (40033) | Active | GW | AT SE CORNER OF SCHOOL |
| WELL 4 (40034) | Active | GW | N WELL OF 2, 2 MI N OF TOWN |
| WELL 5 (47842) | Active | GW | S WELL OF 2, 2 MILES N OF TOWN |
| WELL 6 (01426) | Active | GW | NE Co 18 & BRUSH COLLEGE R |

2016 Regulated Contaminants Detected

Definitions: Action Level Goal (ALG) : the level of a contaminate in drinking water below which there is no known or expected risk to health. ALG's 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 | No. of sites overAL | Units | Violation | Likely Source of Contaminant |
|-----------------|--------------|------|-------------------|-----------------|---------------------|-------|-----------|--|
| Copper | 2016 | 1.3 | 1.3 | 0.136 | 0 | ppm | No | Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems |
| Lead | 2016 | 0 | 15 | 10.1 | 0 | ppb | No | Corrosion of household plumbing systems, Erosion of natural deposits. |

Regulated Contaminants

| Disinfectants & Disinfection By-Products | Collection Date | Highest Level Detected | Range of Levels Detected | MCLG | MCL | Units | Violation | Likely Source of Contaminant |
|--|-----------------|------------------------|--------------------------|---------|--------|-------|-----------|---|
| Chlorine | 12/31/2016 | 0.9 | 0.0 - 1.0 | MRDLG=4 | MRDL=4 | ppm | No | Water additive used to control microbes |

| Inorganic Contaminants | Collection Date | Highest Level Detected | Range of Levels Detected | MCLG | MCL | Units | Violation | Likely Source Of Contaminant |
|------------------------|-----------------|------------------------|--------------------------|------|-----|-------|-----------|---|
| Arsenic | 2016 | 6 | 2.53 – 8.91 | 0 | 10 | ppb | No | Erosion of natural deposits; Runoff from orchards; Runoff from electronics production wastes |
| Barium | 7/21/ 2015 | 0.0273 | 0.0273-0.0273 | 2 | 2 | ppm | No | Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits. |
| Fluoride | 2015 | 1.16 | 1.16-1.16 | 4 | 4.0 | ppm | No | Erosion of natural deposits; Water additive which promotes strong teeth; Fertilizer discharge |
| Sodium | 2015 | 50.7 | 50.7-50.7 | | | ppm | No | Erosion from naturally occurring deposits; Used In water softener regeneration. |

| <i>Radioactive Contaminants</i> | <i>Collection Date</i> | <i>Highest Level Detected</i> | <i>Range of Levels Detected</i> | <i>MCLG</i> | <i>MCL</i> | <i>Units</i> | <i>Violation</i> | <i>Likely Source Of Contaminant</i> |
|---|------------------------|-------------------------------|---------------------------------|-------------|------------|--------------|------------------|-------------------------------------|
| Combined Radium 226/228 | 1/13/2010 | 0.29 | 0.29-0.29 | 0 | 5 | pCi/L | No | Erosion of natural deposits |
| Gross alpha excluding radon and uranium | 1/13/2010 | 0.49 | 0.49-0.49 | 0 | 15 | pCi/L | No | Erosion of natural deposits |

Note: The state requires monitoring of certain contaminants less than once per year because the concentrations of these contaminants do not change frequently. Therefore, some of this data may be more than one year old.

The Illinois Department of Public Health (IDPH) and the Illinois Environmental Protection Agency (IEPA) have recognized the Forsyth Water Department for maintaining the state mandated fluoride level in drinking water for each month in 2016.

This is the 24th consecutive year that Forsyth has been named to the Compliance Award List for community water fluoridation. The Village is one of only a few communities to have met the fluoride levels for at least 20 consecutive years.

Fluoride in drinking water has been credited as an efficient and economical way to promote dental health, especially for children. Drinking fluoridated water from birth can reduce tooth decay by 40 to 60 percent.

Water Quality Test Results

Definitions: The tables inside this report contain scientific terms and measures. some of which may require explanation.

Maximum Contaminant Level Goal (MCLG): 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 Contaminant Level (MCL): The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the Maximum Contaminant Level Goal as feasible using the best available treatment technology.

Maximum Residual Disinfectant Level Goal (MRDLG) The level of disinfectant in drinking water 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.

Maximum Residual Disinfectant Level (MRDL) The highest level of disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

ppb: micrograms per litre or parts per billion - or one ounce in

7,350,000 gallons of water

na: not applicable.

Avg: Regulatory compliance with some MCLs are based on running annual average of monthly samples.

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