Fox Lake IL0970200 Annual Drinking Water Quality Report
For the period of January 1 to December 31, 2008

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 petersok@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 contaminates and potential health effects can be obtained by calling the EPA's **Safe Drinking Water Hotline (800-426-4791).**

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 though 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 contaminates, such as viruses and bacteria, which may come from sewage 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.

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

Organic chemical contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can come from gas stations, urban storm water runoff, and septic systems.

In order to ensure that your water is safe to drink, the I.E.P.A. prescribes regulations limiting the amount of certain contaminates in water provided by Public Water Systems. FDA regulations establish limits for contaminates 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 at risk from infections. These people should seek advice about drinking water with 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**

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2008 Regulated Contaminants Detected

Lead and Copper

Date Sampled: 12/31/2005

Lead MCLG	Lead Action Level (AL)	Lead 90th Percentile	# Sites Over Lead AL	Copper MCLG	Copper Action Level (AL)	Copper 90th Percentile	# Sites Over Copper AL	Likely Source of Contamination
0	15 ppb	2.0 ppb	0	1.3 ppm	1.3 ppm	0.54 ppm	0	Corrosion of household plumbing systems; Erosion of natural deposits

Action Level: The concentration of a contaminant, which, if exceeded, triggers treatment or other requirements, which a water system must follow.
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 are responsible for providing high quality drinking water, but 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.

Water Quality Test Results

Definitions: The following tables contain scientific terms and measures, some of which may require explanation.Maximum Contaminant Level (MCL): The highest level of a contaminant that is allowed in drinking water. MCL's are set as close to the Maxium Contaminant Level Goal 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.mg/l: milligrams per litre or parts per million - or one ounce in 7,350 gallons of water.ug/l: 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.Maximum Residual Disinfectant Level (MRDL): The highest level of disinfectant allowed in drinking water.Maximum Residual Disinfectant Level Goal (MRDLG): The level of disinfectant in drinking water below which there is no known or expected risk to health. MRDLG's allow for a margin of safety.

Regulated Contaminants

Disinfectants & Disinfection By-Products	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source Of Contaminant
Chlorine		0.7	0.2 - 0.7	MRDLG=4	MRDL=4	ppm	No	Water additive used to control microbes
Total Haloacetic Acids (HAA5)	7/5/2007	1.9	1.9 - 1.9	No goal for total	60	ppb	No	By-product of drinking water chlorination
TTHMs [Total Trihalomethanes]	7/5/2007	15.9	15.9 – 15.9	No goal for total	80	ppb	No	By-product of drinking water chlorination

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Inorganic Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source Of Contaminant
Barium	10/23/2006	0.1	0.1 - 0.1	2	2	ppm	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Fluoride	10/23/2006	2.2	0.94 - 2.2	4	4	ppm	No	Erosion of natural deposits; Water additive which promotes strong teeth; Fertilizer discharge
Nickel	10/23/2006	9	0 - 9	N/A	N/A	ppb	No	Erosion of natural deposits; Leaching
Nitrate (As N)		0.082	0 - .082	10	10	ppm	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Selenium	10/23/2006	2	2 - 2	50	50	ppb	No	Discharge from petroleum and metal refineries; Erosion of natural deposits

Radioactive Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source Of Contaminant
Uranium	10/23/2006	0.298	.298 - .298	0	30	ug/L	No	Erosion of natural deposits
Combined Radium		3.4	1.5 – 3.4	0	5	pCi/L	No	Erosion of natural deposits
Gross alpha excluding radon and uranium		1.5	1.5 - 1.5	0	5	pCi/L	No	Erosion of natural deposits

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State Regulated Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source Of Contaminant
Iron This contaminant is not currently regulated by USEPA. However, the state has set an MCL for this contaminant for supplies serving a population of 1000 or more.	10/23/2006	.06	.06 - .06	N/A	1.0	ppm	No	Erosion from naturally occurring deposits
Manganese This contaminant is not currently regulated by USEPA. However, the state has set an MCL for this contaminant for supplies serving a population of 1000 or more.	10/23/2006	13	13 - 13	150	150	ppb	No	Erosion of naturally occurring deposits
Sodium There is not a 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. If you are on a sodium-restricted diet, you should consult a physician about this level of sodium in the water.	10/23/2006	36	36 - 36	N/A	N/A	ppm	No	Erosion of naturally occuring deposits; used in water softener regeneratio n
Zinc	10/23/2006	.01	.01 - .01	5	5	ppm	No	Naturally occuring; discharge from metal factories

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.

2008 Violation Summary Table

Violation summary

No drinking water quality violations were recorded for 2008

Source Water Assessment Summary

The Village of Fox Lake (Facility Number 0970200) utilizes three active public water supply wells. Well #1 (Illinois EPA #20005), well #2 (Illinois EPA #20006), and well #4 (Illinois EPA #00220) distribute 599,000 gallons per day on average to an estimated population of 3,789 at 1,375 service connections. 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 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. The Illinois Environmental Protection Act provides minimum protection zone of 400 feet for Fox Lake well #4 and 200 feet for well #1 and #2. These minimum protection zones are regulated by the Illinois EPA.

To further minimize the risk to the groundwater supply, the Illinois EPA recommends that six additional activities be assessed.

First, the village should obtain aquifer property data and groundwater flow direction information so the recharge area for the village's Well #4 can be mapped. This information can be obtained by completing pump tests on the CWS well and completing mass water level measurements on wells finished in the aquifer utilized by Well #4.

Upon completing this effort, the village may wish to enact a "maximum setback zone" ordinance(s) to further protect their water supply. These ordinances are authorized by the Illinois Environmental Protection Act and allow county and municipal officials the opportunity to provide additional protection up to a fixed distance, normally 1,000 feet, from their well.

Third, the village should explore the options of either properly abandoning inactive Well #3 or retrofitting it for use as a source of water supply. Inactive wells that are not properly abandoned can act as direct conduits for surficial contaminants into the aquifer and are considered "potential routes of groundwater contamination" under the Environmental Protection Act.

Fourth, the water supply staff may wish to revisit their contingency planning documents. Contingency planning documents are a primary means to ensure that, through emergency preparedness, a village will minimize their risk of being without safe and adequate water.

Fifth, the water supply staff is encouraged to review their cross connection control program to ensure that it remains current and viable. Cross connections to either the water treatment plant (for example, at bulk water loading stations) or in the distribution system may negate all source water protection initiatives provided by the village.

Finally, the Illinois EPA recommends that the village investigate additional source water protection management options to address land use activities within the recharge area of Well #4. Specifically, these management options must include potential impacts from point and nonpoint sources of groundwater contamination.

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Village Board Meetings

The Village Board meets on the second and fourth Tuesdays of each month at 7:00 pm at the Village Hall located at 66 Thillen Drive.

The Sewer & Water Committee meet on the forth Tuesday of each month at the Village Hall. Please feel free to attend these meetings.

A Few Words From The Sewer & Water Dept.

The Sewer & Water Dept. flush the 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 847-587-3945 or E-mail wardc@foxlake.org

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

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