



# Lakewood Water District

*2002 Water Quality*

*& Annual Business Report*





## A Message From Your Board of Commissioners

Dear Customers,

In our communications with you, our customers, we often refer to “your Lakewood Water District,” in order to highlight the fact that you’re not just a customer of the District, you’re also an owner. With so much of our physical plant located underground or tucked away off the major traffic routes of our community, it is easy to overlook just how much is really there. Consequently, we want to quantify just what it means to you to be a part owner of Lakewood Water District.

Lakewood Water District is one of the largest water utilities in Washington state. Our total asset value is about \$35 million, or a little more than \$500 per person and a little more than \$1300 per household. Approximately \$28 million of the total asset value is the value of our physical plant. Major assets of the physical plant include 13 water tanks, 31 wells, 250 miles of water mains, 1600 fire hydrants, 29 buildings, 3464 valves, 17 trucks, and 9 emergency generators. All together, the monies committed to building the water district over the last 60 years add up to a significant investment in our community.

The value of the water district doesn’t stop with just the physical assets. We have an annual payroll of nearly \$1.2 million and pay out nearly \$3.4 million annually for goods and services to support the continued operations and enhancements of the District. Most of these dollars remain in our community. In fact, with annual capital expenditures exceeding \$2 million, the bulk of the non-payroll dollars end up being put right back into the utility, constantly increasing its value to our community.

Our community has a major investment in Lakewood Water District, but dollars and cents don’t tell the whole story. We have long enjoyed relatively low fire insurance rates in our community. Part of this is due to our excellent fire department. The fact that Lakewood Water District consistently exceeds all federal, state, and local standards for fireflow through our hydrants, is a major factor as well. This is an often-overlooked role of a water utility. Those big water tanks stand, in large part, to provide the emergency reserves necessary to put out a major fire. The industrial parks, shopping centers, even schools and hospitals, couldn’t be built without the necessary water storage to fight a potential fire.

Your Lakewood Water District is an important part of our community, a significant asset, and a vital link in the economic chain. We’re proud of the services we provide our community. On behalf of our management and staff, we thank you for your continued support.

Sincerely,  
Your Board of Commissioners



*Larry Shiloh*



*W. W. Phillips*



*Bob M. Hultgren*



### 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.

# Year 2002 Water Quality Report

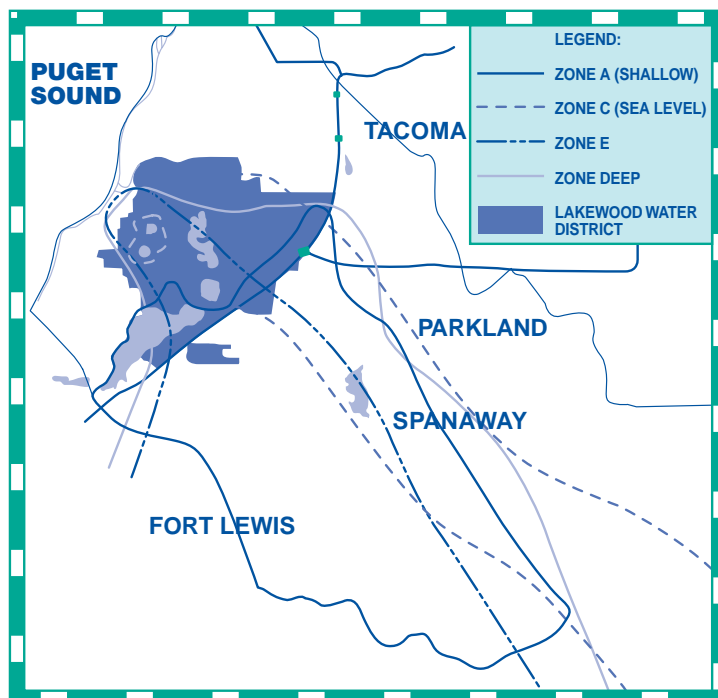
## The Source of Our Water

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 adjacent map shows a view of our service area and an outline 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.



Underground aquifers are the source of water for Lakewood Water District.

## 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:

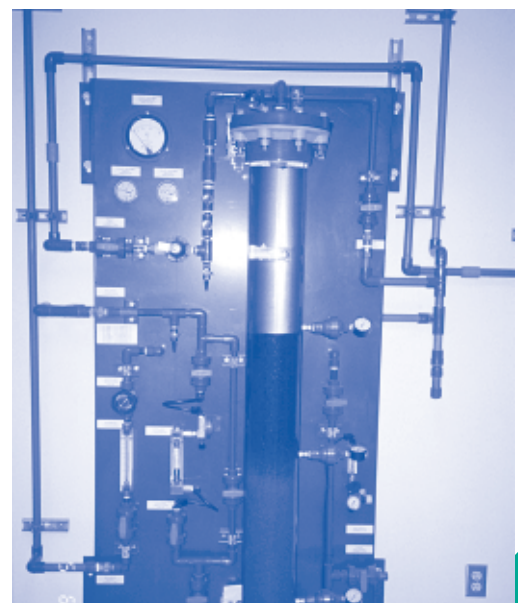
Lakewood Water District  
P.O. Box 99729  
Lakewood WA 98499-0729  
(253) 588-4423  
Randall M. Black, General Manager  
E-mail:  
[rblack@lakewood-water-dist.org](mailto:rblack@lakewood-water-dist.org)

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)



## How We Monitor Your Water Quality

Lakewood Water District staff takes great care to monitor the quality of your water to ensure you have the safest, cleanest possible water supply. We follow regulations of the Washington State Department of Health under the Safe Drinking Water Act. Each week, we conduct tests of the water at the source and during the treatment and distribution processes.

The table in this report shows the few compounds detected in the water, along with their detection levels and typical sources. Samples are taken and tested both at our own facility and at independent, state-certified testing laboratories.



Because our source water 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 2002 calendar year. If a level was not tested in 2002, levels indicated are for the most recent testing period.

Lakewood Water District tests for many 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.

## 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 (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 wa-

ter 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 (800-426-4791).

## Arsenic in Your Drinking Water

Your drinking water currently meets EPA's revised drinking water standard for arsenic. However, it does contain very low levels of arsenic. 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 diseases are due to factors other than exposure to arsenic. EPA's standard balances the current understanding of arsenic's health effects against the costs of removing arsenic from drinking water.

## Lead and Copper in Drinking Water

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

The government requires that we test for these elements because significant levels can pose health risks. Infants and children who drink water containing 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 an increased 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. Practice good water conservation practices, though, and use that flushed water for watering plants or washing dishes. You should never use HOT water for cooking or 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

This table reflects the maximum allowed levels of certain contaminants, and the levels experienced in Lakewood Water District.

### 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

**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

SUBSTANCE	MCL	HIGHEST LEVEL DETECTED	MCLG	TYPICAL SOURCES	DETECTED RANGE
<b>Samples 2002</b>					
Nitrates	10 ppm	2.5 ppm	10 ppm	Erosion of Natural Deposits	.2—2.5 ppm
Total Trihalomethane Potentials T.H.M.P.	80 ppb	56.8 ppb	0	Disinfection Interaction	6.0—56.8 ppb
Lead	15 ppb	Less than .2 ppb	0	Household Plumbing	All samples were under .2 ppb
Copper	1.3 ppm	.38 ppm	1.3 ppm	Household Plumbing	.2—.38 ppm
Chloroform	Not regulated	.8 ppb	Not regulated		ND—.8 ppb
Perchlorate	Not regulated	6 ug/L	Not regulated		ND—6 ug/L
Asbestos					Taken in 2002 with no structures detected
Coliform	4/2002			Fecal Material	1 sample showed presence of Coliform & E.Coli with fecal material

The items listed above were detected in Lakewood Water District's water during 2002. 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 are included in the report.

<b>Samples Last 5 Years</b>					
Arsenic	50 ppb	7 ppb	None	Erosion of Natural Deposits	Under 5 ppb — 7 ppb

### Our testing schedule is as follows:

**Nitrate:** Annually

**Radionuclides:** Every 4 years. Last done in 2000, with no violation. Next testing due in 2004.

**Trihalomethane Potentials (for ground water):** Annually

**Lead & Copper:** Every 3 years at residential water tap. Due again in 2005.

**Coliform:** 70 samples a month.

**E. Coli:** 70 samples a month.

**Arsenic:** Scheduled samples were taken in 2001. All were under the current MCL level of 50 ppb and the proposed MCL of 10 ppb. In 2000, Lakewood Water District also took the initiative to test lower than the proposed EPA level of 10 ppb. All samples were under 5 ppb, except one sample at 7 ppb.

**Asbestos:** Every 3 years. Due again in 2005.

**Volatile Organic Chemicals:** Due again in 2005.

**\*Inorganics -** Tested in 2001. No violations. Due 2004.

\*The EPA and State offered Lakewood Water District and other qualified water systems an inorganic monitoring waiver for the 1999 – 2001 monitoring period. The waiver is based on source susceptibility, water quality history and that such a waiver would not result in an unreasonable risk to health. Lakewood Water District chose not to request the waiver. We feel the information we receive from the tests helps to ensure the quality of water in our District.



# LAKWOOD WATER DISTRICT ANNUAL BUSINESS REPORT

## CAPITAL AND REPLACEMENT RENOVATION PROJECTS FOR 2003

### Capital Projects for the Year 2003

**Comprehensive Plan:** The Board of Commissioners has approved by adoption of the budget capital projects in 2003 that include the continuation and completion in early 2004 of the Lakewood Water District's Comprehensive Plan. All public water systems are required to submit to the State Department of Health a Comprehensive Plan every five years, and the District's plan is due again in the spring of 2004. The water system comprehensive plan is a plan that provides for a five-year strategy that maps out the direction of the Lakewood Water District along with capital and replacement projects for the upcoming years. It also provides financial planning and rate-setting for the District, as well as other system improvements. This process has begun in 2003 and is on track to be completed in the spring of 2004. We will encourage the public to give their comments with regard to the District Comprehensive Plan in the future. The District will continue to carefully manage the District affairs in order to review and mitigate all rate impacts. The cost of the Comprehensive Plan is \$100,000.

**Security Improvements:** Security improvements for the Lakewood Water District facilities make up the largest part of the remaining capital budget. The Bioterrorism Act passed by the federal government in 2002 requires all water systems to complete a vulnerability and risk assessment along with an emergency response plan. The federal government did not provide any funding for water districts. The Lakewood Water District has contracted a consultant to help write this report to be presented to the Environmental Protection Agency (EPA) and Federal Emergency Management Agency (FEMA) for compliance under the act. The EPA will be looking at security areas of risk and vulnerability to the water system against a number of possibilities and situations that will identify how the District can mitigate or reduce those risks. The mitigation side of the plan requires the District to look at such natural events as earthquakes, wind storms, mud slides, flooding, and ice storms in order to qualify to receive future monies from FEMA. The final aspect is the emergency response plan. The District will be tying it into its current plan and making improvements and changes to the overall emergency response plan. According to the recommendations made by the consultant, the estimated cost for the completion of this project is \$80,000.

Security improvements were made by the District to improve resistance to trespassers at both well and tank sites. In addition, in the wake of recent events, the Board of Commissioners asked the District staff to evaluate the improvements that would be instituted this year for security measures prior to the completion of the vulnerability and risk assessment. The Board was given a list of priority security enhancements to be added to the District headquarters, wells, and tank sites that the Board has approved to go into effect immediately in the year 2003. Some of the security improvements recommended by District staff no doubt would have been addressed through the consultant work on the vulnerability and risk assessment. However, the Board felt these priority improvements were needed as soon as possible. The estimated costs are \$125,000.

**Manganese and Iron Filtration Plants**—Current capital projects that are ongoing include the completion of the iron and manganese filtration system located at the District headquarters. As of the writing of this report, the District is nearing the completion of this treatment plant and will be on line for the summer's pumping activity. This will be the third of four planned filtration plants installed for Lakewood Water District, with the **Deepwood** and **Angle Lane** filtration plants completed in 2002. The last of the four treatment plants, the U-1 site located at Country Place, is scheduled for construction in the summer and is to be completed by the winter of 2003.

Manganese is a common mineral typically found in deep wells and can sometimes appear as a brown discoloration on plumbing fixtures. These filtration plants will allow the District to reduce the amount of flushing and time necessary to remove manganese.

The District is able to pay for all four of these treatment plants by using funds provided through the State by way of the Public Works Trust Fund (PWTF). The District pays 15 percent, and the remaining monies come from PWTF loans at a 1 percent interest rate. This provides a tremendous savings to our rate-payers. The estimated cost for the two treatment plants completed in 2003 is \$1.4 million, and the total estimated cost for all four plants is \$2.6 million, most of which is funded through the PWTF. The treatment plant costs are within budget.

**Recirculation Projects:** The District began the chlorination of its water system in 1995. In 2000, a study concluded by Kennedy/Jenks recommended the District install recirculation systems on its tanks. These systems would improve water quality aspects such as odor and taste after adding chlorine to the water system. Recirculation systems have been added to the District's tanks at 88<sup>th</sup> & Pine, American Lake Gardens, Steilacoom Boulevard, Washington Boulevard, and 104<sup>th</sup> & Bridgeport way.

The District has undertaken a project of evaluating and **updating its utility billing and accounting software**. The District has gone through a systematic selection process to choose a vendor that appropriately meets the District's needs. Look forward to enhancements to your billing statements once this software is implemented later this fall. The cost of this project will be \$170,000.

**R&R Projects Completed in 2002:** 1) The **111<sup>th</sup> Street R&R project** with 3,427 feet of water main replaced, 64 water services replaced, and 7 new hydrants installed; 2) The **School Street R&R project** replacing 3,382 feet of water main, 51 water services, and 5 fire hydrants; and the **Bridgeport Way R&R project** that carried over into 2003 and was installed in cooperation with the City of Lakewood Sidewalk Project, with 2,097 feet of water main replaced, 30 water services upgraded, and 5 hydrants installed.

**New Development in 2002** saw 6,183 feet of water main installed and 17 new fire hydrants. These projects were San Moritz, Boo Han Plaza, Paldo World, NW Commercial Bank, Steilacoom Square, Pierce Transit, and Lakewood Towne Center.

**Touch-Read Replacement Program:** In 2002, Lakewood Water District continued its touch-read meter replacement program which will replace all current registers with an electronic version that allows our meter readers to walk up to a meter box, touch a sensor pad, and receive usage information. The District installed 2,666 touch-read registers on the water meters in 2002. This project is scheduled to be completed in 2004, at an approximate total cost of \$1.2 million. The expected 2003 expenditures are expected to be \$100,000 according to budget. This will enable the District to cut down on manpower needed for meter reading and will ensure greater accuracy in billing to our customers.

The District has begun the early stages of the **replacement of the Hemlock Tank**. Currently we are examining the capacity of new tanks and design and engineering effects to the water system. The existing tank capacity is only 100,000 gallons. During the summer months, the tank levels need to insure fire flow protection and demand results in having the well fill the tank every two hours. Early thoughts on the replacement tank capacity is somewhere between 500,000-1 million gallons. Regardless of the eventual size of the new tank, the goal is to have it meet the needs of the District for the next 50-75 years. The estimated cost for the total project is \$1.7 million.

**LAKWOOD WATER DISTRICT • BALANCE SHEET**  
**YEAR ENDED DECEMBER 31, 2002 • (unaudited)**

**ASSETS**

Utility Plant in Service .....	\$ 44,263,87
Accumulated Depreciation .....	(14,514,610)
Net Utility Plant .....	29,749,237

**CURRENT ASSETS**

Cash .....	265,237
Investments .....	5,000,000
Accounts Receivable .....	228,555
Materials Inventory .....	80,753
Pre-Payments .....	209,089
Interest Receivable .....	61,324
Total Current Assets .....	5,844,958

Deferred Debits .....	332,909
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<b>Total Assets</b> .....	<b>\$ 35,927,105</b>
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**LIABILITIES & EQUITY**

Unappropriated Retained Earnings .....	\$ 14,335,724
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**CURRENT LIABILITIES**

Accounts Payable .....	381,205
Customer Deposit Payable .....	123,779
Accrued Liabilities .....	128,862
Total Current Liabilities .....	633,845

Deferred Credits .....	4,917
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Bonds Payable .....	5,279,875
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Contributions in Aid of Construction .....	15,72,744
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<b>TOTAL LIABILITIES &amp; EQUITY</b> .....	<b>\$ 35,927,105</b>
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**FINANCIAL REPORT**

The State auditors have completed their review of our 2001 financial statements, and Lakewood Water District is pleased to report that once again on the State Auditor's Report on Financial Statements, the independent review of our operations show no "findings." A copy of the 2001 annual report can be obtained at the District office.

**ONLINE PAYMENT**

The District offers an easy means for paying your bi-monthly water bill with electronic funds payment. This system allows individuals the opportunity to have their payments deducted directly from their bank accounts. This payment program has successfully been in use for over two years and continues to grow in popularity with our customers.

If you would like to take advantage of this convenient way to pay your bill, application forms can be found on our web site ([www.lakewood-water-dist.org](http://www.lakewood-water-dist.org)) or at the District Office.

## Comparison of Lakewood Water District Rates with Surrounding Utilities Residential Costs for Water — Two Month Bill — As of June 1, 2003

Company Name	Min Svc Charge	Cost per 100 Cu Ft	Total Charge For 1500 Cu Ft
<b>Lakewood Water District</b>	\$0.00	0-800 cu ft = \$12.65 (Base Rate) 800-2000 cu ft @ \$.65 Over 2000 cu ft @ \$.87	700 @ \$.65 = \$4.55 Base Rate = \$12.65 Total = \$17.20
<b>Parkland</b> (253-531-5666)	\$12.00	\$.65 per 100 cu ft	1500 @ \$.65 = \$9.75 Svc. Chrg. = \$13.00 Total = \$22.75
<b>Tacoma</b> (Inside City) (253-383-9600)	\$20.28	\$.828 per 100 cu ft except June thru Sept. when all water used over 1000 cu ft is charged @ \$1.035	WINTER: 1500 @ \$.828 = \$12.42 Svc. Chrg. = \$20.28 Total = \$32.70  SUMMER: 1000 @ \$.828 = \$8.28 500 @ \$1.035 = \$5.18 Svc. Chrg. = \$20.28 Total = \$33.74
<b>Dupont</b> (253-964-8121) Ex. # 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
<b>Spanaway</b> (253-531-9024)	\$17.50 (best rate of \$14.50 + EPA charge of \$3.50)	0-500 cu ft @ \$.55 501-1500 cu ft @ \$.75 1501-2500 cu ft @ \$.95 2501-4000 cu ft @ \$1.20 4001-7500 cu ft @ \$1.30 7501 and over @ \$1.50	500 @ \$.55 = \$2.75 1000 @ \$.75 = \$7.50 Svc. Chrg. = \$17.50 Total = \$27.75
<b>Tacoma</b> (Outside City) (253-383-9600)	\$24.34	\$.994 per 100 cu ft except June thru Sept. where all water used over 1000 cu ft is charged @ \$1.243	WINTER: 1500 @ \$.994 = \$14.91 Svc. Chrg. = \$24.34 Total = \$39.25  SUMMER: 1000 @ \$.994 = \$9.94 500 @ \$1.243 = \$6.22 Svc. Chrg. = \$24.24 Total = \$40.50
<b>Steilacoom</b> (253-581-1900)	\$12.94	\$2.92 per 100 cu ft	1500 @ \$2.92 = \$43.80 Svc. Chrg. = \$12.94 Total = \$56.74

### 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](http://www.lakewood-water-dist.org). We offer a variety of information online, including tips on water conservation, 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.

### NEED EXTRA COPIES OF THE LAKEWOOD 2002 WATER QUALITY AND ANNUAL REPORT?

If you would like extra copies of the Lakewood Water District 2002 Water Quality and Annual Report for your office or residence, please call the District office at 253-588-4423.



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