Fox Lake IL0970200 Annual Drinking Water Quality Report
For the period of January 1 to December 31, 2011

This report is intended to provide you with important information about your drinking water and the efforts made by the Fox Lake water system to provide safe drinking water. The source of drinking water used by Fox Lake is ground.

For more information regarding this report, contact:
Fox Lake Sewer & Water Department
847-587-3506 or e-mail vellas@foxlake.org

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

ABOUT OUR WATER SYSTEM

In 1928 the Village of Fox Lake Public Water System was put into service. The system supplied potable water to our residents from RT.12 & Grand Ave. to Washington St. & Rollins Rd. The system also supplied potable water north up Forest Ave. to Lakeview Ave. & Howard Ave. The distribution system was comprised of a 60,000-gallon water tower floating over 10" 8"& 6" cast iron water mains. Well #1, drilled in 1928, supplied all the Village's treated water until 1941.

Well #2, put into service in 1941. Iron removal filters were required to reduce the iron concentration to an acceptable limit.

In 1976 a new 500,000-gallon water tower and new Well #3 was put into service. Well #3 along with Wells #1&2 supplied all the Village's potable water until 1988.

Well #4 drilled in 1987 was put into service in 1988. Not unlike Well #2 Iron Removal Filters were required to reduce the treated waters iron concentration to an acceptable limit.

In 1999 a 250,000-gallon water tower was constructed to replace the original 60,000-gallon tower.

In the spring of 2004 new well #5 was put into service. Well #5, not unlike Well #2 & #4, required Iron Removal Filters in order to reduce the treated water's iron concentration to an acceptable limit.

Today our Water System supplies 500,000 to 1,000,000 gallons of potable water per day for over 5,000 Village residents, and our water system now reaches as far south as Rt. 134 & Rt. 12. Wells #1,2,4&5 supply all of the Village's treated water.

Water from Well #1 is pumped and blended with filtered water from Well #2. Polyphosphates are added for corrosion control, followed by the addition of fluorine to help control tooth decay, chlorine is then added for disinfection. Water from Well #4 is pumped and filtered for iron, polyphosphates are added for corrosion control, followed by the addition of fluorine to help control tooth decay. Chlorine is then added for disinfection.

Water from Well #5 is pumped and filtered for iron, polyphosphates are added for corrosion control, followed by the addition of fluorine to help control tooth decay. Chlorine is then added for disinfection.

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 EPAs Safe Drinking Water Hotline at (800) 426-4791.

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 pickup 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.

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.

2011 Regulated Contaminants Detected

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		1.3	1.3	0.964	1	ppm	N	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems.
Lead		0	15	2.89	0	ppb	N	Corrosion of household plumbing systems; Erosion of natural deposits.

Water Quality Test Results

Maximum Contaminant Level Goal or 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 or 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 residual disinfectant level goal or 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.
Maximum residual disinfectant level or 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.
Definitions:	The following tables contain scientific terms and measures, some of which may require explanation.
ppb:	micrograms per liter 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 liter or parts per million - or one ounce in 7,350 gallons of water.

Regulated Contaminants

Disinfectants and Disinfection By-Products	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Chlorine	01/01/2011	0.4	0.28 - 0.5	MRDLG = 4	MRDL = 4	ppm	N	Water additive used to control microbes.
Haloacetic Acids (HAA5)*	07/06/2010	4.8	4.8 - 4.8	No goal for the total	60	ppb	N	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								
Total Trihalomethanes (TThm)*	07/06/2010	28	28 - 28	No goal for the total	80	ppb	N	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	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Barium	10/27/2009	0.12	0.12 - 0.12	2	2	ppm	N	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Fluoride	10/27/2009	0.61	0.61 - 0.61	4	4.0	ppm	N	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.
Iron	01/20/2010	0.62	0.62 - 0.62		1.0	ppm	N	This contaminant is not currently regulated by the USEPA. However, the state regulates. Erosion of natural deposits.
Manganese	10/27/2009	85	85 - 85	150	150	ppb	N	This contaminant is not currently regulated by the USEPA. However, the state regulates. Erosion of natural deposits.
Nitrate [measured as Nitrogen]		1	0 - 0.72	10	10	ppm	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
Selenium	10/27/2009	2	2 - 2	50	50	ppb	N	Discharge from petroleum and metal refineries; Erosion of natural deposits; Discharge from mines.

Sodium	10/27/2009	35	35 - 35			ppm	N	Erosion from naturally occuring deposits: Used in water softener regeneration.
Zinc	10/27/2009	0.026	0.026 - 0.026	5	5	ppm	N	This contaminant is not currently regulated by the USEPA. However, the state regulates. Naturally occurring; discharge from metal
Radioactive Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Uranium	10/23/2006	0.298	0.298 - 0.298	0	30	ug/l	N	Erosion of natural deposits.
Volatile Organic Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
cis-1,2-Dichloroethylene		1	0 - 1	70	70	ppb	N	Discharge from industrial chemical factories.

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

2011 Violation Summary Table

Violation summary

No drinking water quality violations were recorded for 2011

Source Water Assessment Summary

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 847-587-3506. 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.

Based on information obtained in a Well Site Survey published in 1992 by the Illinois EPA, twenty-six potential sources or possible problem sites were identified within the survey area of Fox Lake's wells. Furthermore, information provided by the Leaking Underground Storage Tank and Remedial Project Management Sections of the Illinois EPA indicated several additional sites with ongoing remediations which may be of concern. The Illinois EPA has determined that the Fox Lake's wells #1 and #2 source water is not susceptible to contamination. However, the source water obtained from Well #4 is susceptible to 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 on the wells.

Village Board Meetings

The Village Board meets on the second and fourth Tuesdays of each month at 6:30pm at the Village Hall located at 66 Thillen Drive.

System Flushing Twice Per Year.

The Sewer & Water Department flush the water system and fire hydrants twice a year, once in the spring and again in the fall. This flushing is required to insure our fire hydrants are working properly and to clean the water mains of sediments that cause red water and odor problems. Your Patients is greatly appreciated during this procedure.

If you have a question about your Sewer & Water Bill please call our office at 847-587-3942 or E-mail schuerrn@foxlake.org

All calls other than Billing are accepted at 847-587-3506 or E-mail vellas@foxlake.org

For Sewer & Water Locations Before You Dig. Please Call J.U.L.I.E. at 1-800-892-0123