



ANNUAL DRINKING WATER QUALITY REPORT

Washington IL-1790750-For the period of January 1 to December 31, 2010



This report is intended to provide you with important information about your drinking water and the efforts made by the WASHINGTON water system to provide safe drinking water. The source of drinking water used by WASHINGTON is Groundwater (Sankoty Aquifer).

For more information regarding this report, contact the City of Washington Water Department at 309-444-8292.

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 and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity.

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.

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.

In order to ensure that tap water is safe to drink, U.S. 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 Summary

The City of Washington (Facility Number 1790750) obtains its water from five community water supply wells. Well #6, Well #7, Well #8, Well #11, and Well #12 (Illinois EPA #55018, #55019, #55020, #01447, and #01522, respectively). If you would like to learn more, please feel welcome to attend our regularly scheduled meetings on the 1st and 3rd Monday of each month at 6:30 p.m. in the meeting room at Washington District Library. 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 309-444-8292. 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>.

To determine Washington's susceptibility to groundwater 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, ten potential sources of groundwater contamination are present that could pose a hazard to groundwater pumped by the Washington community water supply wells. These include a construction/demolition co., a grain elevator, an electrical generator/substation, a machine shop/shed, two below ground fuel storages, two vehicle sales, and two stores/sales. **Based on information obtained from Washington water supply officials, the following facilities, also indicated as potential sources in the site data table, are either located further than 1,000 feet from the wells or do not exist:** Remote Services, D&J Signs, City of Washington, Dick Gaunt Trucking Excavating, Northern Tazewell Fire Protection District, J&G Real Estate Investments, Inc., Clark Oil & Refining, Marathon Oil Co., American Allied Railway Equipment, Westside Amoco, Caterpillar Inc., Illico Independent Oil Co., Genuine Parts Co., Todds Service Center, and Illinois Department of Transportation. Also, City Hall machine shop/shed should be a public works garage.

Based upon this information, the Illinois EPA has determined that Washington Wells #6, #7, #8, #11, and #12 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 Washington'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.

Regulated Contaminants Detected in 2010

Lead and Copper

Copper MCLG	Copper Action Level (AL)	Copper 90 th Percentile	# Sites Over Copper AL	Units	Violation	Likely Source of Contamination
1.3 ppm	1.3 ppm	0.56 ppm	0	ppm	N	Corrosion of household plumbing systems; Erosion of natural deposits; leaching from wood preservatives

Definitions: The following tables contain scientific terms and measures, some of which may require explanation.
Action Level Goal (ALG): the level of a contaminant in drinking water below which there is no known or expected risk to health. ALG's allow for a margin of safety.
Action Level (AL): the concentration of a contaminant which, if exceeded, triggers treatment of other requirements which a water system must follow.
Maximum Contaminant Level (MCL): the highest level of a contaminant that is allowed in drinking water. MCL's are set as close to the MCLGs as feasible using the best available treatment technology.
Maximum Contaminant Level Goal (MCLG): The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLG's allow for a margin of safety.
ppm: milligrams per litre or parts per million – or one ounce in 7,350 gallons of water.
ppb: micrograms per litre or parts per billion – or one ounce in 7,350,000 gallons of water.
pCi/L: picoCuries per liter (measurement of radioactivity)
na: not applicable.
Avg: Regulatory compliance with some MCLs are based on running annual average of monthly samples.
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.
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.

Regulated Contaminants	Highest Level Detected	Range of Levels Detected	Unit of Measure	MCLG	MCL	Violation	Likely Source of Contaminant
Disinfectants & Disinfection By-Products							
CHLORINE	.8	0.6-1.06	ppm	mrdlg=4	mrdl=4	No	Water additive used to control microbes
HALOACETIC ACIDS (HAA5)*	3	2.7-2.7	ppb	no goal	60	No	By-product of drinking water chlorination
TRICHALOMETHANES (TThm)*	16	16-16	ppb	no goal	80	No	By-product of drinking water chlorination
*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.							
Inorganic Contaminants – Collection Date for Arsenic, Barium, Fluoride, Iron, Manganese, Sodium, & Zinc is 03/10/2009							
ARSENIC	1.98	1.98-1.98	ppb	0	10	No	Erosion of natural deposits; Runoff from orchards; Runoff from glass & electronics production wastes
BARIUM	0.248	0.248-0.248	ppm	2	2	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
FLOURIDE	0.412	0.412-0.412	ppm	4	4	No	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
NITRATE (measured as Nitrogen)	0.14	0-0.14	ppm	10	10	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
IRON	2.81	2.81-2.81	ppm	na	1	No	Erosion from naturally occurring deposits
MANAGANESE	101	101-101	ppb	150	150	No	Erosion of naturally occurring deposits
SODIUM	10600	10600-10600	ppm	na	na	No	Erosion of naturally occurring deposits; Used in water softener regeneration
Radioactive Contaminants – Collection Date 10/16/2008							
COMBINED RADIUM 226/228	2.2	1.5-2.2	pCi/L	0	5	No	Erosion of natural deposits
Synthetic Organic Contaminants Including Pesticides and Herbicides – Collection Date 6/11/2009							
Di (2-ethylhexyl) Phthalate	0.64	0.64-0.64	ppb	0	6	No	Discharge from rubber and chemical factories