

2005 Water Quality

Annual Business Report



LAKEWOOD





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# A Message From Your Board of Commissioners

#### Dear Lakewood Water District Customers:

Before the world had television, radio was a primary source of home entertainment, with performers such as Jack Benny, Burns & Allen, Red Skelton, and Eddie Cantor; and shows like Fibber McGee & Mollie, The Green Hornet, and The Shadow being extremely popular (you seniors out there should remember them). Another favorite was The Great Gildersleeve, starring an actor named Harold Perry. His character, Throckmorton P. Gildersleeve, served as Commissioner of the Summerville Water District, and many laughs were squeezed out of audiences from his blustery attempts to govern that District.

Thankfully, after a couple of years of dealing with fairly "non-laughable" issues, this year rewarded us with upbeat and positive activities and projects which your "Gildersleeves" have enjoyed overseeing. They didn't necessarily produce laughs, however, we did get some smiles of satisfaction from our staff and, hopefully, some of our customers.

First, after closing the purchase in December 2005 of significant water rights previously serving the Abitibi Mill in Steilacoom, we proceeded to offer our surplus water to other water purveyors in the area with the result that serious contract negotiations are underway with several other water purveyors. We hope to finalize these contracts in the near future in order to satisfy their needs and enhance our revenues. It might be of interest to you that in financing the purchase of those rights by the issuance of revenue bonds, your District was awarded an A1 rating by the bond rating agency, an unusually high rating for an entity such as ours. This rating was a product of the rating agency's determination that our financial structure and operation were superior and resulted in our bonds carrying a lower than normal interest rate, much to the benefit of the District.

Second, by the time you read this, we will have substantially completed our new half-milliongallon storage tank at Hemlock Hill, thereby improving fire flow in the area it serves. That project has proceeded smoothly and, hopefully, with a minimum of inconvenience to residents in that neighborhood.

Third, by the end of June, we will have completed and will be occupying our remodeled and expanded shop and office facilities at our headquarters location at Gravelly Lake Drive SW and Washington Boulevard. This project was designed and constructed to be as unobtrusive as possible, since it is located in a lovely residential area. Since several of our other facilities also are located in other than commercial or industrial settings, we strive to blend them into the neighborhoods as best we can by the use and maintenance of attractive landscaping. We think we are succeeding in this effort and hope you agree.

We remain,

Your Board of Commissioners ("Gildersleeves")



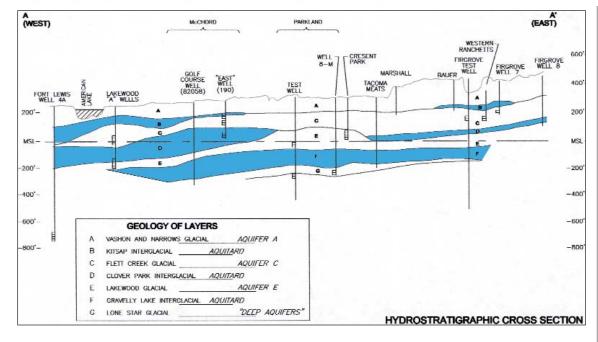




YOUR LAKEWOOD WATER DISTRICT STAF

#### Mission Statement of Lakewood Water District

Lakewood Water District will provide its customers with water service that meets or exceeds all water quality standards, maintaining policies and practices that benefit the health and welfare of the community.



# Lakewood Water at the Source

Underground aquifers are the primary source of water in Lakewood Water District. This means that the water you drink is pumped from a series of wells to your home or business via the District's system of pipes and pumps. Currently, Lakewood Water District operates with 31 wells to serve our customers.

The above graphic shows the locations and depth of the aquifers from which we draw water.

Since our water comes from underground aquifers, protection of our "wellheads" is very important. Protecting our wellheads means we work hard to secure the integrity of our wells, including keeping them clean and in excellent running condition and not allowing discharge or placement of unhealthy materials into the ground through drainage systems. We also ask our customers to be careful to dispose of hazardous wastes properly so they do not seep into groundwater.

Wellhead protection includes working in concert with the city, county, Department of Ecology, and Department of Transportation to ensure we have response and mitigation plans in place to deal with any hazardous material spill which could affect water quality. We must all take care to protect our water source to ensure that our water supply continues to serve us well.

# Lake and Stream Monitoring

Many lakes in Lakewood Water District's service area 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, it was necessary to develop a long-term understanding of the changes in lake levels.

In particular, the District hoped to identify means of using the lake level responses to help properly manage its shallow groundwater withdrawals. To accomplish this, a series of gauges were installed on five local lakes and two streams. Lakewood Water District staff collect monthly water level measurements in cooperation with the Pierce County Stream Team.

In addition, Lakewood Water District has been working in cooperation with the Tacoma-Pierce County Health Department's long-term groundwater monitoring program for the last seven years. The District uses the generated data as part of its aquifer management program and as a regional data source for watershed planning.

# 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 Lakewood, WA 98499-0729 (253) 588-4423

Randall M. Black, General Manager

E-mail: rmblack@lakewood-water-dist.org

Washington State Department of Health (WDOH) Web site: www.doh.wa.gov/ehp/dw

Environmental Protection Agency (EPA) Web site: www.epa.gov/safewater

Safe Drinking Water Hotline: 1-800-426-4791

Safe Drinking Water E-mail: hotline-sdwa@epa.gov





# 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.

# **Keeping Your Water Safe**

Lakewood Water District takes care and works hard to ensure the quality of your water is the highest it can be. We want you to have the safest, cleanest, best-tasting water supply possible. We follow the regulations of the Washington State Department of Health under the Safe Drinking Water Act. Every week, we conduct tests of the water at its source, and during the treatment and distribution processes.

The chart 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 and tested both at our own facilities and at independent, state-certified testing laboratories.

Because our water source is underground aquifers, and therefore considered at a low level for possible contaminants, some testing parameters have reduced monitoring requirements. The levels indicated in the following chart are for the 2005 calendar year. If a level was not tested in 2005, levels indicated are for the most recent testing period.

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.

# Your Drinking Water

### **Arsenic Levels Low**

Your drinking water meets the EPA's revised drinking water standard for arsenic. However, it does contain a very low level of arsenic, which 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 effects against the costs of removing arsenic from drinking water.

### Lead and Copper Levels

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



Daily Water Testing

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 replumbed 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 flush 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.



### **Regulated and Unregulated Contaminants Monitoring Data Tables**

The table below reflects the maximum allowed levels of certain contaminants and the levels experienced in Lakewood Water District. Our testing is based on 70 samples a month, which resulted in **no violations**.

SUBSTANCE	MCL	HIGHEST LEVEL DETECTED	DETECTED RANGE	MCLG	TYPICAL SOURCES
Samples 2005					
Total <b>Trihalomethanes</b>	80 ppb	57.0 ppb	16.2 - 57.0 pbb	0	Byproduct of drinking water disinfection
Haloacetic Acids	60 ppb	2.3 ppb	N.D 2.3 ppb	0	Byproduct of drinking water disinfection
Total <b>Coliform</b>	<5% positive	N.D.	N.D.	0	Found throughout the environment
Fecal Coliform Bacteria	0	N.D.	N.D.	0	Human and animal fecal waste
Nitrates	10 ppm	2.2 ppm	<0.2 - 2.2 ppm	10 ppm	Erosion of natural deposits
Radium 228	5pCi/L	N.D.	N.D.	0	Erosion of natural deposits
Lead	15 ppb AL	.003 AL	<.002003 AL	0	Household plumbing
Copper	1.3 ppm AL	.26 AL	.0326 AL	1.3 ppm AL	Household plumbing

The items listed above were sampled for/detected in Lakewood Water District's water during 2005. Not listed are the 62 volatile organic chemicals and 81 synthetic organic chemicals including herbicides and pesticides, that we tested for which were not detected.

As noted in the chart above, all of the elements for which we test either met or exceeded federal and state standards. A complete Source Water Assessment card is available at the District office. All substances that have been tested for and found to have a positive detection in the last 5 years—although well within established limits—are included in the report below.

#### Samples Last 5 Years

<b>Arsenic</b> (2004)	10 ppb	<3 ppb	<2 ppb - 3 ppb	0	Erosion of natural deposits
Perchlorate (2002)	Not regulated	6 ug/L	N.D 6 ug/l	0	Oxidants
Asbestos (2002)		No structures detected		0	

### **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/l)

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







# District Projects 2005-2006

#### **New Hemlock Tank**

The construction of the new one-half-million-gallon hydropillar tank on Hemlock Hill is within budget and on



schedule to be completed in late June or early July. The tank will greatly enhance the District's ability to provide adequate fire flow to our customers in the Hemlock Hill area. General contractor Morse/CBI has done an excellent job on this project despite difficult surroundings and tight site conditions.

#### Shop Remodel & Office Addition

The shop remodel and office addition is also within budget and scheduled to be com-

pleted in June. Christensen Inc., the general contractor, has also done a superb job of building a first-rate facility that will meet the District's needs for years to come.



#### **Increased Water Pressure**

The Lakewood Water District is currently developing a plan to increase the overall water pressure in the northeastern area of its service area (out to Tacoma Mall Boulevard and 84th near Lakewood 15 Theaters). The engineering will be completed in 2006 with facility upgrades completed in 2007. The end result will be increased pressure while maintaining sufficient fire flow. The construction costs for this project are estimated to be \$800,000.

#### Hazard Mitigation Plan

The District is working with Pierce County to develop a county-wide Hazard Mitigation Plan to be completed by 2008. The District's participation in the plan will enhance its ability to procure federal mitigation funding prior to and after a catastrophic event.

#### **Planned Preparedness for Possible Pandemic**

The District is adding a preparedness plan for a potential pandemic to its Emergency Response Plan. We are working with the City of Lakewood, Lakewood Fire Department, Pierce County, and the State to ensure the District has a Continuity of Operations Plan. We are working to serve you effectively while maintaining a safe environment for our personnel.

#### New Wholesale Water Transmission Main

The engineering is underway for a new 24-inch transmission water main to be built in 2007, spanning from our Parkland Intertie located near South Tacoma Way and 112th Street to Summit Water & Supply Company located at 9701 50th Avenue East in Tacoma.

The route for this new transmission main is currently being studied, but at this time it is scheduled to head east on 112th Street to Alaska Street, south on Alaska Street to 117th Street, east on 117th Street across Pacific Avenue to "A" Street, south on "A" Street to 121st Street, and east to Bingham Drive where it will tie into Summit Water & Supply Company.



Lakewood Water District staff member with a new 24" pipe fitting.

# R&R Projects Completed in 2005 and Planned for 2006

Lakewood Water District completed two water main Replacement and Rehabilitation projects in 2005 on Interlaaken Drive SW and Pacific Highway and will complete an additional project on Kline Street later this year.

Interlaaken Drive SW—This project spanned between Washington Boulevard and Veterans Drive on Interlaaken Drive SW. Pape & Sons completed the project in March, installing

1555 feet of 12-inch water main, 57 feet of 8-inch water main, 40 feet of 4-inch water main, 15 service connections, and 3 fire hydrants.

Pacific Highway— This project spanned between Bridgeport Way and 112th Street on Pacific Highway. NOVA Contracting,



Inc. completed the project in December, installing 4271 feet of 16-inch water main, 627 feet of 8-inch water main, 12 service connections, and 11 new hydrants.

Kline Street—This project is planned to begin in September of this year, spanning from Pacific Highway to Pacific Street on Kline Street.

# LAKEWOOD WATER DISTRICT BALANCE SHEET YEAR ENDED DECEMBER 31, 2005 (unaudited)

#### **ASSETS**

Total Utility Plant	 	 
Cash	 	 2.474,234
Temporary Cash Investments	 	 
Other Current Accrued Assets	 	 
Total Current Assets	 	 
Deferred Debits	 	 
Total Assets	 	 \$45,572,743

#### **CURRENT LIABILITIES**

Current Liabilities	1,835,589
Deferred Credits	4,917
Contributions in Aid of Construction	
Bonds Payable	11,001,133
Unappropriated Retained Earnings	

TOTAL LIABILITIES & EQUITY......\$45,572,743

### **State Audit Results**

The State Auditor's Office has completed the District's 2004 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 not only once again cited no deficiencies in this year's audit, they were highly complimentary of the District's strong financial policies, precise accounting practices, and highly competent and cooperative staff. The District is proud of its history of consistently clean audits.

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

# **District Acquires Life-Saving Machine**

Lakewood Water District has purchased an Automatic External Defibrillator (AED). This life-changing and life-saving machine is mounted in the District's main office, readily available for the District's recently trained and certified staff to utilize to potentially save the life of a customer,



vendor, or fellow employee in the case of cardiac arrest.

Our AED selection, staff training & certification, and maintenance is in conjunction with the full support of the Lakewood Fire Department. We believe this was another case of dollars well spent to further protect and enhance the lives of customers, community, and staff.

# Credit Card and Automatic Bill Payment

The District is pleased to announce it now accepts VISA or MasterCard credit or check cards, making it available for our customers to pay their bill in person or over the phone. Internet on-line payments options will be available soon. And, as always, we continue to offer the convenience of our Automatic Bill Payment Service, where your payment is automatically deducted from the account you designate.

If you would like to sign up for Automatic Bill Payment, either contact the District Office at 588-4423 or download the application from the District Web site at: www.lakewoodwater-dist.org.



District staff accepting credit card payment.

### Lakewood Water District at a Glance

#### Customer Base

- 61,068 Lakewood customers
- 6,621 Summit (wholesale customers)

• 6,750 Town of Steilacoom (wholesale customers)

For a total of ~75,000 customers

- 250 miles of water main
- 16,616 connections
- 16,518 active connections 26 million gallons of water
- storage capacity
- 13 water storage tanks
- 31 wells with a pumping capacity of around 40 million gallons of water a day! Total system pump ing capacity over 60 million gallons!



### Lakewood Water District on the Web

For those of you with Internet access, we invite you to visit the District's Web site at www.lakewood-water-dist.org. We offer a variety of information online, including tips on wise water use, answers to many of your questions, rates, current legislative issues that may impact the District, and copies of our recent newsletters. We also have our automatic payment (EFT) form available for customers, so you may sign-up for this easy payment method.

In addition, the Web site includes information on employment opportunities with the District and an employment application form can be downloaded. We regularly update information on the site, and we encourage you to visit us or contact us through the Web if you have questions or concerns.

### Need Extra Copies of the Lakewood 2005 Water Quality and Annual Report?

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



### Meter Reading

All meters in the District have been upgraded to a touchread/radio read system. This cuts down on mistakes

and allows the District to read much more quickly and efficiently.

### Our New Hemlock Tank



500,000-gallon Tank, located at the hub of our low,

medium, and high pressure zones (present tank 100,000 gallons).

### Comparison of Lakewood Water District Rates with Surrounding Utilities Two-Month Billings of Residential Costs for Water as of Feb. 1, 2005

Company Name	Min Svc Chg "for 5/8"" meter"	Cost per 100 Cu Ft	Total Charge For 1500 Cu Ft
Lakewood Water District (588-4423)	\$13.85 base rate 0-800 cu ft	0-800 cu ft = \$13.85 (Base Rate) 801-2000 cu ft @ \$.70 Over 2000 cu ft @ \$.95	700 @ \$.70 = \$4.90 Base Rate = \$13.85 Total = \$18.75
<b>DuPont</b> (964-8121) Ext. # 385	\$0.00	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
Parkland Mutual Water Co. (531-5666)	\$15.60	\$.78 per 100 cu ft	1500 @ \$.78 = \$11.70 Svc. Chg. = \$15.60 Total = \$27.30
Spanaway Water (531-9024)	\$21.50 (base rate of \$13 + EPA charge of \$3.50 + capital projects fee of \$5)	0-500 cu ft @ \$.55 501-1500 cu ft @ \$.80 1501-2500 cu ft @ \$1.00 2501-4000 @ \$1.25 4001-7500 @ \$1.50 7501 and over @ \$1.75	500 @ \$.55 = \$2.75 1000 @ \$.75 = \$7.50 Svc. Chg. = \$20.50 Total = \$30.75
Steilacoom (581-1912)	\$30.64	\$2.11 per 100 cu ft	1500 @ \$2.11 = \$31.65 Svc. Chg. = \$30.64 Total = \$62.29
Summit Water & Supply Co. (537-7781)	\$37.02	0-4000 cu ft @ \$1.10 4001-6000 cu ft @ \$1.75 Over 6000 cu ft @ \$2.10	1500 @ \$1.10 = \$16.50 Svc. Chg. = \$37.02 Total = \$53.52
<b>Tacoma Water</b> (Inside City) (383-9600)	\$25.64	\$1.05 per 100 cu ft except June thru Sept. when all water used over 500 cu ft is charged @ \$1.31	WINTER: 1500 @ \$1.05 = \$15.75 Svc. Chg. = \$25.64 Total = \$41.39 SUMMER:
			500 @ \$1.05 = \$5.25 1000 @ \$1.31 = \$13.10 Svc. Chg. = \$25.64 Total = \$43.99
Tacoma Water (Outside City) (383-9600)	\$30.76	\$1.26 per 100 cu ft except June thru Sept. where all water used over 500 cu ft is charged @ \$1.57	WINTER: 1500 @ \$1.26 = \$18.90 Svc. Chg. = \$30.76 Total = \$49.66
			SUMMER: 500 @ \$1.26 = \$6.30 1000 @ \$1.57 = \$15.70 Svc. Chg. = \$30.76 Total = \$52.76



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