

## ONGOING MAINTENANCE & IMPROVEMENT PROGRAMS

Residents in our District may observe several ongoing projects which are part of LFPWD's scheduled activities to ensure a reliable supply of quality water now and in the future:

- ◆ Each month samples are collected from seven sample stations throughout the District. These samples are tested by Edge Analytical, an independent laboratory, for any bacterial contaminants.



- ◆ Annual flushing of water mains ensures that mineral sediments like iron and manganese oxides do not accumulate in the pipes. On occasion customers may notice sediments in the tap while flushing is underway. These are not hazardous to your health.

- ◆ Water meters require periodic replacement to ensure accurate operation. We replace a percentage of all meters each year. If your meter is scheduled for replacement we will attempt to contact you before any service interruption.



- ◆ Reservoirs are cleaned, disinfected and maintained

on a periodic basis. The District's 200,000-gallon "High Zone" standpipe retrofit project began in 2009. The reservoir project calls for mixing baffles to promote circulation for better water quality as well as other improvements.

- ◆ The District is implementing a long-term plan to replace old steel pipes with ductile iron pipe, which is more resistant to rust and leaks. In 2009 about 650 feet of watermain, valves and fire hydrants were upgraded.
- ◆ One of the projects completed in 2009 is the new watermain and fire hydrant on NE 187<sup>th</sup>. →



- ◆ All new water mains are disinfected, flushed and sampled before they are put into service.
- ◆ The District has added a vactor trailer to its fleet. This piece of equipment uses hydro-excavation, which reduces the risk of damaging other underground utilities and allows for smaller asphalt patches.
- ◆ Customers are encouraged to stop in and review the District's Comprehensive System Plan which outlines all planned improvements.

### CONTACT INFORMATION

**LAKE FOREST PARK WATER DISTRICT**  
**F. Alan Kerley, District Water Manager**  
**4029 N.E. 178<sup>th</sup> St. Lake Forest Park, WA 98155**

**Phone: (206)-365-3211**  
**FAX: (206)-365-3357**  
**e-mail: [office@lfpwd.org](mailto:office@lfpwd.org)**

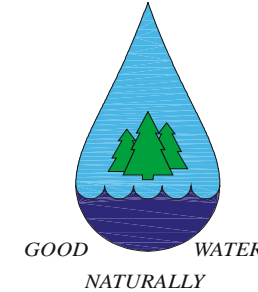
**District web address has ongoing information and news: <http://www.lfpwd.org>**

Washington State Department of Health  
 Environmental Protection Agency  
 Safe Drinking Water Hotline

Website: [www.doh.wa.gov/gov/ehp/dw](http://www.doh.wa.gov/gov/ehp/dw)  
 Website: [www.epa.gov/safewater](http://www.epa.gov/safewater)  
 Phone: 1-800-426-4791  
 e-mail: [hotline-sdwa@epamail.epa.gov](mailto:hotline-sdwa@epamail.epa.gov)

*Participate in District Board Meetings! The District's Board of Commissioners has regular meetings on the third Monday of each month at 9:00 AM in the District office on 178<sup>th</sup> Street. We invite any interested resident to participate*

## LAKE FOREST PARK WATER DISTRICT



# ANNUAL WATER QUALITY REPORT

## JUNE 2010

### KEEPING YOU INFORMED!

#### WHAT'S IN THIS REPORT?

This report contains information on the quality of your drinking water for the calendar year **2009**. Your water meets all safety requirements. If you have any questions or comments please call Lake Forest Park Water District at (206) 365-3211.

#### WHERE DOES YOUR WATER COME FROM?

Lake Forest Park Water District (LFPWD) water comes from two well fields, located on District-owned acreage in the northern end of the community. There are eight artesian aquifer wells less than 30 feet deep that produce a combined flow of around 100 gallons per minute (gpm) and three drilled wells that are over 200 feet deep and pump up to 800 gallons a minute. LFPWD pumps water from the wells to two steel reservoirs with a combined capacity of 440,000 gallons. The system uses an average of 277,000 gallons per day and during hot summer days that figure can rise to 775,000 gallons per day. Through conservation and leak repairs our usage has been reduced substantially in recent years. Interested customers are welcome to receive a full field tour of our production facilities. Just call the District office to arrange your visit.

#### PROTECTING OUR WATER SOURCES

Our District is very protective of its water sources and our first defense is the careful attention of our customers and neighbors to activities near our wellhead protection area. We encourage residents that are in the groundwater recharge zone to avoid commercial fertilizers and all synthetic pesticides and herbicides as these have the potential to enter our aquifer.

We also have a Wellhead Protection Program and are covered by the Ground Water Contamination Susceptibility Assessment Survey. Our artesian wellfield is classified as "highly susceptible" while the deep well field is rated as moderately susceptible, based on the depth of the wells. From a groundwater protection standpoint, the wellhead area is considered relatively safe from contamination because there are limited potential sources of contamination in the watershed. The District owns and controls around 12 acres of land immediately surrounding the wells. Access is limited via a locked gate.

We appreciate the careful attention of residents in our ground water recharge area who are voluntarily avoiding the use of commercial fertilizers and chemicals to protect our water source.

## WATER QUALITY TESTING

The State Department of Health and the EPA require water purveyors to sample their water on a regular basis to ensure its safety. The Department of Health (DOH) establishes specific testing requirements for each water purveyor, based on their risk assessment for each contaminant. Because of this, many tests are infrequent for reason of economy. Our District is required to test for bacterial contamination three times per month. To insure high quality water the District actually averages 15 bacterial tests per month.

Violation Y/N	Last Sample In Period	Average Value	Maximum Value	Unit of Measurement	MCLG	MCL	Likely Source of Contamination
<b>Microbiological/Physical Contaminants</b>							
Coliform Bact	Y*	10/7/2009	0.0	0.0	per 100/ml	0	+/- May indicate exposure to pathogens
Fecal coliform and E.coli	N		0.0	0.0		0	Human and animal fecal waste
Turbidity	N	4/18/2007	1.6	1.6	NTU	n/a	5 Suspended Mineral deposits
<b>Radioactive Contaminants</b>							
Beta/photon emitters		6/9/2009	1.9	4.4	pCi/L	0	50 Decay of natural and man-made deposits
<b>Inorganic Contaminants</b>							
Arsenic	N	4/18/2007	5	5	ppb	n/a	50 Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes
Fluoride	N	4/18/2007	0	0	ppm	4	4 Erosion of natural deposits, water additive, discharge from fertilizer and aluminum factories
Lead	N	4/18/2007	2.58	6.00	ppb	0	15 Corrosion of household plumbing systems
Copper	N	12/11/2002	0.00	0.00	ppm	0	1.3 Corrosion of household plumbing systems
Nitrate	N	6/9/2009	1.08	2.52	ppm	10	10 Runoff from fertilizer use, leaching from septic tanks, sewage; erosion

Source: raid-2:Water Quality/CCR/CCR2008.XLS  
\* Sample Exceeded MCL in tests on: 7/9/09 and 10/7/09

During 2009 the District had two violations (July, October) for exceeding coliform maximum contaminant level (MCL). District staff immediately investigated and found no definitive cause for the positive sample but we accelerated a scheduled upgrade to one of the District's reservoirs to improve reservoir circulation and hatch seals. Routine sampling was resumed and the District had no further positive bacterial test results. We are committed to meeting the most stringent and most recent regulatory standards. At the same time we recognize our customers long-standing appreciation and general desire for naturally pure, chemical-free water. We will do our best to continue to meet this expectation.

## RESULTS OF LEAD AND COPPER SAMPLING AT RESIDENTIAL WATER TAPS

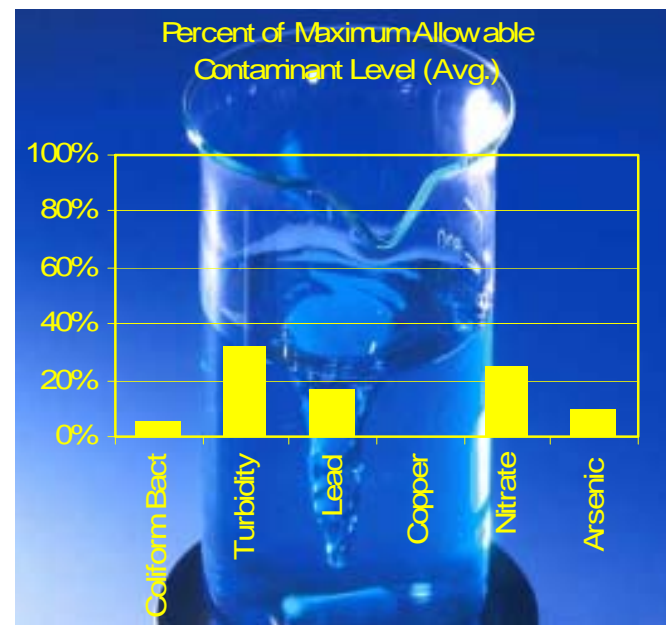
Lead and copper monitoring is conducted as directed by the State in ten homes categorized as high risk. The District tests these homes under worst-case conditions. 2008 test results did not exceeded the 90<sup>th</sup> percentile allowable level for lead or copper.

Variable	90th Percentile Values	No. of Sites Exceeding Action Levels*	Maximum Contaminant Level (MCL)	Maximum Contaminant Level Goal (MCLG)	Source of Contaminant
Copper	0.431	All sample results were below the Action Level	Exceeds Action Level if more than 10% of the homes tested have copper levels greater than 1.3 parts per million	1.3 parts per million Treatment technique required	Corrosion of plumbing systems
Lead	5 parts per billion	None of the 10 site samples taken in 2008 exceeded the Action Level	Exceeds Action Level if more than 10% of the homes tested have lead levels greater than 15 parts per billion	Zero parts per billion	Corrosion of plumbing systems

## WATER CONTENT AND TREATMENT

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The laboratory detection of these substances does not necessarily indicate that water poses a health risk. For this reason, State and Federal guidelines have suggested a Maximum Contaminant Level (MCL) for most substances found in water. The tables shown below compare the detected values with MCL for current test results.

The Total Coliform Rule requires water systems to meet a strict limit for coliform bacteria all the way to the customer connection. Coliform bacteria are usually harmless, but their presence in water can be an indication of disease-causing bacteria. If coliform bacteria are found, special follow-up tests are done to determine if harmful bacteria are present in the water supply. If this happens, we will notify the public by written notice, newspaper, television or radio. To comply with the stricter regulation while still maintaining chlorine free water, we have installed automated standby chlorination equipment which can be used immediately in the event of contamination with harmful bacteria.



## CONSERVATION TIPS

Lake Forest Park Water District has an excellent supply of pure well water. Nevertheless, water conservation helps to stretch our existing supplies and saves you money. Most homes can conserve water without any significant change in life-style. Here are some tips that will help you make a difference:

- ◆ Take shorter showers and avoid running the water while you brush your teeth.
- ◆ Replace water-using appliances with newer water-saving models.
- ◆ Repair all plumbing leaks promptly. This is especially important in older homes.
- ◆ Water your lawn early in the morning or consider letting your lawn go dormant in the summer.
- ◆ Repair any leaking pipes or malfunctioning sprinkler heads on your irrigation system.



## WATER USE EFFICIENCY RULE

Lake Forest Park Water District is subject to the new Municipal Water Law that is regulated by Washington State Department of Health (DOH). DOH has implemented regulations (Water Use Efficiency Rules) that are intended to decrease the amount of water use within a water purveyor's service area to minimize withdrawal from the environment for the sake of fish and other wildlife while also providing sufficient amounts of water for new homes and businesses.

The District has responded to these new regulations by adopting demand conservation measures that include a schedule to exchange older residential water meters that under-register usage with new water meters equipped with low-flow detection (As of April 2009, the District had 49 meters slated for replacement). Other conservation measures include monitoring residential and commercial water use for potential leaks and increasing notification of the public about water conservation and steps they can take to reduce water use.

## ADVISORIES

Our water is not chlorinated or fluoridated. Families with growing children may contact their dentist regarding the use of fluoride supplements such as toothpaste containing fluoride. The District water is tested for arsenic in accordance with federal guidelines, and levels remain within guidelines.

Some people are more vulnerable to contaminants in drinking water than the general population. Immuno-compromised people such as those undergoing chemotherapy, people 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 from their health care providers about drinking water. EPA/CDC guidelines on appropriate means to lessen the risk of infection by microbial contaminants are available from the Safe Drinking Water Hotline (1-800-426-4791).

### Table Definitions

#### 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 large 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 MCLGs as is feasible using the best available treatment technology.

#### Nephelometric Turbidity Unit – NTU

The unit of measurement for turbidity. Turbidity is caused by suspended sediments in water.

#### Parts per million - ppm or Milligrams per liter – mg/l

One part per million corresponds to one minute in two years or a single penny in \$10,000.

#### Parts per billion - ppb or Micrograms per liter -µg/l

One part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.

#### Action Level (AL)

The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.