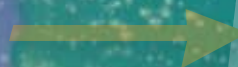




# Water Quality & Annual Business REPORT



SOURCE  
(AQUIFERS)



WELL

TREATMENT



STORAGE

DISTRIBUTION  
MAIN



STORAGE

DISTRIBUTION  
MAIN

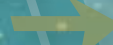
DISTRIBUTION  
MAIN



STORAGE



BOOSTER  
PUMPING STATION



## A Message From Your Board of Commissioners

### Dear Lakewood Water District Customers:

Who would've known a roller coaster would end up in Lakewood? This last year has had more ups and downs, twists and turns, and zigs and zags than the largest, longest, tallest, most sharply curved roller coaster in any theme park in the world. However, with each up, down, twist, turn, zig, and zag, your Lakewood Water District commissioners and staff have continued to do their level best to make the soundest decisions possible to take the greatest care of our District and serve you most effectively in every way we can.

Life recently "zigged" with banks no longer issuing certificates of deposit for public funds, so the District "zagged" by redirecting its reserves to a number of major, necessary projects at record-low prices. The downward economy has resulted in upward savings to the District in that the present bidding climate is bringing projects in at 25-30 percent below the engineer's estimate. In so doing, the District has been able to take this "twist" and "turn" it into an opportunity to make the best use of your dollars while also providing work for companies in our community who are hungry for work. So, at the end of the day, we are getting a number of very important projects accomplished for the continued strength and growth of our water system while contributing to the local economy and putting food on our neighbors' tables.

In this report, you will read about these projects just referenced. We are pleased to tell you all of them have either come in at significantly discounted prices or are expected to do so, except for the Sound Transit Rail Realignment Project. As most of you know, this project was mandated, unfunded, and unexpected. That means we have to do the project (no choice), we have to do it on our own dime (no help from anyone), and we had no idea it was coming (not even a clue). This project was a major contributor to the rate increase we had to introduce earlier this year. However, it is what it is, so we move forward. We will hold fast to the good...our water mains underneath the Sound Transit tracks will be very thoroughly protected.

We are very pleased to be able to bring better water pressure to the Sylvan Park area with our new 455 pressure zone and booster pump station. This new pressure zone will also help support the delivery of wholesale water to our neighbors in need. We are delighted to inform you we now have signed agreements with Spanaway Water Company and Rainier View Water Company who are contracted to buy 1 and 2 million gallons a day (mgd) of wholesale water, respectively. These contracts have already resulted in increased revenue to the District. Spanaway Water and Rainier View Water join Summit Water and Supply Company and the Town of Steilacoom as our wholesale partners, and we are



From left: John Korsmo, Bill Philip, and Larry Ghilarducci.

happy to have them on board. We are proud to be a regional provider and be in a position to use our excess water to help our neighbors in Pierce County with their future water needs. This is all a result of making a good decision a few years ago in purchasing the 6 mgd of Abitibi water rights located at the paper mill on Chambers

Creek Road in Steilacoom. We are proud to say the largest water rights acquisition in the history of our state was made by your Lakewood Water District to abundantly serve our customers, both retail and wholesale, today and well into the future.

So, can you believe we *finally* get to build our wholesale transmission main? We can't likely deliver water to our new wholesale customers without a means to get it there, so with agreements in place, a competitive bidding climate, and funds available, we will begin construction this summer.

Although we most prefer identifying with the color blue to represent our good, clear, clean water, we have added a little "green" to our repertoire. We have become faithful recyclers and have also purchased a hybrid car to not only make better use of our energy sources but to save more District dollars in the process. We continue to examine our practices and operations, looking for ways and places we can reduce our carbon footprint.

We thank you for being our valued customers, and we are honored to continue to serve you with all means available to us. We look forward to the year ahead and anticipate many good things as we continue to do our best to go from strength to strength. May the only roller coaster in your future be a fun one in the amusement park of your choice! Hands up! Enjoy your summer and our good water. ■



The staff of your Lakewood Water District, ready to serve you.

## The Source of Your Water

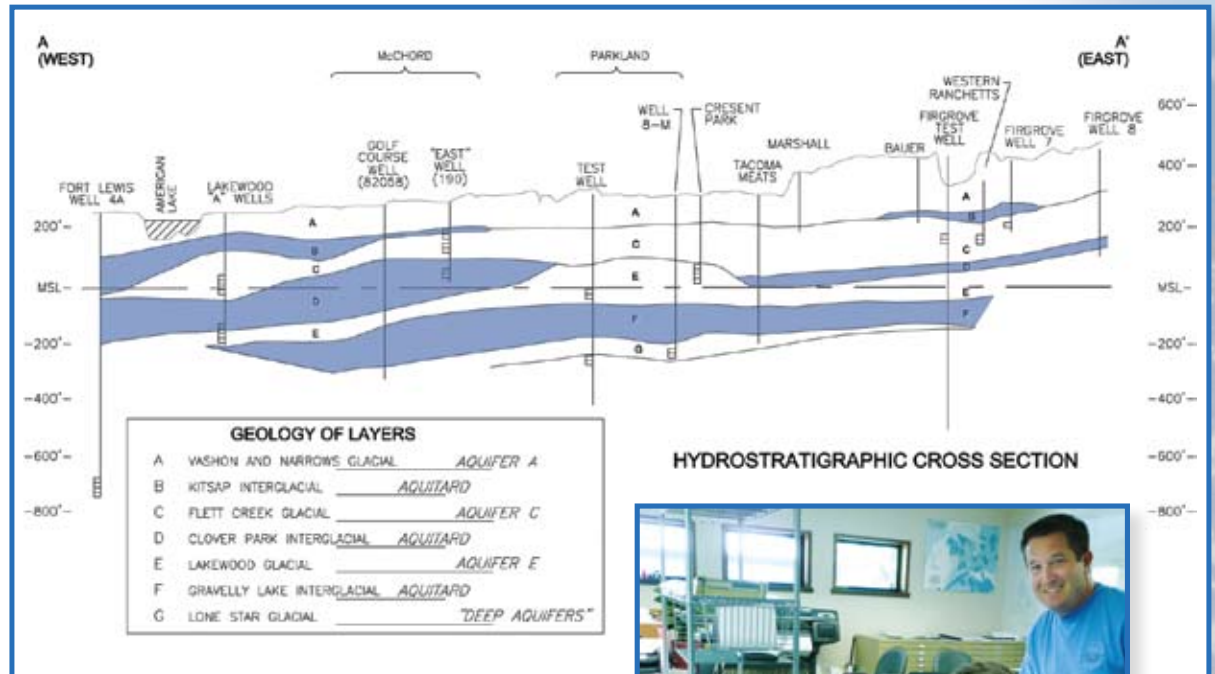
Your water, provided by Lakewood Water District, comes from underground aquifers. Wells are drilled into the aquifers, and the water is pumped out of the aquifers into the District's distribution system. This means the water from your taps is pumped from a series of 29 active wells to your home or business through over 250 miles of water main pipes. A hydrostratigraphic analysis (right) shows the location and depth of the aquifers from which we draw water to serve our customers.

Aquifers are essentially underground rivers, allowing water from glaciers, snow, and rain from Mt. Rainier and the foothills of the Cascade Mountains to flow to the Puget Sound, refreshing our water supply on a continual basis.

Because our water comes from underground aquifers, protection of our "wellheads" is very important. We work hard to secure the integrity of our wells, including keeping them clean and in excellent condition and not allowing discharge or placement of unhealthy materials into the ground.

We also ask our customers to be careful to properly dispose of hazardous wastes so they do not seep into the groundwater.

We work closely with the city, county, Department of Ecology, and Department of Transportation to ensure we have emergency response and mitigation

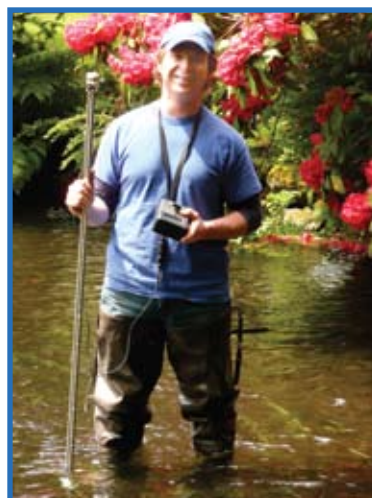


Lakewood Water District staff carefully monitor the operation of our system.

## Monitoring Our Lakes and Streams

Lakewood Water District continually monitors the levels of the lakes and streams in our service area, as many of our lakes have been identified as surface expressions of the area's groundwater aquifers. To better understand lake response to regional precipitation and interpret shallow aquifer response to lake water level changes, we use a series of gauges installed on five local lakes and two streams.

Lakewood Water District staff members collect monthly water level measurements in cooperation with the Pierce County Stream Team. In addition, the District works in cooperation with the Tacoma-Pierce County Health Department's long-term groundwater monitoring program. The District uses the generated data as part of our aquifer management program and as a regional data source for short- and long-term watershed planning. ■



Monitoring Ponce de Leon Creek.



Beautiful American Lake, one of the lakes we monitor.

## Water Main Projects Completed

**Pacific Highway Main Upgrade** from 10-inch to 12-inch water main; 1588 feet of 12-inch main, 4 fire hydrants, and 12 isolation valves installed.

*Location—108th Street SW to 10314 Pacific Highway.*

**74th Street West 8-inch Loop System;** 523 feet of 8-inch main, 1 fire hydrant, and 6 isolation valves installed.

*Location—between 74th Street West and 75th Street West.*

**Lake Louise Willows 8-inch Loop System;** 663 feet of 8-inch main, 1 fire hydrant, and 3 isolation valves installed.

*Location—Lake Louise Drive SW and Holden Road SW.*

**Clover Park School District Auxiliary Service Center 8-inch Loop System;** 1048 feet of 8-inch main, 3 fire hydrants, and 10 isolation valves installed.

*Location—9219 Lakewood Drive SW.*

**Solberg Place 8-inch Loop System;** 1084 feet of 8-inch main and 3 isolation valves installed.

*Location—Solberg Drive SW and San Francisco Avenue SW.*

**Clover Park School District Lakes High School Phase I;** 1310 feet of 8-inch main, 3 fire hydrants, and 11 isolation valves installed.

*Location—10320 Farwest Drive SW.*

**Sound Transit Water Line Extension;** 791 feet of 16-inch water main and 1 isolation valve installed.

*Location—111th Street SW and Pacific Highway.*

**Motor Avenue SW/Whitman Avenue SW 8-inch Main Upgrade;** 230 feet of 8-inch main installed.

*Location—Motor Avenue SW and Whitman Avenue SW.*



Above: Staff work hard to maintain all meter boxes.



Left: Meter reading is efficient with electronic readers.

## Keeping Your Water Clean and Safe

Lakewood Water District works hard every day to provide you with the highest quality of water. We want you to have the safest, cleanest, best-tasting water possible. We follow all regulations of the Washington State Department of Health under the Safe Drinking Water Act.

Every week, we test the water at its source and during the treatment and distribution processes.

Your water meets or exceeds all standards for safety. The chart across the page in this report shows the few compounds detected in the water, along with their detection levels and typical sources of those elements. Samples are taken on a regular basis and tested both



Careful testing ensures clean, safe water.

at our own facilities and at independent, state-certified testing laboratories.

Because our water source is underground aquifers, and therefore considered at a low risk for possible contaminants, some testing parameters are required less frequently. The chart includes how many samples are taken per year, the last year

samples were taken, the results of those samples, and the next sample year.

Lakewood Water District tests for many possible contaminants not listed in our regular water quality testing program. Most of the tests show no detectable levels. A complete list of those items for which we test, but which are undetected, is available at the District office. ■

## We Meet or Beat EPA Standards

### Lead and Copper Levels

Lakewood Water District meets or exceeds all governmental standards regarding lead and copper in your drinking water.

The government requires that we test for these elements, because significant levels can pose health risks. Infants and children who drink water that contains lead in excess of the action level could experience delays in their physical or mental development. Children could show slight deficits in attention span and learning abilities. Adults who drink this water over many years could develop kidney problems, high blood pressure, or may be at risk of getting cancer.

The primary sources for potential lead and copper in drinking water are homes built or re-plumbed with copper pipes prior to 1985 when lead-based solder was banned. If your home or building is “high risk,” you may want to flush water that has been standing for six hours or longer prior to using it for cooking or drinking.

Many people run their faucet until they notice the temperature change – usually less than 30 seconds. Use water-wise practices, though, and use

that flushed water for watering plants or washing dishes. You should never use HOT water for cooking, drinking, or making baby formula, because hot water can dissolve metals faster.

If your home does not meet the Environmental Protection Agency’s “high risk” criteria, you may still be at some risk from lead leaching from brass faucets. You only need to run 6-8 ounces of water to flush what is inside the faucet.

### Low, Natural Levels of Arsenic

Your drinking water meets the EPA’s drinking water standard for arsenic. It does contain very low levels of arsenic, but this naturally occurs as a result of runoff from natural deposits. There is a small chance that some people who drink water containing low levels of arsenic for many years could develop circulatory disease, cancer, or other health problems.

Most types of cancer and circulatory disease are due to factors other than exposure to arsenic. The EPA’s standard balances the current understanding of arsenic’s health effect against the costs of removing arsenic from drinking water. ■

## Water Quality Monitoring Results

The table below reflects the maximum allowed levels of certain contaminants and the levels experienced in Lakewood Water District. Not listed are 63 volatile organic chemicals for which we tested, all resulting in either Not Detected (ND) or well below the MCL. Your water meets or exceeds all federal, state, and local quality standards, ensuring that you enjoy safe, clean water.

Sample Type	Samples Taken per Year	Last Sample Year	Next Sample Year	MCL (maximum level allowed)	Highest Level Detected	Detected Range	Number of Samples MCL	MCLG	Typical Sources
<b>Arsenic</b>	22 every 3 yrs	2007	2010	10 ppb	<6 ppb	<2ppb - <6ppb	0		Erosion of natural deposits
<b>Asbestos</b>	3 every 3 yrs	2007	2010			No structures detected	0	0	Friable fibers
<b>Copper</b>	30 every 3 yrs	2008	2011	1.3 ppm AL	.54 AL	.02 - .54 AL	0	1.3 ppm AL	Household plumbing
<b>Fecal Coliform</b>	840 per yr	2008	2009	0	ND	ND		0	Human and animal fecal waste
<b>Total Coliform</b>	840 per yr	2008	2009	<5% positive	ND	ND	0	0	Found throughout the environment
<b>Haloacetic Acids</b>	4 per yr	2008	2009	60 ppm	1.7 ppb	ND - 1.7 ppb	0	0	Byproduct of drinking water disinfection
<b>Lead</b>	30 every 3 yrs	2008	2011	15 ppb AL	.004 AL	<.002 - .004 AL	0	0	Household plumbing
<b>Nitrates</b>	22 per yr	2008	2009	10 ppm	2.1	<0.2 - 2.1	0	0	Erosion of natural deposits
<b>Total Trihalomethanes</b>	4 per yr	2008	2009	80 ppm	6.5 ppb	0.0 - 6.5 ppb	0	0	Byproduct of drinking water disinfection

### Our testing resulted in no violations.

Due to the consistently high quality of water in the District, the Washington State Department of Health awarded testing waivers for Synthetic Organic Chemicals for 2008. All of the elements for which we tested in 2008 either met or exceeded federal and state standards. Complete Source Water Assessment information is available at the District office.

### 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 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 feasible using the best available treatment technology.

**Treatment Technique:** A required process intended to reduce the level of a contaminant in drinking water.

**AL:** (Action Level) The concentration of a contaminant which triggers treatment or other requirement which a water system must follow.

**ND:** Not Detected

**NA:** Not Applicable

**pCi/L:** Pico Curie per Liter

**ppm:** parts per million, or milligrams per liter (mg/L)

**ppb:** parts per billion, or micrograms per liter (ug/L0)

**1 mg/L = 1000 ug/L**

*For aqueous (water) samples:*

**1 mg/L = 1 part per million (ppm)**

**1 ug/L = 1 part per billion (ppb)**

**ug = micrograms**

## Important Information from the Environmental Protection Agency

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 Environmental Protection Agency's Safe Drinking Water Hotline at (800) 426-4791.

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 healthcare providers.

EPA/CDC guidelines on appropriate means to lessen the risk of infections by cryptosporidium and microbial contaminants are available from the Safe Drinking Water Hotline at (800) 426-4791. ■



Lakewood staff carefully maintain water quality.

## District Projects 2008 – 2009

In a time of economic challenge and banks temporarily not issuing public fund certificates of deposit, the District has taken advantage of a very competitive bidding climate in 2009 to best utilize District funds to get a number of major projects contracted at prices far below the engineers' estimates. The exception to this rule is the Sound Transit Project.

### Wholesale Transmission Main

The District is finally able to proceed with the construction of the new wholesale water transmission main to supply needed water to other purveyors in Pierce County. We have been serving water to Summit Water & Supply Co. and the Town of Steilacoom for a number of years, and now, after many months of preparation and negotiations with potential wholesale customers, the District has signed contracts with Spanaway Water Company and Rainier View Water Company. Other purveyors have also expressed interest in obtaining wholesale water from the District.

The construction of the project went out to bid in late June, and we anticipate completion by the spring of 2010. This wholesale water transmission main has been designed and engineered to get the 20-inch water main from the District's intertie at 112th Street and South Tacoma Way to 121st Street & 22nd Avenue East in Parkland. From there, Summit Water will connect to the pipeline and be in a position to possibly wheel water to others in the future. Spanaway's water will be wheeled through Parkland Light & Water's system once Summit is off it, and Rainier View is still exploring wheeling options.

**Materials** were bid separately at an engineer's estimate of \$1,409,470 and came in at \$916,500, for a savings of \$492,970. The engineer's estimate for **construction and installation** of the transmission main is \$2.1M; however, the District expects to see the same cost savings as in other recent projects at approximately 25-30 percent. A **booster pump station** will be constructed near the time of completion of the transmission main and will be bid and contracted separately. The engineer's estimate for this component is \$1.3M.

Lakewood Water District staff work hard every day, in every way, to serve our customers.



### Sound Transit Project

Sound Transit, successor to the Northern Pacific Railroad, is reconstructing its tracks from "M" Street in Tacoma through Lakewood just south of Bridgeport Way SW. They are relocating the mainline eastward and installing a parallel track to allow for two-way traffic between 66th Street and Bridgeport Way. They are also installing additional tracks between Steilacoom Boulevard and 100th Street to accommodate storage and cleanup of the commuter trains stopping in Lakewood overnight.

Lakewood Water District is required to protect its waterlines that cross under the tracks from vibration and other damage by placing its mains inside a larger pipe called casings. LWD has secured S&W Utility Contractors of Lakewood to install these large protective casings. Work will take place in June and July of this year.

This project, estimated at \$450K, came in at over \$500K due to having to meet very stringent criteria imposed by Sound Transit in locating utilities beneath the rail track. This extensive and very expensive unfunded mandate by the railroad has depleted funds scheduled for other projects this year and was a major contributor to the overall 9 percent rate increase in 2009.

### American Lake Gardens-Tillicum Water Main Improvements

Lakewood Water District is participating with the City of Lakewood to upgrade portions of the American Lake Gardens and Tillicum neighborhoods. The City is upgrading its storm system and paying to have Pierce County sanitary sewer installed. Lakewood Water District is taking advantage of this opportunity to upgrade its water system. The City will then construct new curb/gutter/sidewalks and streets. The water mains in the Tillicum area are some of the oldest mains in our system. We will save considerable funds by partnering with the City on this project. This project, estimated at \$852K came in at \$632K, for a savings of approximately \$220K. ■

**Lakewood Water District  
Balance Sheet  
Year Ended December 31, 2008  
(Unaudited)**

**ASSETS**

<i>Total Net Utility Plant</i>	\$45,083,459
Cash	1,561,602
Temporary Cash Investments	8,000,000
Other Current Accrued Assets	835,555
<i>Total Current Assets</i>	\$10,397,157
Deferred Debits	416,369
<b>TOTAL ASSETS</b>	<b>\$55,896,985</b>

**CURRENT LIABILITIES & EQUITY**

Current Liabilities	\$1,014,755
Deferred Credits	4,917
Contributions in Aid of Construction	15,066,467
Bonds Payable	17,053,937
Unappropriated Retained earnings	22,756,909
<b>TOTAL LIABILITIES &amp; EQUITY</b>	<b>\$55,896,985</b>

**District Receives Another Clean Audit**

The State Auditor's Office has completed the District's 2007 audit. The yearly audit includes a complete review of financial and compliance practices, reviewing high-risk areas, how the District meets state and local regulations, and our financial statements.

The auditors cited zero deficiencies for the 13<sup>th</sup> year in a row and were again highly complimentary of the District's strong financial policies, precise accounting practices, and competent and cooperative staff. The District is proud of its history of clean audits.

Your elected Commissioners, District management, and staff work diligently to guide the District in maintaining our financial stability so we can continue to serve you effectively. ■



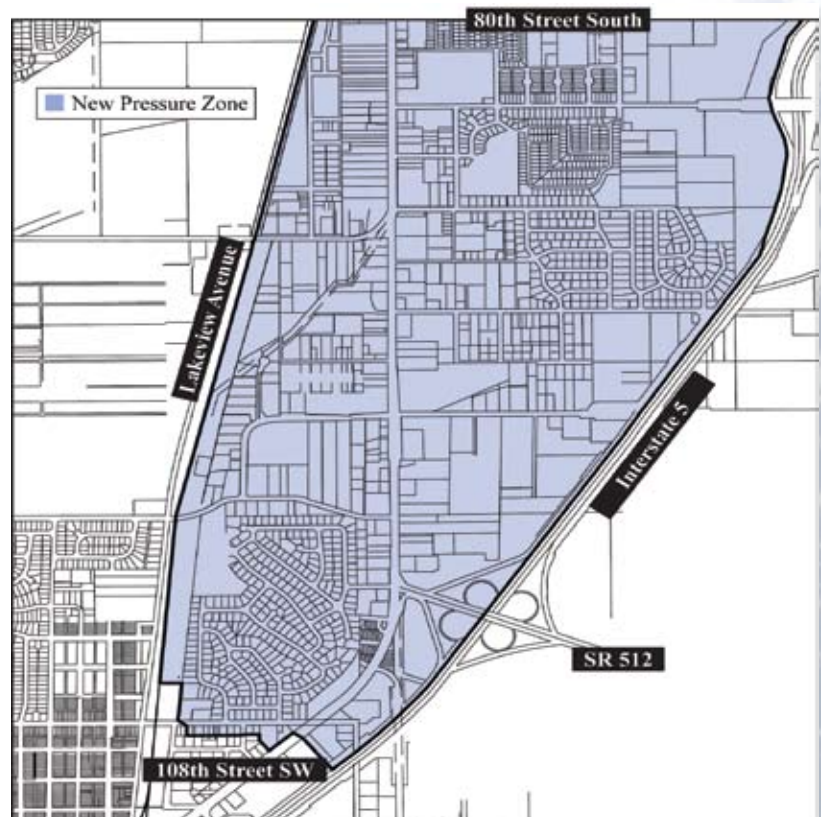
Lakewood Water District staff monitor our operations and maintain all our facilities.

Your business and accounting staff serve our customers daily.

**New 455-Pressure Zone**

The District continues to proceed with the generation of the new 455 Pressure Zone. The contract for building the booster pump station for this project was awarded May 29, 2009 to Stouder General Construction out of Ferndale, Washington. The pump station will draw water from the water tank behind the fire station on Steilacoom Boulevard and boost the pressure 22 pounds per square inch (psi) into the Sylvan Park area between the railroad tracks and I-5, north of 108<sup>th</sup> Street. The well site on 88<sup>th</sup> Street will also be modified to support the new zone.

The increased pressure will improve the domestic and fire flows in this area typically known for its low water pressure. Completion of the new zone is scheduled for late fall 2009. Affected property owners will be notified prior to activation of the pressure change. The District intends to increase the pressure gradually to neutralize any potential negative effects on customers' plumbing. The construction of the Steilacoom Boulevard booster pump station came in at \$394,700, roughly \$205,300 **below** the engineer's estimate of approximately \$600,000. ■



PRSR SD  
 US POSTAGE  
 PAID  
 TACOMA, WA  
 PERMIT 356



P.O. BOX 99729  
 LAKEWOOD, WA 98496-0729

## For More Information on Water Quality:

If you would like to learn more about our water, or have questions regarding water quality or what you can do to help keep our water supply clean and safe, please feel free to contact us at Lakewood Water District, or any of the following organizations:

### Lakewood Water District

P.O. Box 99729  
 11900 Gravelly Lake Drive SW  
 Lakewood, WA 98496-0729  
 253-588-4423  
 Randall M. Black, General Manager  
 E-mail: [rblack@lakewood-water-dist.org](mailto:rblack@lakewood-water-dist.org)

### Washington State Department of Health (WDOH) Web site

[www.doh.wa.gov/ehp/dw](http://www.doh.wa.gov/ehp/dw)

### Environmental Protection Agency (EPA) Web site

[www.epa.gov/safewater](http://www.epa.gov/safewater)

### Safe Drinking Water Hotline

1-800-426-4791

### Safe Drinking Water E-mail

[hotline-sdwa@epa.gov](mailto:hotline-sdwa@epa.gov)

### Need More Copies of the Lakewood Water Quality and Annual Report?

If you would like extra copies of this year's Lakewood Water District Water Quality and Annual Business Report for your office, multifamily residence, library, or organization, please call the District office at 253-588-4423.



Careful meter reading ensures accurate billing.



Flushing our system regularly helps keep your water clean and safe.

## Comparison of Lakewood Water District Rates with Surrounding Utilities

### Two-Month Billings of Residential Costs for Water as of June 10, 2009

Company Name	Min Svc Chg for 5/8" meter	Cost per 100 Cu Ft	Total Charge for 1500 Cu Ft
<b>Lakewood Water District</b> (588-4423)	\$16.55 base rate, 0-800 cu ft	0-800 cu ft = \$16.55 (Base Rate) 801-2000 cu ft @ \$0.85 Over 2000 cu ft @ \$1.15	700 @ \$0.85 = \$5.95 Base Rate = \$16.55 Total = \$22.50
<b>Dupont</b> (964-8121) Ext. # 385	0	0-1000 cu ft = \$32.00 (Base Rate) Over 1000 cu ft @ \$1.12	500 @ \$1.12 = \$5.60 Base Rate = \$32.00 Total = \$37.60
<b>Parkland Light &amp; Water</b> (531-5666)	\$15.60 \$4 cap fee	0-6000 cu ft @ \$.78 6001-10,000 @ \$.85 10,001-15,000 @ \$.95 Over 15,000 @ \$1.05	1500 @ \$.78 = \$11.70 Svc. Chg. = \$15.60 \$4 cap fee (\$2/month) Total = \$31.30
<b>Spanaway Water Co.</b> (531-9024)	\$25.00 (base rate of \$14.00 + EPA charge of \$4.00 + capital projects fee of \$7.00)	0-500 cu ft @ \$.60 501-1500 cu ft @ \$.85 1501-2500 cu ft @ \$1.05 2501-4000 @ \$1.35 4001-7500 @ \$1.75 7501 and over @ \$2.00	500 @ \$.60 = \$3.00 1000 @ \$.85 = \$8.50 Svc. Chg. = \$25.00 Total = \$36.50
<b>Town of Steilacoom</b> (581-1912)	\$30.64	\$2.11 per 100 cu ft	1500 @ \$2.11 = \$31.65 Svc. Chg. = \$30.64 Total = \$62.29
<b>Summit Water &amp; Supply Co.</b> (537-7781)	\$40.74	0-4000 cu ft @ \$1.22 4001-6000 cu ft @ \$1.94 Over 6000 cu ft @ \$2.42	1500 @ \$1.22 = 18.30 Svc. Chg. = \$40.74 Total = \$59.04
<b>Tacoma Water</b> (Inside City) (383-9600)	\$30.14	\$1.230 per 100 cu ft except June thru Sept. when all water used over 500 cu ft is charged @ \$1.538	WINTER: 1500 @ \$1.230 = \$18.45 Svc. Chg. = \$30.14 Total = \$48.59 SUMMER: 500 @ \$1.230 = \$6.15 1000 @ \$1.538 = \$15.38 Svc. Chg. = \$30.14 Total = \$51.67
<b>Tacoma Water</b> (Outside City) (383-9600)	\$36.16	\$1.476 per 100 cu ft except June thru Sept. where all water used over 500 cu ft is charged @ \$1.845	WINTER: 1500 @ \$1.476 = \$22.14 Svc. Chg. = \$36.16 Total = \$58.30 SUMMER: 500 @ \$1.476 = \$7.38 1000 @ \$1.845 = \$18.45 Svc. Chg. = \$36.16 Total = \$61.99