

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:

- Use the garbage disposal sparingly. Compost vegetable food waste instead and save gallons every time.
- 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.

Contact Information

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 Lake Forest Park, WA 98155 e-mail: office@lfpwd.org

District web address has ongoing information and news: www.lfpwd.org
 Washington State Department of Health Website: www.doh.wa.gov/gov/ehp/dw
 Environmental Protection Agency Website: www.epa.gov/safewater
 Safe Drinking Water Hotline Phone: 1-800-426-4791
 e-mail: hotline-sdwa@epamail.epa.gov

Participate in District Board Meetings! The District's Board of Commissioners has regular meetings on the second Monday of each month at 8:30 AM in the District office on 178th Street. We invite any interested resident to participate.



Lake Forest Park Water District
 4029 N.E. 178th St.
 Lake Forest Park, WA 98155



Board of Commissioners
 William F. Donahue
 David A. Hammond
 Eli B. Zehner

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LAKE FOREST PARK WATER DISTRICT

2011 Annual Water Quality Report



What is in this report?

This report contains information on the quality of your drinking water for the calendar year 2011. Your water meets or exceeds all safety requirements. If you have any questions or comments please call Lake Forest Park Water District at (206) 365-3211

The Source of Your Water

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 275,000 gallons per day and during hot summer days that figure can rise to 625,000 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...



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 monitored by the Washington State Department of Health. Our shallow artesian wellfield is classified as "highly susceptible" while the deep artesian 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 manages around 12 acres of land immediately surrounding the wells.

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.

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 "The staff and I are very proud to be stewards of a water district and watershed that provides naturally pure water!"
 -Alan Kerley, General Manager

Maintenance and Improvement Program

Residents in our District may observe several ongoing projects and 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 in-house and by Edge Analytical, an independent laboratory, for bacterial contamination.
- 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 discoloring sediments in the tap while flushing is underway. This is 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.
- A new main has been installed by directional drill through the south end of the wellhead area to provide redundancy and increased fire flow capacity.



- 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 2011 about 3,950 feet of watermain was replaced along with valves fire hydrants and two new Pressure Reducing Valve Stations (of which one is shown here being lowered into the ground).
- One project completed in 2011 is installation of 1500ft of 12" pipe to increase fire flow to the Towne Centre and residences along Ballinger Way.
- Customers are encouraged to stop in and review the District's Comprehensive System Plan which outlines all planned improvements.

Water Content and Treatment

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. State and Federal guidelines have suggested a Maximum Contaminant Level (MCL) for most substances found in water. Table 1 compares the detected values with the MCL for current test results. More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline (1-800-426-4791).

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.



Table 1 - Water Quality as tested in Distribution System

	Violation Y/N	Most Recent Sample	Avg Value	Max Value	Unit	MCLG	MCL	Likely Source of Contamination
Coliform Bact	Y -7/12/2011	12/7/2011	0	0	100/ml	0	+/-	May indicate exposure to pathogens
Fecal Coliform and <i>E. coli</i>	N	12/7/2011	0	0	100/ml	0	0	Human and animal fecal waste
Turbidity	Y	6/2/2010	1.390	1.39	NTU	n/a	1	Suspended mineral deposits
Radioactive Contaminants								
Beta/photon emitters	N	6/9/2009	1.892	4.4	pCi/L	0	50	Decay of natural and man-made deposits
Inorganic Contaminants								
Arsenic	N	6/2/2010	4	4	ppb	n/a	50	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes
Fluoride	N	6/2/2010	ND	ND	ppm	4	4	Erosion of natural deposits, water additive, discharge from fertilizer and aluminum factories
Iron	N	6/2/2010	0.15	0.15	ppm	0.3	0.3	natural deposits in ground
Lead	N	6/2/2010	ND	ND	ppb	0	15	Corrosion of household plumbing systems
Copper	N	6/2/2010	ND	ND	ppm	1.3	1.3	Natural Deposits
Nitrate	N	6/3/2011	1.281	2.98	ppm	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion

Results of Lead and Copper Sampling at Residential 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. 2010 test results did not exceed the 90th percentile allowable level for lead or copper. Table 2 summarizes these results.

In Washington State, lead in drinking water comes primarily from materials and components used in household plumbing. The more time water has been sitting in pipes, the more dissolved metals, such as lead, it may contain. Elevated levels of lead can cause serious health problems, especially in pregnant women and young children.

To help reduce potential exposure to lead: for any drinking water tap that has not been used for 6 hours or more, flush water through the tap until the water is noticeably colder before using for drinking or cooking. You can use the flushed water for watering plants, washing dishes, or general cleaning. Only use water from the cold-water tap for drinking, cooking, and especially for making baby formula. Hot water is likely to contain higher levels of lead. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water is available from EPA's Safe Drinking Water Hotline at 1-800-426-4791 or online at <http://www.epa.gov/safewater/lead>.

Table 2 - Copper and Lead Levels at Residential Taps

Variable	90th %	Number of Sites Exceeding Action Level (AL)	Maximum Contaminant Level (MCL)	Contamination Source
Copper	0.606 ppm	All Sample results below AL	Exceeds if >10% of homes tested >1.3ppm	Corrosion of household plumbing systems
Lead	5 ppb	All Sample results below AL	Exceeds if >10% of homes tested > 15ppb	Corrosion of household plumbing systems

Water Use Efficiency (WUE) Report

Lake Forest Park Water District is subject to 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 create a more efficient use of the resource so that future demands are met appropriately. The process of developing WUE goals includes engaging customer and public participation.

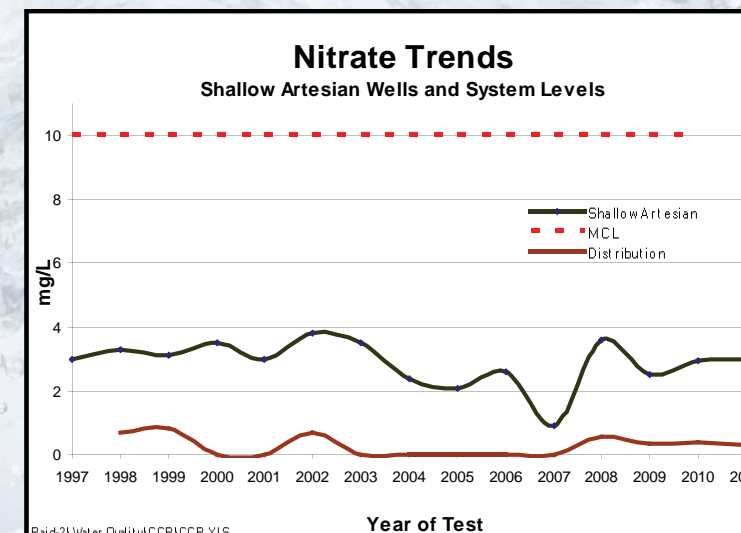


Our WUE Goal:
Reduce average customer usage by 0.33% per year over the next three years for a 1% reduction in the Equivalent Residential Unit (ERU) average consumption by 2012, which, given the historical ERU consumption of 215 gallons/day (Comprehensive System Plan 2005), will achieve a reduction of 2.15 gallons/day per ERU by 2012.

Our Progress:
The District's 2011 projection is on schedule to meet or exceed the criteria set forth in our WUE Goal by 2012.

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.



DEFINITIONS

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 large margin of safety.

MCL - Maximum Contaminant Level
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.

NTU - Nephelometric Turbidity Unit
The unit of measurement for turbidity. Turbidity is caused by suspended sediments in water.

ppm - Parts per million
or mg/l - 1 Milligram per liter (One part per million corresponds to one minute in two years or a single penny in \$10,000.)

ppb - Parts per billion
or mg/l - Micrograms per liter (One part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.)

AL - Action Level
The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow

ND - Not Detected

Distribution Leakage Summary

Total Water Produced and obtained:	104.2 Million CF
Total Water Accounted for:	89.1 Million CF
Distribution System Leakage %:	13.0%

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).