

# Annual Drinking Water Quality Report for Calendar Year 2012

## Fox Lake Plant #2 IL0975780

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. This report includes drinking water facts, information on violations (if applicable), and contaminants detected in your drinking water supply during calendar year 2012. Each year, we will provide you a new report. If you need help understanding this report or have general questions, please contact the person listed below.

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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 1972 Leisure Technologies completed construction on the Tall Oaks Public Water Supply, now known as the Fox Lake Water System #2. This new water system supplied potable water to the Leisure Village and Vacation Village Home Owners Associations. The system now supplies potable water to not only Leisure Village and Vacation Village, but also to Hickory Cove, East and West Dunn's Lake Subdivisions, Woodland Green, Reva Bay, and Brightwater Subdivisions. Fox Lake Plant #2 is now treating 100,000-400,000 gallons of water per day depending on the time of year.

Before we begin listing our unique water quality characteristics, here are some important facts you should know to help have a basic understanding of drinking water in general.

#### **Sources 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.

Our source of water comes from groundwater which is drawn primarily from shallow sand and gravel aquifers. Wells #1, 2 supplies the systems treated water. Well #2 operates through an iron removal system. We add 2 chemicals to our treated water. We add chlorine for disinfection and fluoride to prevent tooth decay.

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.

### **Other Facts about Drinking Water**

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).

#### **Source Water Assessments**

Source water protection (SWP) is a proactive approach to protecting our critical sources of public water supply and assuring that the best source of water is being utilized to serve the public. It involves implementation of pollution prevention practices to protect the water quality in a watershed or wellhead protection area serving a public water supply. Along with treatment, it establishes a multi-barrier approach to assuring clean and safe drinking water to the citizens of Illinois. The Illinois EPA has implemented a source water assessment program (SWAP) to assist with wellhead and watershed protection of public drinking water supplies.

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 Village Board meets on the second and fourth Tuesdays of each month at 6:30pm at the Village Hall located at 66 Thillen Drive. 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 staff 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://dataservices.epa.illinois.gov/swap/factsheet.aspx

To determine Fox Lake Plant 2's susceptibility to groundwater contamination, the following document was reviewed: a Well Site Survey, published in 1992 by the Illinois EPA. Based on the information obtained in this document, there are no potential sources of groundwater contamination that could pose a hazard to groundwater utilized by Fox Lake Plant 2's Community Water Supply. However, information provided by the Leaking Underground Storage Tank and Remedial Project Management Sections of the Illinois EPA indicated sites with on-going remediation that might be of concern. Based upon this information, monitoring conducted at the wells, and available hydro geologic data on the wells, the Illinois EPA has determined that the Fox Lake Plant 2 Community Water Supply's source water is susceptible to contamination. The land use within close proximity of the wells was analyzed as part of this susceptibility determination. This land use primarily includes residential properties.

#### 2012 Regulated Contaminants Detected

The next several tables summarize contaminants detected in your drinking water supply.

Here are a few definitions and scientific terms which will help you understand the information in the contaminant detection tables.

AL	Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
Avg	Regulatory compliance with some MCLs is based on running annual average of monthly samples.
MCL	Maximum Contaminant Level: 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.
MCLG	Maximum Contaminant Level Goal: 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.
MRDL	Maximum Residual Disinfectant Level: The highest level of disinfectant allowed in drinking water.
MRDLG	Maximum Residual Disinfectant Level Goal: The level of disinfectant in drinking water below which there is no known or expected risk to health. MRDLGs allow for a margin of safety.
N/A	Not Applicable
NTU	Nephelometric Turbidity Units
pCi/L	picocuries per liter ( a measure of radioactivity)
ppb	parts per billion or micrograms per liter (ug/L) - or one ounce in 7,350,000 gallons of water.
ppm	parts per million or milligrams per liter (mg/L) - or one ounce in 7,350 gallons of water.
TT	Treatment Technique: A required process intended to reduce the level of a contaminant in drinking water.

Coliform Bacteria	MCLG	Total Coliform MCL	Highest Number of Positive Samples	Fecal Coliform or <i>E. coli</i> MCL	Total No. of Positive E. coli or Fecal Coliform Samples	Violation	Likely Source of Contamination
	0	MCL: presence of coliform bacteria in > 5% of monthly samples (for systems that collect 40 or more samples/month).  > 1 positive monthly sample (for systems that collect < 40 samples/month)	1	Fecal Coliform or E. Coli MCL: A routine sample and a repeat sample are total coliform positive, and one is also fecal coliform or E. coli positive	0	No	Naturally present in the environment

Lead and C	Lead and Copper										
	Date Sampled N		Action Level	90 <sup>th</sup>	# Sites Over	Units	Violation	Likely Source of Contamination			
			(AL)	Percentile	AL						
Copper	June-July 2012	1.3	1.3	.178	0	ppm	No	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives			
Lead	June-July 2012	0	15	6.01	0	ppb	No	Corrosion of household plumbing systems; erosion of natural deposits.			

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. Fox Lake Plant #2 is responsible for providing high quality drinking water, but 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 <a href="http://www.epa.gov/safewater/lead">http://www.epa.gov/safewater/lead</a>.

Disinfectants & Disinfection	Collection	Highest Level	Range of Levels	MCLG	MCL	Units	Violation	Likely Source of Contamination
Byproducts	Date	Detected	Detected					
Chlorine	12/31/2012	1	.575-1.5	MRDLG=4	MRDL=4	ppm	No	Water Additive Used to Control Microbes
Total Trihalomethanes (TTHM)	7/23/2010	2.1	2.1-2.1	No Goal For Total	80	ppb	No	By-product of drinking water disinfection

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 Dates	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination	
Barium	1/18/12	.097	.097097	2	2	ppm	No	Discharge of drilling wastes: Discharge from metal refineries: Erosion of natural deposits	
Fluoride	1/18/12	0.98	0.98-0.98	4	4.0	ppm	No	Erosion of Natural Deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.	
Iron	1/18/12	0.038	0.038-0.038		1.0	ppm	No	This contaminant is not currently regulated by the USEPA. However the state regulates erosion of natural deposits.	
Manganese	1/18/12	30	30-30	150	150	ppb	No	This contaminant is not currently regulated by the USEPA. However the state regulates erosion of natural deposits.	
Nitrate (measured as Nitrogen)	7/2/12	0.42	0.42-0.42	10	10	ppm	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits	
Sodium	1/18/12	14	14-14			ppm	No	Erosion from naturally occurring deposits: Used in water softener regeneration.	

#### **Violation Summary Table**

We are happy to announce that <u>no</u> monitoring, reporting, treatment technique, maximum residual disinfectant level, or maximum contaminant level violations were recorded during 2012.

### **System Flushing**

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.

# FOR SEWER and WATER Emergencies please call (847)587-3100

If you have a question about your Sewer & Water Bill please call our office at 847-587-3945 or E-mail <a href="mailto:martinezl@foxlake.org">martinezl@foxlake.org</a>
For general information or requests for <a href="mailto:mon-emergency service">mon-emergency service</a> please call: 847-587-3506 or E-mail <a href="mailto:mortante@foxlake.org">horvathr@foxlake.org</a>
For Sewer & Water Locations Before You Dig. Please Call J.U.L.I.E. at 1-800-892-0123