2008

ANNUAL SURVEY OF WHOLESALE CUSTOMERS:

SUMMARY OF RESULTS

Seattle Public Utilities

October 2008

RESULTS OF THE 2008 SEATTLE SURVEY OF WHOLESALE CUSTOMERS

Each year, Seattle Public Utilities (SPU) asks its wholesale customers to provide information on their current and forecast water demand (both retail and wholesale), sources of supply (in addition to SPU), and their water and sewer rates. A complete set of this data by wholesale customer and by year is of critical importance in Seattle Public Utilities' efforts to better forecast wholesale demand. Wholesale customers often find the current and historical information provided in this report useful in their own analysis and planning. It also allows them to see how they compare to other wholesale customers and Seattle in a number of areas.

This report summarizes much of the data that was collected in the 2008 wholesale customer survey and is the 15th year the report has appeared in this format. ***Seattle Public Utilities appreciates the time and effort each wholesale customer has taken in completing and returning the survey.*** Comparative information is presented on water rates, bills and consumption patterns. Questions about this report or requests for data from the surveys should be directed to Bruce Flory at (206) 684-5859. Copies of current and past reports (back to 2005) can be downloaded from the wholesale customers page of SPU's website.

Overview

About half the water produced by Seattle Public Utilities is sold directly to consumers in Seattle's direct service area. The rest is sold wholesale to 25 neighboring cities and water districts. These wholesale customers are listed below.

Wholesale Customers of Seattle Public Utilities

Cities

- City of Bellevue[1]
- City of Bothell
- City of Duvall
- City of Edmonds
- City of Kirkland[1]
- City of Mercer Island
- City of Redmond[1]
- City of Renton
- City of Tukwila[1]

Water Districts

- Cedar River Water & Sewer District
- Coal Creek Utility District
- Highline Water District
- Lake Forest Park Water District
- Northshore Utility District
- Olympic View Water & Sewer District
- Shoreline Water District
- Skyway Water & Sewer District[1,2]
- Soos Creek Water & Sewer District
- Woodinville Water District
- Water District No. 20[3]
- Water District No. 45
- Water District No. 49
- Water District No. 90
- Water District No. 119
- Water District No. 125

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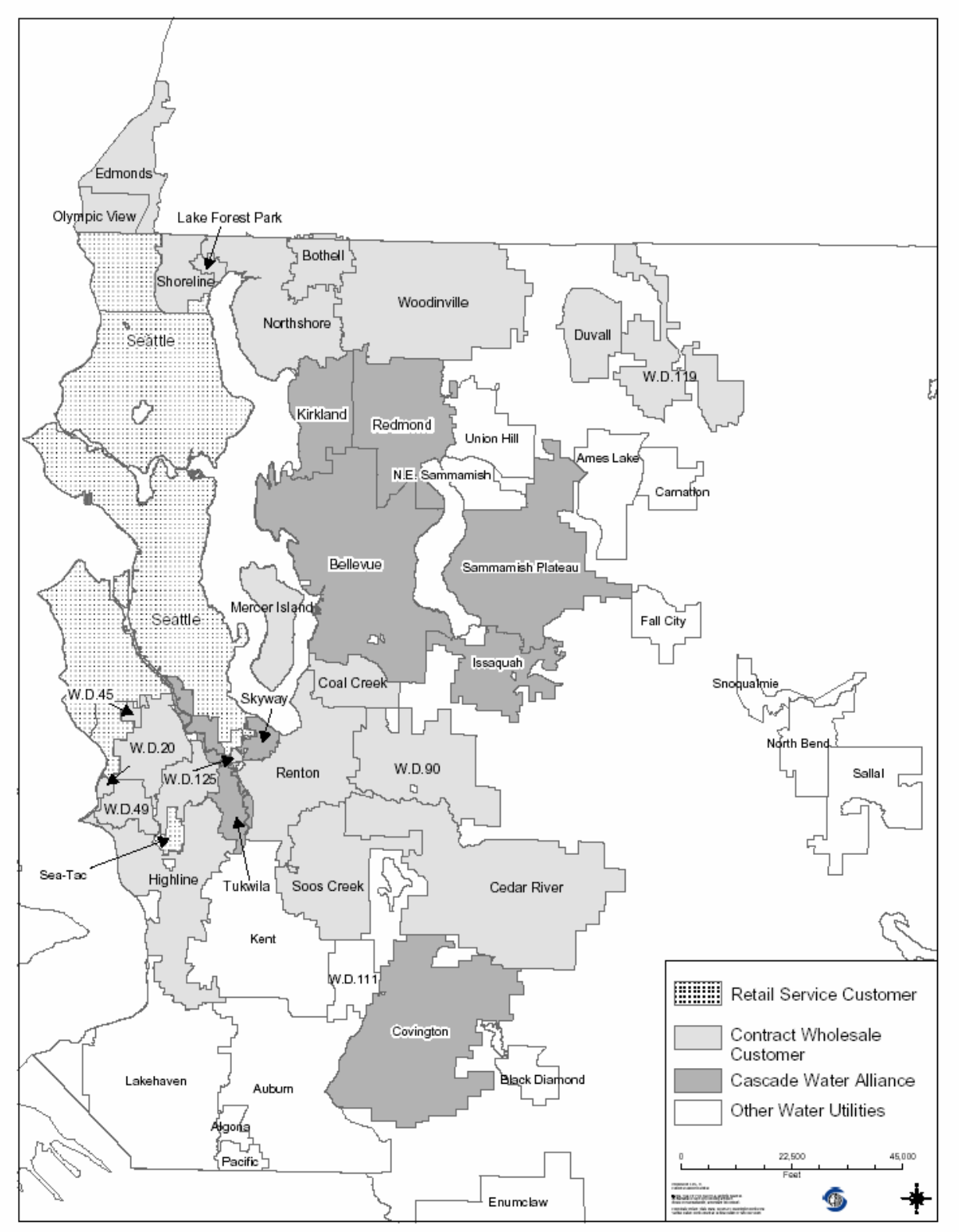
[1] Bellevue, Kirkland, Redmond, Skyway, and Tukwila are members of the Cascade Water Alliance which signed a block supply contract with SPU effective January 1, 2004.

[2] Skyway and Bryn Mawr-Lakeridge merged in 1999. The name of the merged utility was changed to Skyway in 2002.

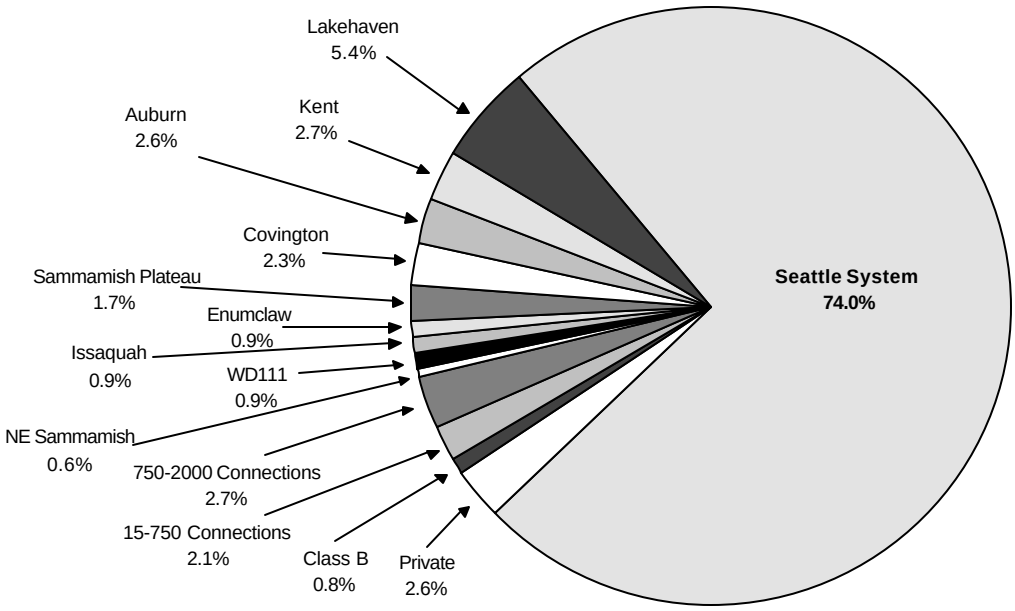
[3] Water District 85 was merged with Water District 20 in 2003.

Water Utilities in King County



While there are almost 1,500 public water systems in King County and an estimated fourteen thousand private systems, the 45 largest water utilities serve 95% of the county's population. Seattle and its wholesale customers alone provide water to about 74% of the population of King County as well as 43,000 people in the southwest corner of Snohomish County.

Percent of Population Served by Water Providers in King County



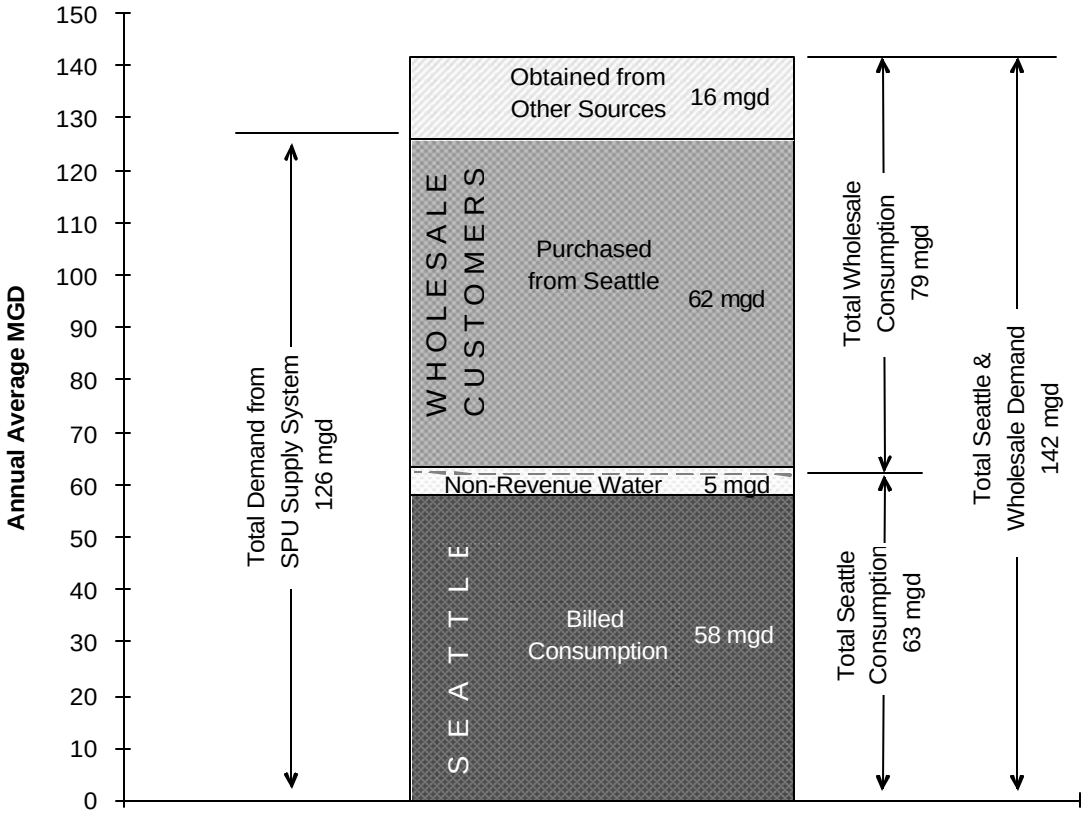
Supply: Seattle Public Utilities has two surface water sources and a small ground water source: the Cedar River system, the South Fork Tolt Reservoir, and the Seattle Well Field (used primarily for summer peaking). On average, the Cedar River system provides about 70 percent of total supply, the South Fork Tolt system delivers 29 percent, and the Seattle Well Field delivers 1 percent. With the addition of the Tolt Treatment Facility in 2001, total annual average firm yield from the current system is estimated at 171 million gallons per day (mgd).

A number of Seattle's wholesale customers have their own sources of supply, which reduce their demand from Seattle. These utilities and the approximate annual capacity of their sources are listed below:

- **Edmonds** – Purchased all of its water from Alderwood in 2006.
- **Highline -** Wells, 1.9 mgd
- **Lake Forest Park -** Well, 0.4 mgd
- **Olympic View** - Surface Water, 0.5 mgd
- **Redmond** - Wells, 2.7 mgd
- **Renton -** Wells, 13.2 mgd.
- **Skyway** - Well, 0.2 mgd
- **Water District 90** - 0.6 mgd

Demand: Seattle and wholesale water demand totaled 142 mgd in 2007, down from 147 mgd in 2006. Of that, 126 mgd came from the SPU supply system and 16 mgd was obtained from wholesale customers' own sources of supply. Various components of Seattle and wholesale demand are shown in the chart, below[4]. Seattle demand was 63 mgd including 4 mgd of non-revenue water. Total wholesale demand of 79 mgd consisted of 63 mgd from Seattle (62 mgd purchased and 1 mgd transmission losses) and 16 mgd obtained from other sources. Included in wholesale demand, but not shown separately on the chart, is about 6.5 mgd of distribution system non-revenue water.

Components of Seattle and Wholesale Water Demand in MGD: 2007

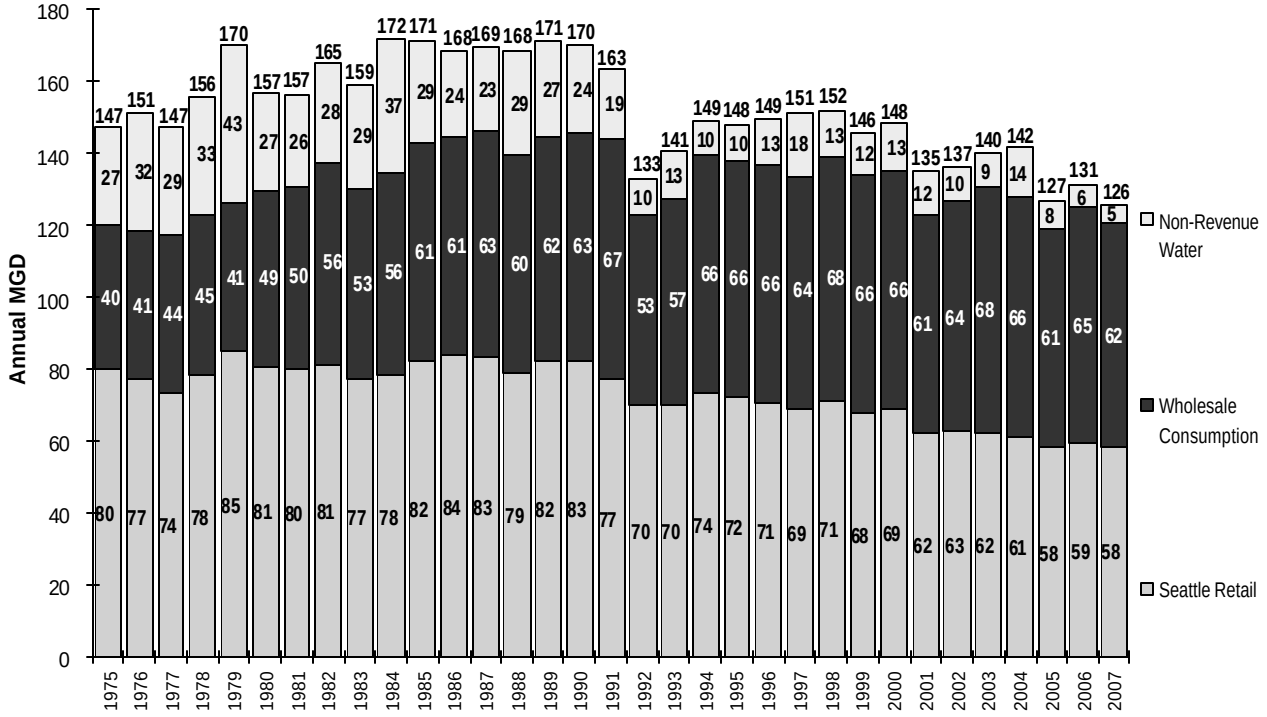


How Seattle system water consumption has changed over time can be seen in the graph below. While population has risen steadily since 1975, total water demand leveled off during the 1980s at about 170 mgd before dropping off sharply due to the 1992 drought. During the rest of the 1990s, the combined effects of higher water rates, the 1993 plumbing code, conservation, and improved system operations kept total consumption at or just under 150 mgd – well below pre-drought levels. The economic slowdown in the early part of this decade, voluntary curtailment in 2001, and the impact of the 1% Conservation Program (begun in 2000) and the Saving Water Partnership further extended the downward trend so that in recent years, water demand has dipped below 130 mgd.

[4] Components may not add to total due to rounding.

Wholesale demand from the Seattle water system grew by two thirds from 40 mgd in 1975 to 67 mgd in 1991. Following the 1992 drought though, wholesale demand leveled off (averaging 66 mgd) for the rest of the decade before declining slightly since 2000. Seattle retail demand was essentially flat between 1975 and 1991 (averaging 80 mgd) but has trended downward ever since. Finally, non-revenue water was cut by more than half due to actions taken by Seattle just before and during the 1992 drought.[5] Seattle's recent program to cover all its in-city reservoirs plus better monitoring of overflows from the remaining open reservoirs has further reduced non-revenue water.

Components of Annual Water Demand in MGD
Seattle Regional System: 1975-2007



Water Rates

Residential and commercial rates in effect during 2008 for each wholesale customer and Seattle are summarized in Tables 1.1 and 1.2. Quite a variety of rate levels and structures are evident. All wholesale customers levy a commodity charge and a fixed monthly charge or meter charge (which, in a few cases, also includes a minimum level of consumption per month). There are three basic commodity rate structures and one hybrid: uniform rates, seasonal rates, inclined block rates, and seasonal rates with blocks. Fixed monthly charges on a ¾" meter, the usual size for residential meters, average $13.50 per month with a range of $6.00 per month to $27.82 per month. The range of fixed monthly charges on 2" meters, typical of commercial accounts, is even greater: $13.50 per month to $274.60 per month.

[5] These actions included reducing in-city reservoir overflows, eliminating regular flushing of Green Lake, relining leaky reservoirs, changing reservoir washing practices, and rehabilitating and replacing other reservoirs.

Residential Rates: Of the 25 wholesale customers, only two (Edmonds and Lake Forest Park) have a uniform rate structure, i.e., a single rate per ccf for all volumes and times of the year. The average uniform rate is $2.11 per ccf. (These rates appear in the table as inclined block structure rates with just one block.) Another three wholesale customers (Tukwila and Water Districts 20 and 125) have straight seasonal rates: a single rate in the winter and a single higher rate in the (typically 4 month) summer season. The average winter rate is $1.99/ccf and the average summer rate is $2.72/ccf. Fifteen wholesale customers have simple inclined block rates with from two to five blocks. The size of the blocks is indicated in the "Break Points" column of the tables. For example, Water District 45 has three blocks: the first from 0 to 5 ccf per month, the second from 6 to 25 ccf per month and the last for 26 or more ccf per month. There is considerable variation in the number and size of the blocks and in the rates themselves. Finally, five wholesale customers and Seattle use various combinations of seasonal and block rates. Olympic View and Water District 119 have a block structure that shifts to higher rates in the summer. So do Soos Creek and Mercer Island except there is no higher summer rate in the first block for Soos Creek or in the first two blocks for Mercer Island. Seattle and Highline have single winter rates with blocks only in the summer.

The diversity of residential rate structures results in very different price signals to customers during the peak season. Residential customers of wholesale utilities face marginal rates ranging from $1.82 to $6.84 per ccf. The twenty wholesale customers with block rate structures have summer end-block rates that average $4.76 per ccf. The end-block rates for four of these now exceed $6.00 per ccf. Seattle still has the highest summer end-block rate: $8.55 per ccf for consumption in excess of 18 ccf per month.

Commercial Rates: Less than half of all wholesale customers (10) apply the same rates and rates structures to both their commercial and residential customers. Three wholesale customers change the rates charged but maintain the same structure. The remaining twelve plus Seattle change the rates *and* the structure, usually shifting from inclined block and hybrid structures to uniform or seasonal rates, but occasionally just reducing the number of blocks. The highest rate is $6.84 per ccf and the average summer end block rate (including uniform and seasonal rates) is $3.66 per ccf.

Customer Bills: Figures 1.1 through 1.4 and Tables 1.3 and 1.4 compare monthly residential bills across wholesale customers. Three consumption levels, defined below, are used throughout:

Monthly Consumption Levels Used in Calculating Bills

Level of Household Consumption	Winter	Summer	Average Annual
Low	4 ccf/mo	6 ccf/mo	4.67 ccf/mo
Medium	8 ccf/mo	12 ccf/mo	9.33 ccf/mo
High	16 ccf/mo	24 ccf/mo	18.67 ccf/mo

Figures 1.1, 1.2 and 1.3 graphically display monthly residential bills by wholesale customer at low, medium, and high levels of consumption. The figures also rank wholesale customers (including Seattle) by the size of their bills revealing two interesting facts. One is that there is quite a difference in what households pay for water among different utilities. Monthly bills from utilities with the highest rates are as much as two and a half times as large as those from utilities with the lowest rates. Average monthly bills range from $14.98 to $37.70 at the low level of consumption and $42.74 to $117.01 at the high level of consumption.

A utility's average residential water bill is a function of both its rates *and* its average residential consumption. The problem with most comparisons of water bills across utilities (including the comparisons in Figures 1.1 through 1.3) is that the comparisons use a single level of consumption to calculate the bills. But if the chosen level of consumption is typical for one utility, it may not be for another. Consider two utilities having exactly the same rates. One could have higher average bills than the other because its average consumption is higher. To correctly compare average bills across utilities, each utility's bill should be calculated at its average level of consumption. This has been done in Figure 1.4. Average monthly residential consumption ranges from 6.0 ccf per month in Seattle to 9.2 ccf per month in Lake Forest Park. In Figure 1.4, Renton has the lowest average residential bill and Soos Creek has the second lowest. Lake Forest Park tops the list having both the highest average consumption and among the highest rates.

The other phenomenon revealed by the graphs is how much wholesale customer rankings can change at different levels of consumption, i.e., the wholesale customer with the lowest bill at one level of consumption may be far from the lowest at other levels of consumption. For example, Water District 20 has the fifth highest bill at low consumption but the fourth *lowest* bill at high consumption. Skyway, Mercer Island, Soos Creek, and Cedar River are good examples of the opposite pattern, moving up 9 to 10 positions in the bill rankings between low and high consumption levels. Finally others, such as Duvall, Tukwila, and Renton maintain their relative ranking at all levels of consumption. (Table 1.4 summarizes the different rankings from Figures 1.1 through 1.3.)

There are two factors that explain the shifts in relative rankings of wholesale customer bills at different levels of consumption. One is different rate structures. For example, an inclined block structure tends to favor low volume users while a flat rate structure favors high volume users. Perhaps even more important is the relative magnitudes of the fixed and variable components of the rates. Higher meter charges relative to volume charges result in higher bills for low volume users and proportionally lower bills for high volume users. The combined impact of these factors can be seen in Table 1.4. In general, wholesale customers with relatively high meter charges and relatively low volume charges move down in the rankings (their bills get smaller compared to other wholesale customers) as consumption increases. Wholesale customers with lower meter charges and higher or steeply inclining volume charges tend to move in the opposite direction, placing higher in the rankings as consumption increases. In many cases, the "meter charge effect" offsets the "rate structure effect" so that the wholesale customer maintains its ranking across all consumption levels.

Table 1.3 displays monthly bills at the medium level of consumption (graphed in Figure 1.2) and the difference between winter and summer bills by wholesale customer. Note that the summer/winter differential is not the differential in *rates* but in *bills*. Many wholesale customers have a differential of less than 50% even though bills are calculated with 50% more consumption in summer than in winter. This means that the average rate charged per ccf by these wholesale customers is actually *less* in the summer than in the winter. This seemingly contradictory result is due to the impact of the meter charge which is spread over a greater number of ccf in the summer. This effect diminishes as the level of consumption rises and the meter charge represents a smaller and smaller proportion of the total bill. Tukwila, Soos Creek, Seattle, Duvall, Water District 20, Highline, and Mercer Island, have differentials of more than 50%, a sign that the average rate charged per ccf in the summer is greater than in the winter.

Consumption Patterns

Annual Consumption: Figures 2.1 and 2.2 display annual water purchases from SPU and annual retail water sales by wholesale customer for 2007. Note that annual purchases from SPU are often, but not always, a good indicator of the actual magnitude of wholesale customers' retail demands. Purchases from SPU understate the actual demand of wholesale customers who have their own sources of supply or who buy from others. This is the case for the two wholesale customers at the bottom of the chart, Lake Forest Park, Edmonds, and Renton, as well as Redmond[6] a little farther up, who buy very little water directly from SPU. Other wholesale customers such as Bellevue and Kirkland sell some of what they buy from SPU to other wholesale customers. Their retail demand can be quite a bit less than their purchases from SPU.

Tables 2.1 and 2.2 provide a historical perspective by displaying 14 years of data on annual retail consumption by wholesale customer and wholesale purchases from Seattle.

Non-Revenue Water: Figure 2.3 ranks all wholesale customers by percent of non-revenue water in 2007, i.e., the percent of their total water purchases and production that is not sold. Percent non-revenue water for 2004, 2005 and 2006 is also shown. Table 2.3 shows annual distribution system percent non-revenue water by wholesale customer for the years 1994 through 2007 and the average for each wholesale customer over that period. Percent non-revenue water is calculated as follows:

$$(PS + PO + OS - RS - WS) \div (PS + PO + OS)$$

where

PS = Water Purchased from Seattle
PO = Water Purchased from Others
OS = Water obtained from Own Supply
RS = Water Sold Retail
WS = Water Sold Wholesale

[6] Note that Redmond did not participate in this year's survey so data on Redmond's retail water sales is not available.

There are many causes of non-revenue water. Some are necessary and/or beneficial such as water main flushing, reservoir cleaning and water taken from hydrants for fire fighting, street cleaning and some construction projects. Others, however, are undesirable and represent wasted water or lost revenues. These include leaks from pipelines and reservoirs, inadvertent reservoir overflows, theft and slow customer meters. For a newer water system efficiently operated, the percentage of non-revenue water might be expected to creep down towards 5%. Non-revenue water in the 10% to 15% range should prompt some analysis of what might be the cause, and non-revenue water in excess of 15% is definitely a call to action.[7]

The average level of non-revenue water for all wholesale customers in 2007 was 8.6%[8], a little higher than usual. Since 1994, non-revenue water has varied from 5.3% to 9.4% averaging 7.0%.

Measurement problems contribute to at least some of the year-to-year variation in non-revenue water evident in Table 2.3 and Figure 2.3. Billing lags and inaccurate supply meters are two problems that make the precise measurement of non-revenue water difficult. Because of differences in the length of billing lags, the measure of annual wholesale water sales generally doesn't span the exact same period as the measure of annual purchases and production. These two measures of water consumption, the difference of which provides our estimate of non-revenue water, may be offset by as much as two months. Fortunately, these months are in the middle of winter when consumption tends to be relatively constant from month to month. The problem would be much worse if the end of the year coincided with the peak season.

Slow wholesale meters have represented a much more serious problem in measuring non-revenue water by reducing the apparent difference between the amount of water entering a wholesale customer's system and the amount of water sold by that wholesale customer. Extremely low levels of non-revenue water (under 3%) suggest that there is probably some kind of metering problem. Negative non-revenue water, i.e., when metering data implies that more water has been sold than was produced and/or purchased, is a sure sign that one or more meters measuring incoming water is slow. Until recently, there's always been at least one, and as many as six, wholesale customers showing negative non-revenue water. In 2004 and again in 2007, no wholesale customer had negative non-revenue water, indicating some improvement in the maintenance and replacement of wholesale supply meters.

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[7] The new state Water Efficiency Rule requires water utilities to report their Distribution System Leakage (DSL) to the Department of Health annually, and to take action if the 3-year moving average exceeds 10%. Note that non-revenue water is different that DSL. All water produced or purchased but not sold is considered non-revenue water. DSL starts with non-revenue water but subtracts out all authorized uses of water that do not generate revenue but can be measured or estimated. These include water used for reservoir cleaning and overflowing, main and hydrant flushing, firefighting, and other hydrant use such as construction and street sweeping. If measured, transmission losses can also be deducted in calculating DSL. A utility's estimate of DSL will be less than its non-revenue water to the extent that these non-revenue-generating but authorized uses are taken into account.

[8] Seattle non-revenue water averaged 6.4% for 2005 through 2007. Percent of non-revenue water for Seattle is not included in Figure 2.3 because it is not directly comparable to wholesale non-revenue water. For wholesale customers, non-revenue water is a distribution system concept. Water lost in transmission from Seattle's sources to wholesale meters is not part of the calculation. However, Seattle non-revenue water consists of both distribution and transmission losses to Seattle plus wholesale transmission losses. Comparing Seattle and wholesale non-revenue water would be misleading unless the distribution system component of Seattle non-revenue water could be isolated. Unfortunately, that is not possible with currently available data.

Per Household and Per Account Consumption: The two graphs in Figure 2.4 rank wholesale customers and Seattle on the basis of 2007 *single family* consumption *per household* and *total* consumption *per account*. The first measure is often used by wholesale customers in their analysis of current and projected water demand and in their calculation of Equivalent Residential Units (ERUs). The wholesale customer with the highest single family consumption per household is Lake Forest Park at 226 gallons per day (gpd) followed by Bothell at 224 gpd. The weighted wholesale average for 2007 was 191 gpd (7.8 ccf per month). Seattle reported the lowest consumption per household with 145 gpd. The variance in per household use between wholesale customers is due to more than just different attitudes towards water conservation. Wholesale customers at the top of the list (Lake Forest Park, Bothell, Woodinville, Mercer Island) tend to have some or all of the following characteristics associated with higher water use: larger lot sizes, higher household incomes, and higher average persons per household. Utilities (including Seattle) with consumption per household at the low end of the scale tend to have just the opposite characteristics: denser development with smaller lots, lower household incomes, and fewer persons per household.

In addition to annual average consumption per single family household, the first graph also shows peak (4 month) season consumption per household.

There is much greater variation in total consumption per account across wholesale customers as can be seen in the second graph in Figure 2.4. Tukwila, with the lowest single family consumption per household, has by far the highest total consumption per account of 893 gpd. This is about five times Skyway's per account consumption of 178 gpd. The weighted wholesale average is 310 gpd. Total consumption per account in Seattle is slightly higher than the wholesale average at 315 gpd. This is *not* an indication of the relative efficiency of water use among the different utilities. Rather, higher levels of total consumption per account are closely associated with higher proportions of non-residential and multifamily customers. Wholesale customers at the bottom of the list serve predominantly single family customers while Tukwila's customers are primarily commercial, industrial and multifamily. About 90% of the water sold by Tukwila goes to other than single family residences. Bothell has the second highest level of consumption per account and also the second highest proportion of non-residential and multifamily consumption (68%). Total consumption per account and percent of consumption that is *not* single family are highly correlated all the way down the line.

Finally, Table 2.4 provides some history on single family consumption per household by wholesale customer for the period 1994-2007. The overall downward trend in average consumption per household for both wholesale customers and Seattle is apparent in Figure 2.5. The range, from low to high, of wholesale consumption per household over time is also depicted in the graph.

TABLES AND FIGURES

Water Rates and Bills

Water Consumption Patterns

Table 1.1

A Comparison of 2008 Residential Rates

Purveyor:	3/4" mtr ch per month	Includes Minimum	Seasonal		Inclined Block					
			Winter	Summer*	1st	2nd	3rd	4th	5th	Break Points**
W.D. 20	$17.50	0	$1.34	$2.19	-	-	-	-	-	-
W.D. 45	$13.50	0	-	-	$1.75	$2.75	$3.75	-	-	5/25
W.D. 49	$12.00	0	-	-	$2.25	$2.75	$3.85	-	-	5/8
W.D. 90	$17.75	2.5	-	-	$2.25	$2.65	$3.15	-	-	7.5/12.5
W.D. 119***	$27.50	0	Block	Block	$1.95/$2.50***	$2.70/$3.45***	$3.50/$4.45***	$4.31/$4.89***	-	7/14/21
W.D. 125	$10.50	0	$2.20	$2.60	-	-	-	-	-	-
Bellevue	$12.79	0	-	-	$2.55	$3.52	$4.52	$6.73	-	10/15/50
Bothell	$10.06	0	-	-	$2.04	$2.98	$3.85	$4.90	$5.59	5/10/15/25
Cedar River	$16.22	2.5	-	-	$2.10	$3.68	$3.99	$6.47	-	5 /15/25
Coal Creek	$13.30	0	-	-	$2.12	$2.76	$3.52	$5.05	-	5/15/50
Duvall	$21.37	2	-	-	$3.18	$4.09	$5.00	$5.91	$6.84	4/6/8/10
Edmonds	$8.77	0	-	-	$1.82	-	-	-	-	-
Lake Forest Park	$25.24	0	-	-	$2.40	-	-	-	-	-
Highline	$9.75	0	$2.98	Block	$2.98	$3.80	-	-	-	$4.00
Kirkland	$14.43	2	-	-	$3.45	$4.53	-	-	-	12
Mercer Island***	$7.07	0	Block	Block	$1.54	$2.62	$3.16/$3.26***	$4.26/$4.56***	-	4/8/12
Northshore	$14.50	0	-	-	$2.00	$2.75	$3.75	$4.75	-	6.5/8.5/12.5
Olympic View***	$11.53	0	Block	Block	$1.64/$1.75***	$2.40/$2.74***	-	-	-	20
Redmond	$10.35	0	-	-	$1.46	$2.84	$4.20	$5.57	-	5/11/20
Renton	$10.10	0	-	-	$1.47	$1.97	$2.47	-	-	$0.36
Shoreline	$19.62	0	-	-	$1.88	$2.02	$2.50	$3.18	$4.41	2/4/7/15
Skyway	$11.28	0	-	-	$2.50	$3.17	$4.00	$5.06	-	4/6/12
Soos Creek***	$8.85	0	Block	Block	$1.39	$2.97/$3.56***	$3.72/$4.46***	$4.25/$5.10***	-	5/10/15
Tukwila	$6.00	0	$2.43	$3.38	-	-	-	-	-	-
Woodinville	$11.75	0	-	-	$2.65	$3.91	$5.06	$6.32	-	6/12/25
Seattle***	$9.40	0	$2.62	Block	$2.88	$3.35	$8.55	-	-	5/18

* All utilities with seasonal rates use a 4 month peak season except Soos Creek which has a 3 month peak season.

** Break Points are the number of ccf per month at which the next rate block is attained. For example, W.D. 45 charges $1.75 per ccf for the first 5 ccf consumed, $2.75 per ccf for the next 20 ccf per month, and $3.75 per ccf for all consumption in excess of 25 ccf per month.

*** WD 119, Mercer Island, Olympic View, Soos Creek, and Seattle have both seasonal and block rates. For example, WD 119's 2nd block rate of $2.70/ccf increases to $3.45 during the peak season.

Table 1.2

A Comparison of 2008 Commercial Rates

Purveyor:	2" mtr ch per month	Includes Minimum	Seasonal		Inclined Block					
			Winter	Summer*	1st	2nd	3rd	4th	5th	Break Points**
W.D. 20	$87.50	0	$1.34	$2.19	-	-	-	-	-	-
W.D. 45	$13.50	0	-	-	$1.75	$2.75	$3.75	-	-	5/25
W.D. 49	$156.00	0	-	-	$2.60	-	-	-	-	-
W.D. 90	$51.50	2.5	-	-	$3.15	-	-	-	-	-
W.D. 119***	$40.50	0	Block	Block	$1.95/$2.50***	$2.70/$3.45***	$3.50/$4.45***	$4.31/$4.89***	-	7/14/21
W.D. 125	$35.75	0	$2.20	$2.60	-	-	-	-	-	-
Bellevue	$58.85	0	$2.60	$3.65	-	-	-	-	-	-
Bothell	$98.16	0	$2.37	$4.06	-	-	-	-	-	-
Cedar River	$54.70	2.5	-	-	$2.10	$3.68	$3.99	$6.47	-	5 /15/25
Coal Creek	$70.75	0	$2.44	$3.19	-	-	-	-	-	-
Duvall	$21.37	2	-	-	$3.18	$4.09	$5.00	$5.91	$6.84	4/6/8/10
Edmonds	$60.85	0	-	-	$1.82	-	-	-	-	-
Lake Forest Park	$108.24	0	-	-	$2.20	-	-	-	-	-
Highline	$84.74	0	$2.98	Block	$2.98	$3.80	-	-	-	$4.00
Kirkland	$58.19	0	-	-	$4.01	-	-	-	-	-
Mercer Island	$56.56	0	$1.72	$4.20	-	-	-	-	-	-
Northshore	$100.00	0	-	-	$2.80	$3.20	$3.50	$3.80	-	34.5/45/66.5
Olympic View***	$41.93	0	Block	Block	$1.64/$1.75***	$2.40/$2.74***	-	-	-	160
Redmond	$55.50	0	$1.92	$2.96	-	-	-	-	-	-
Renton	$60.54	0	-	-	$2.01	-	-	-	-	-
Shoreline	$274.60	0	-	-	$2.50	$3.82	-	-	-	48
Skyway	$136.44	0	-	-	$3.21	$3.81	-	-	-	$48.00
Soos Creek***	$44.40	0	Block	Block	$1.39	$2.97/$3.56***	$3.72/$4.46***	$4.25/$5.10***	-	5/10/15
Tukwila	$50.00	0	$3.15	$4.33	-	-	-	-	-	-
Woodinville	$94.79	0	-	-	$3.22	$3.53	-	-	-	prior winter avg
Seattle	$21.70	0	$2.62	$3.35	-	-	-	-	-	-

* All utilities with seasonal rates use a 4 month peak season except Soos Creek which has a 3 month peak season.

** Break Points are the number of ccf per month at which the next rate block is attained. For example, W.D. 45 charges $1.75 per ccf for the first 5 ccf consumed, $2.75 per ccf for the next 20 ccf per month, and $3.75 per ccf for all consumption in excess of 25 ccf per month.

*** WD 119, Olympic View, and Soos Creek have both seasonal and block rates. For example, WD 119's 2nd block rate of $2.70/ccf increases to $3.45 during the peak season.

Figure 1.1

Average Monthly Residential Bills at 2008 Rates and LOW Consumption

(4 ccf/mo Winter and 6 ccf/mo Summer Consumption)

Purveyor	Average Monthly Bills
W.D. 119	$37.70
Lake Forest Park	$36.44
Duvall	$30.46
Shoreline	$29.09
W.D. 20	$25.45
Bellevue	$24.69
Highline	$24.20
Woodinville	$24.12
Northshore	$23.83
Kirkland	$23.63
Coal Creek	$23.41
Skyway	$23.39
W.D. 49	$22.67
W.D. 90	$22.63
Seattle	$22.30
W.D. 45	$22.00
W.D. 125	$21.57
Cedar River	$21.30
Bothell	$19.89
Olympic View	$19.40
Tukwila	$19.24
Redmond	$17.62
Edmonds	$17.26
Renton	$17.13
Soos Creek	$15.88
Mercer Island	$14.98

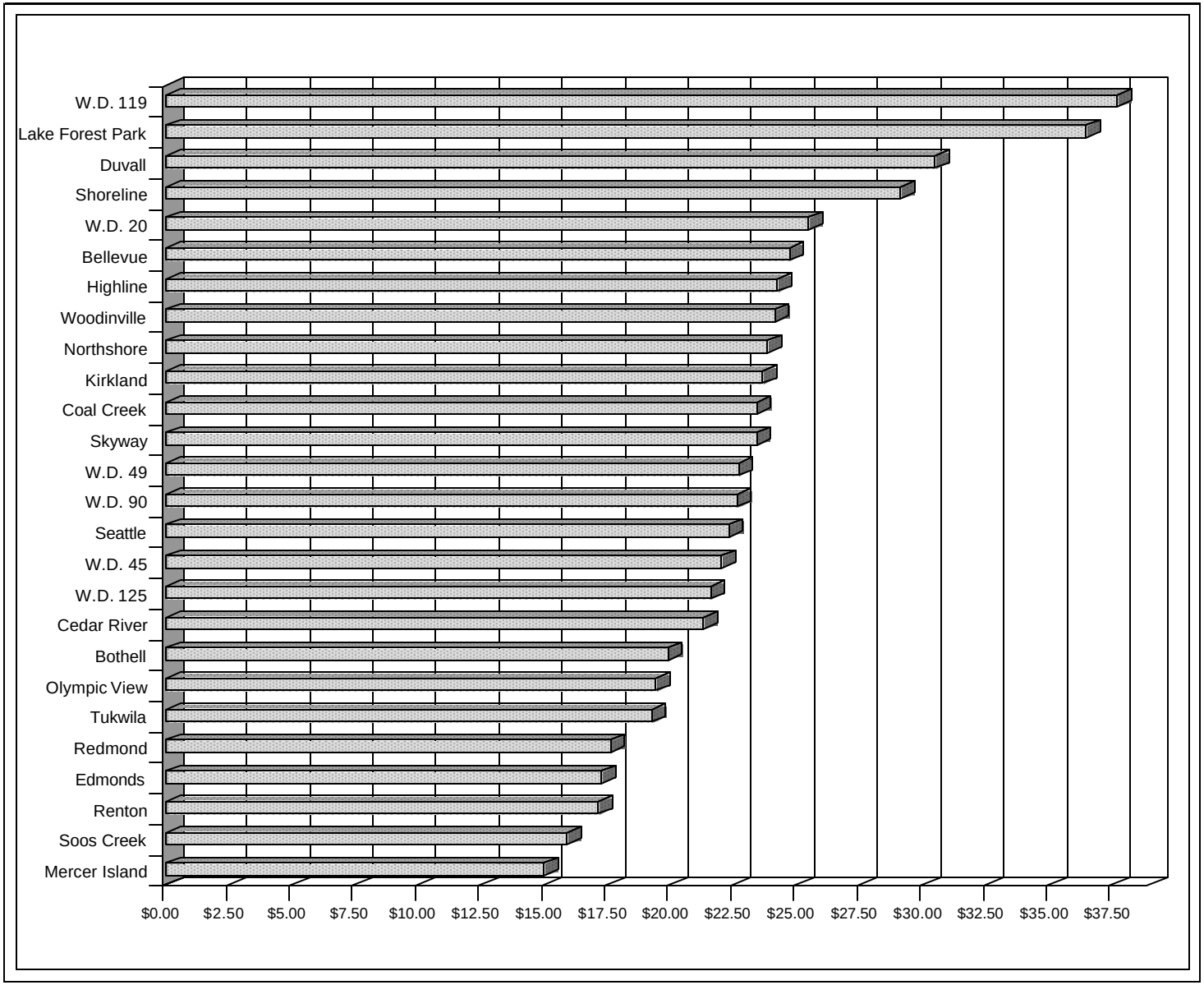


Figure 1.2

Average Monthly Residential Bills at 2008 Rates and MEDIUM Consumption

(8 ccf/mo Winter and 12 ccf/mo Summer Consumption)

Purveyor	Average Monthly Bills
Duvall	$54.41
W.D. 119	$49.98
Lake Forest Park	$47.64
Shoreline	$42.35
Skyway	$40.95
Woodinville	$40.68
Highline	$39.75
Kirkland	$39.73
Cedar River	$37.42
Bellevue	$37.24
W.D. 49	$36.63
Northshore	$36.46
Seattle	$35.99
Coal Creek	$35.86
W.D. 45	$34.17
W.D. 90	$33.86
Bothell	$33.75
W.D. 20	$33.41
W.D. 125	$32.63
Tukwila	$32.48
Redmond	$30.41
Soos Creek	$30.14
Mercer Island	$28.06
Olympic View	$27.27
Renton	$25.99
Edmonds	$25.76

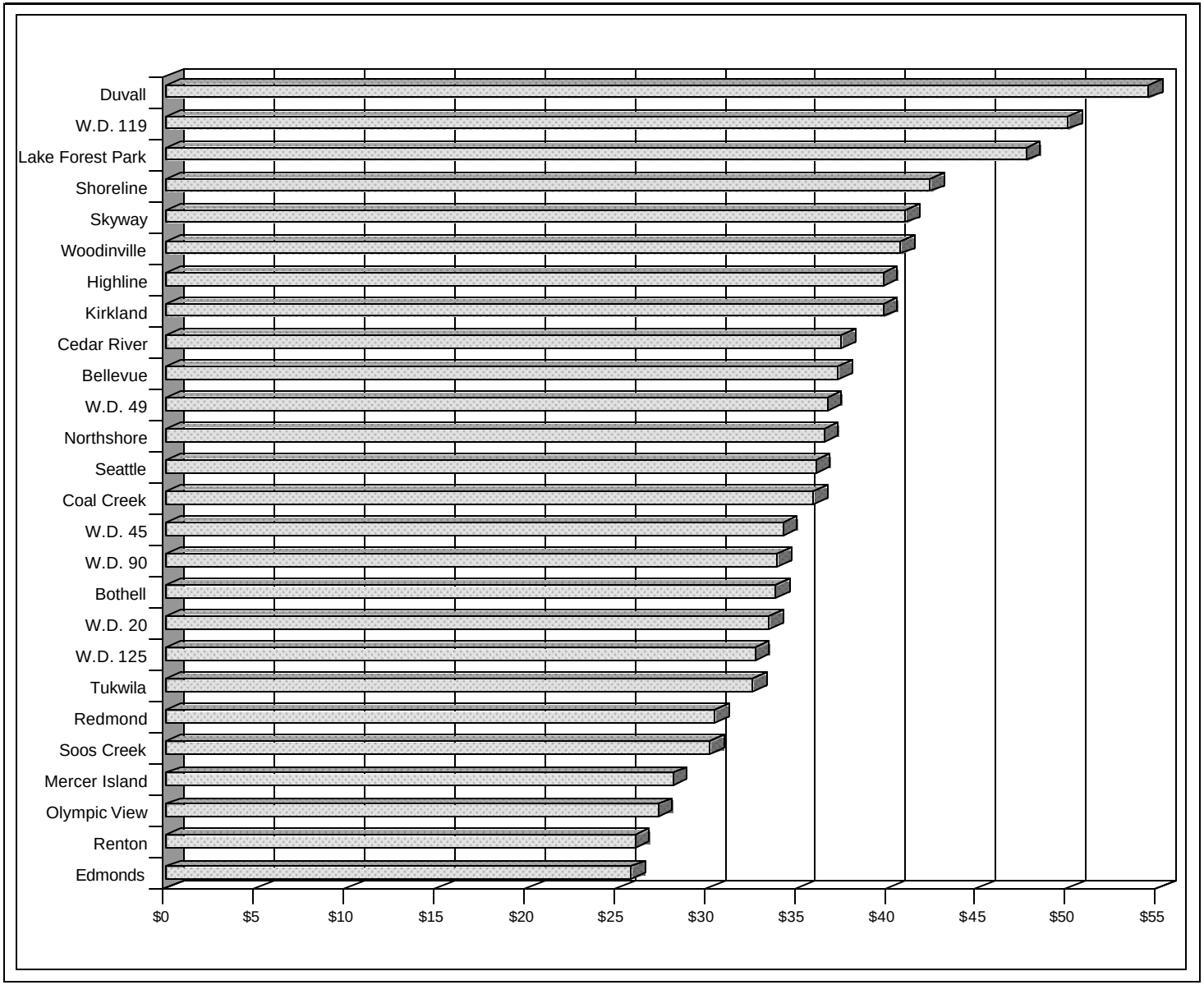


Figure 1.3

Average Monthly Residential Bills at 2008 Rates and HIGH Consumption

(16 ccf/mo Winter and 24 ccf/mo Summer Consumption)

Purveyor	Average Monthly Bills
Duvall	$117.01
Skyway	$85.35
Woodinville	$84.84
W.D. 119	$83.02
Kirkland	$79.13
Northshore	$77.29
Shoreline	$76.54
Seattle	$73.76
Cedar River	$72.90
W.D. 49	$72.57
Bellevue	$72.46
Bothell	$72.38
Highline	$70.84
Lake Forest Park	$70.04
Redmond	$68.72
Soos Creek	$68.38
Mercer Island	$66.08
Coal Creek	$64.41
W.D. 90	$61.68
W.D. 45	$59.83
Tukwila	$58.96
W.D. 125	$54.77
W.D. 20	$49.31
Renton	$46.71
Olympic View	$44.34
Edmonds	$42.74

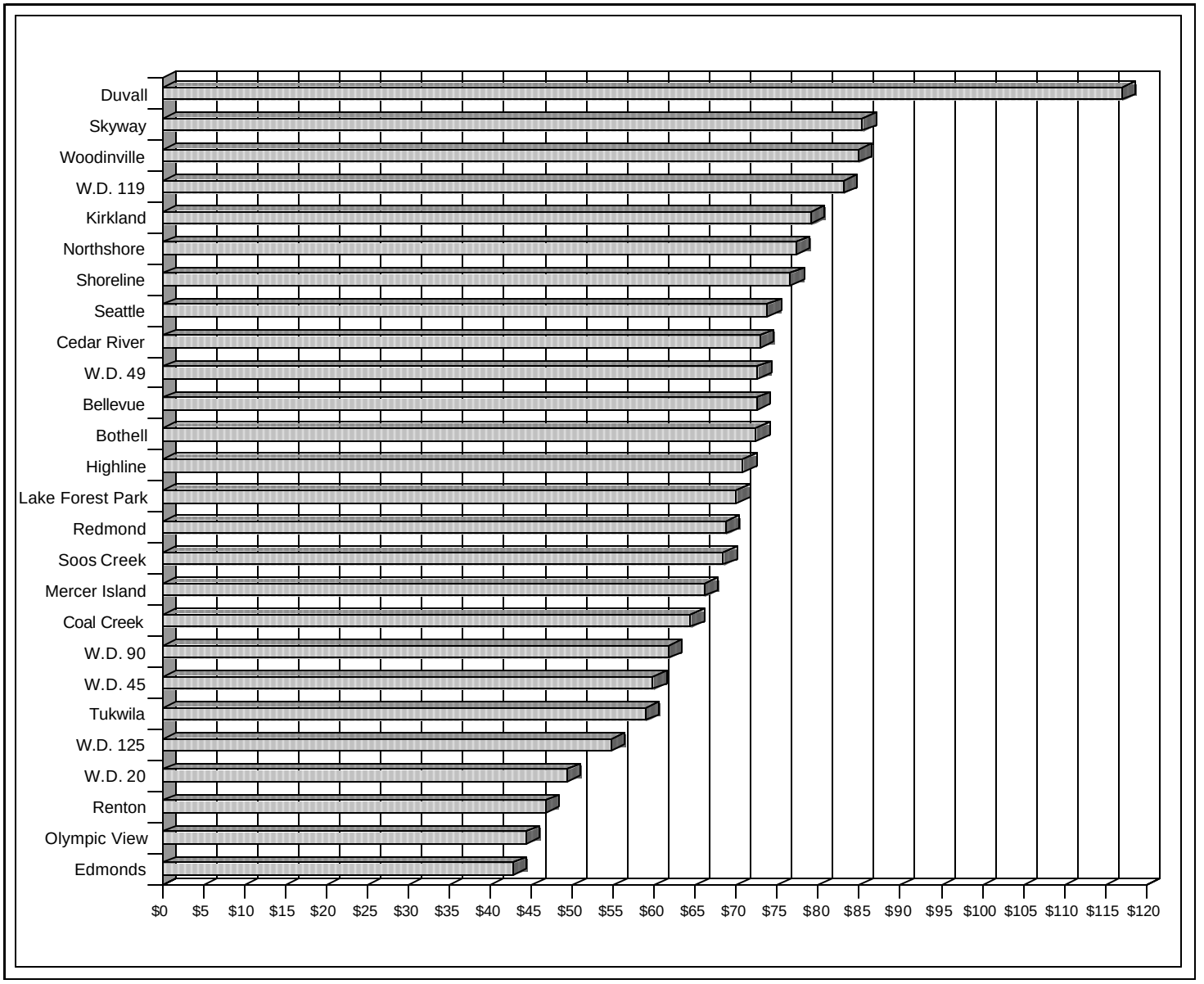


Figure 1.4

Average Monthly Residential Water Bills at Each Utility's Average Consumption

	Average Monthly	
	CCF	Bill
Lake Forest Park	9.2	$47.28
W.D. 119	7.6	$45.08
Woodinville	8.9	$39.10
Duvall	6.4	$38.06
Bellevue	8.5	$34.93
Kirkland	7.8	$34.29
Shoreline	6.3	$33.27
Highline	7.3	$32.81
Bothell	9.1	$32.61
Cedar River	7.9	$32.04
Coal Creek	7.9	$31.72
Northshore	7.6	$30.76
PURVEYOR AVG	7.8	$30.70
W.D. 90	7.7	$29.75
W.D. 49	7.1	$29.60
W.D. 125	8.0	$29.45
W.D. 20	6.8	$28.89
Skyway	6.0	$28.04
Mercer Island	8.9	$27.24
SEATTLE	6.0	$26.05
W.D. 45	6.3	$25.70
Olympic View	8.4	$25.53
Tukwila	6.6	$24.46
Edmonds	8.1	$23.19
Soos Creek	7.2	$22.88
Renton	7.3	$21.91
Redmond	No Data	

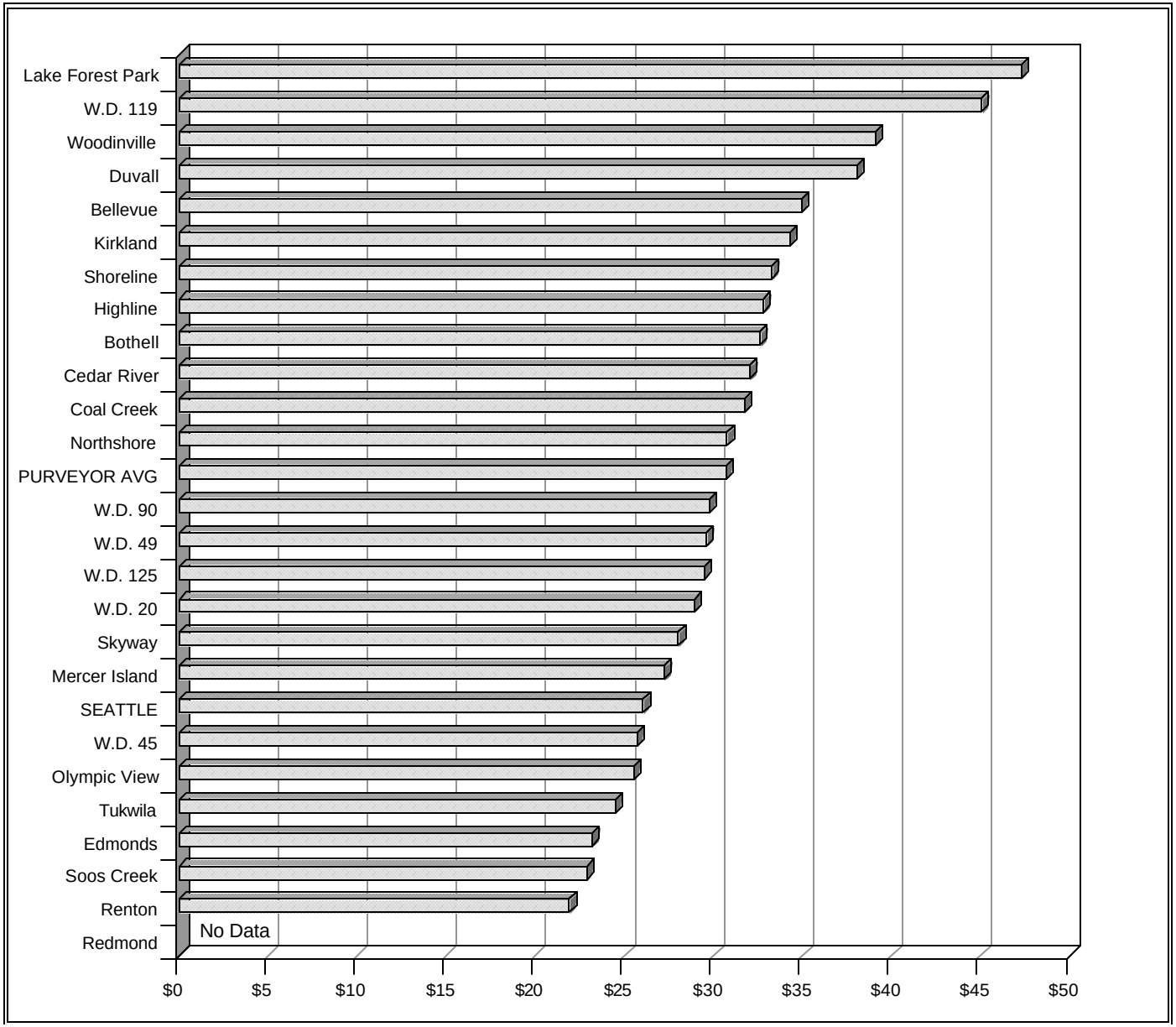


Table 1.3

AVERAGE ANNUAL, WINTER, AND SUMMER RESIDENTIAL BILLS

with 2008 Rates & Medium Consumption: 8 ccf/mo Winter, 12 ccf/mo Summer
Ranked from Highest to Lowest

Rank	Purveyor:	Monthly Residential Bills			Summer/Winter Differential*
		Avg. Annual	Winter	Summer	
1	Duvall	$54.41	$45.91	$71.41	55.5%
2	W.D. 119	$49.98	$43.85	$62.25	42.0%
3	Lake Forest Park	$47.64	$44.44	$54.04	21.6%
4	Shoreline	$42.35	$38.11	$50.83	33.4%
5	Skyway	$40.95	$35.62	$51.62	44.9%
6	Woodinville	$40.68	$35.47	$51.11	44.1%
7	Highline	$39.75	$33.59	$52.07	55.0%
8	Kirkland	$39.73	$35.13	$48.93	39.3%
9	Cedar River	$37.42	$32.51	$47.23	45.3%
10	Bellevue	$37.24	$33.19	$45.33	36.6%
11	W.D. 49	$36.63	$31.50	$46.90	48.9%
12	Northshore	$36.46	$31.63	$46.13	45.8%
13	Seattle	$35.99	$30.36	$47.25	55.6%
14	Coal Creek	$35.86	$32.18	$43.22	34.3%
15	W.D. 45	$34.17	$30.50	$41.50	36.1%
16	W.D. 90	$33.86	$30.33	$40.93	35.0%
17	Bothell	$33.75	$29.20	$42.86	46.8%
18	W.D. 20	$33.41	$28.22	$43.78	55.1%
19	W.D. 125	$32.63	$28.10	$41.70	48.4%
20	Tukwila	$32.48	$25.44	$46.56	83.0%
21	Redmond	$30.41	$26.17	$38.89	48.6%
22	Soos Creek	$30.14	$26.02	$42.52	63.4%
23	Mercer Island	$28.06	$23.71	$36.75	55.0%
24	Olympic View	$27.27	$24.65	$32.53	32.0%
25	Renton	$25.99	$23.36	$31.24	33.7%
26	Edmonds	$25.76	$23.33	$30.61	31.2%
WHOLESALE AVERAGE		**$36.28**	**$31.69**	**$45.64**	**44.0%**

* Note that the summer/winter differential is not the differential in rates but in bills. Most purveyors have a differential of less than 50% even though bills are calculated with 50% more consumption in summer than in winter. This means that the average rate charged per ccf by these purveyors is actually less in the summer than in the winter. This seemingly contradictory result is due to the impact of the meter charge which is spread over a greater number of ccf in the summer.

Table 1.4

Ranking of Purveyor Bills from High to Low at Different Levels of Consumption

Ranking at Low Consumption	Ranking at Medium Consumption	Ranking at High Consumption
1 W.D. 119	1 Duvall	1 Duvall
2 Lake Forest Park	2 W.D. 119	2 Skyway
3 Duvall	3 Lake Forest Park	3 Woodinville
4 Shoreline	4 Shoreline	4 W.D. 119
5 W.D. 20	5 Skyway	5 Kirkland
6 Bellevue	6 Woodinville	6 Northshore
7 Highline	7 Highline	7 Shoreline
8 Woodinville	8 Kirkland	8 Seattle
9 Northshore	9 Cedar River	9 Cedar River
10 Kirkland	10 Bellevue	10 W.D. 49
11 Coal Creek	11 W.D. 49	11 Bellevue
12 Skyway	12 Northshore	12 Bothell
13 W.D. 49	13 Seattle	13 Highline
14 W.D. 90	14 Coal Creek	14 Lake Forest Park
15 Seattle	15 W.D. 45	15 Redmond
16 W.D. 45	16 W.D. 90	16 Soos Creek
17 W.D. 125	17 Bothell	17 Mercer Island
18 Cedar River	18 W.D. 20	18 Coal Creek
19 Bothell	19 W.D. 125	19 W.D. 90
20 Olympic View	20 Tukwila	20 W.D. 45
21 Tukwila	21 Redmond	21 Tukwila
22 Redmond	22 Soos Creek	22 W.D. 125
23 Edmonds	23 Mercer Island	23 W.D. 20
24 Renton	24 Olympic View	24 Renton
25 Soos Creek	25 Renton	25 Olympic View
26 Mercer Island	26 Edmonds	26 Edmonds

Definition of Consumption Levels:

	Winter	Summer	Average
Low	4 ccf/mo	6 ccf/mo	4.67 ccf/mo
Medium	8 ccf/mo	12 ccf/mo	9.33 ccf/mo
High	16 ccf/mo	24 ccf/mo	18.67 ccf/mo

Figure 2.1

WHOLESALE CUSTOMERS RANKED BY 2007 ANNUAL PURCHASES FROM SPU

Purveyor	Purchases
Bellevue	8,336,308
Kirkland	2,954,510
Northshore	2,555,901
Highline	2,517,632
Soos Creek	2,126,508
Woodinville	1,996,289
W.D. 20	1,339,902
Mercer Island	1,087,304
Tukwila	1,060,170
Cedar River	947,745
Shoreline	871,042
Bothell	745,144
W.D. 49	636,898
W.D. 125	597,401
W.D. 90	542,270
Coal Creek	526,420
Redmond	452,805
Olympic View	406,617
Duvall	230,852
Skyway	201,841
W.D. 119	121,176
W.D. 45	95,913
Renton	51,959
Edmonds	55
Lake Forest Park	6
TOTAL	**30,402,668**

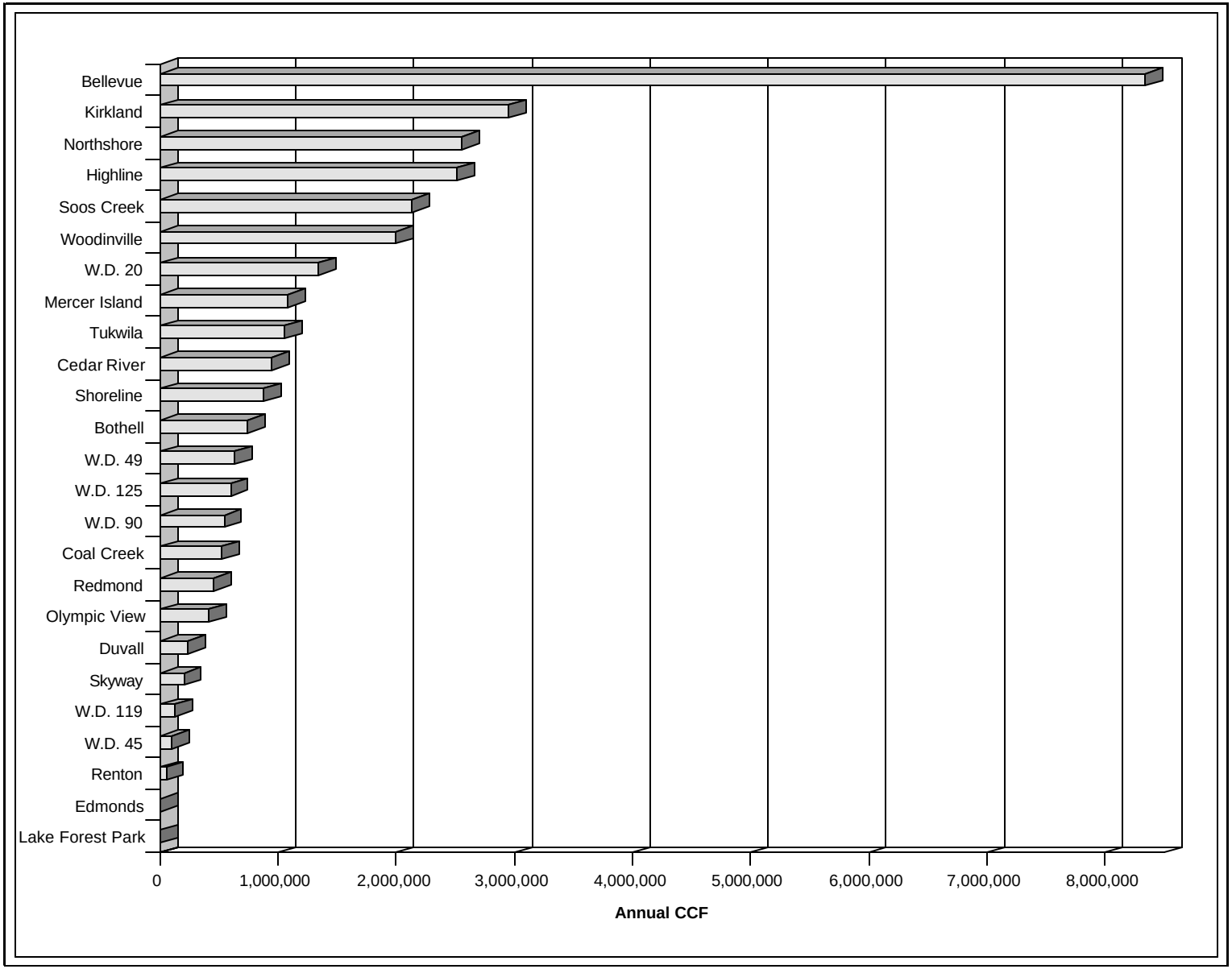


Table 2.1

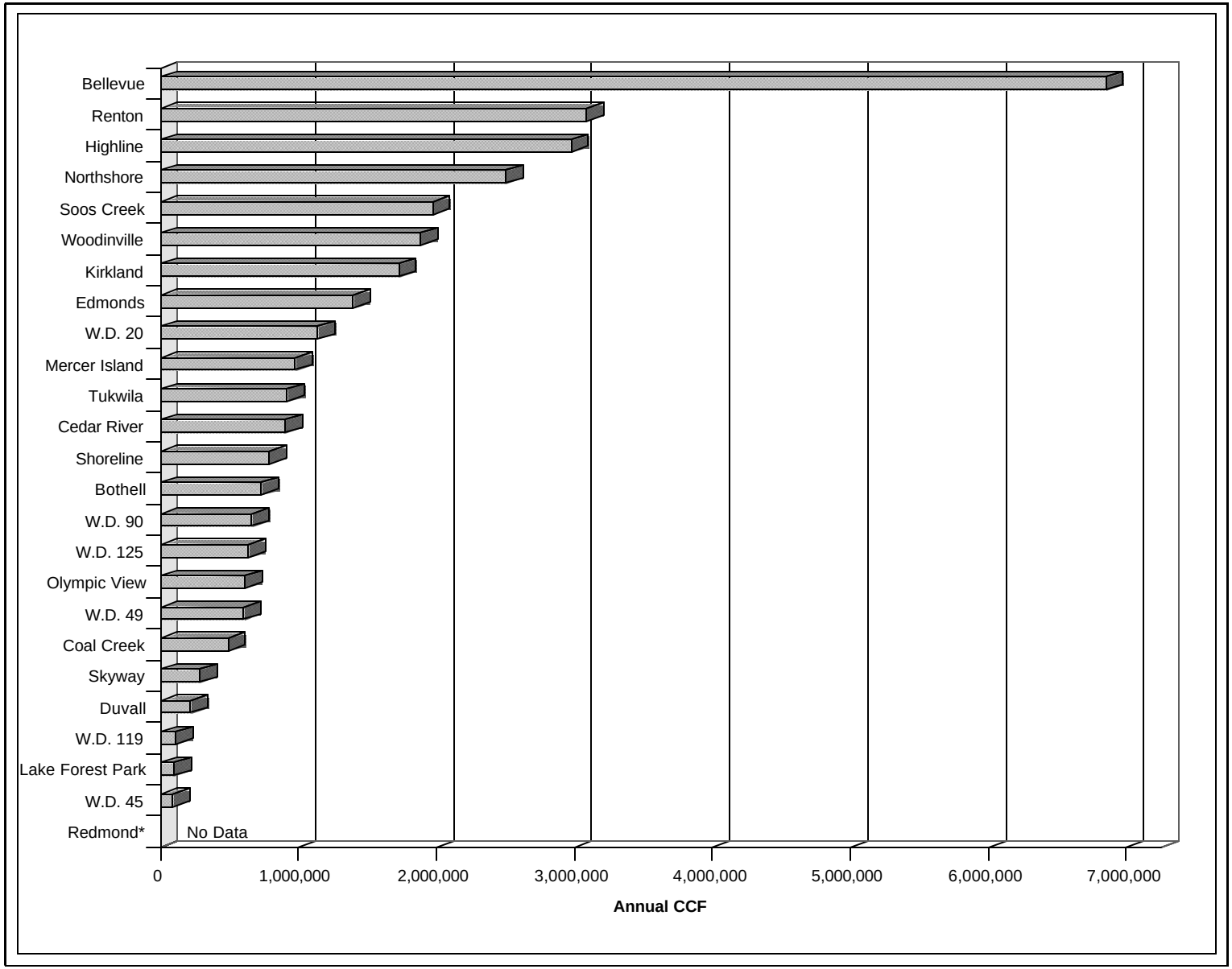
Annual Water Purchases from SPU by Wholesale Customer: 1994-2007

Purveyor	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Bellevue	7,976,658	7,565,651	7,741,347	7,723,447	8,254,911	8,053,791	8,012,735	7,221,979	7,559,140	8,124,609	8,525,078	7,864,907	8,474,731	8,336,308
Bothell	667,498	725,746	575,987	647,008	731,200	638,894	761,656	720,652	751,322	783,847	790,903	710,804	791,591	745,144
Bryn Mawr	37,872	45,330	45,527	54,377	56,648	59,525				Merged with Skyway				
Cedar River	750,800	779,246	831,807	820,126	925,231	841,243	891,413	835,740	912,348	980,516	989,535	985,386	1,071,615	947,745
Coal Creek	955,727	950,677	1,033,659	966592	1,101,548	1,110,773	1,124,051	942,044	1,121,178	1,237,310	607,964	525,361	598,753	526,420
Duvall	173,669	165,968	168,628	173,831	194,781	193,759	211,270	168,746	202,939	257,645	244,321	236,868	242,851	230,852
Edmonds	363,220	482,584	492,976	457,778	467,746	386,147	21,675	7	16	4	1,068	62	0	55
Highline	3,460,968	3,405,697	3,280,274	3,090,166	2,982,876	3,058,440	3,020,265	2,856,390	2,918,609	3,233,149	2,964,590	2,559,715	2,565,923	2,517,632
Kirkland	3,329,440	3,195,319	2,994,880	2,802,576	2,920,755	2,955,265	3,138,937	2,861,685	2,989,315	3,238,310	3,044,835	2,833,027	3,150,078	2,954,510
Lake Forest Park	103	25	5	526	12	34	22	186	168	16	0	2	6	2
Mercer Island	1,202,145	1,165,843	1,115,339	1,089,467	1,175,902	1,141,068	1,198,242	1,033,318	1,091,347	1,165,501	1,219,866	1,072,336	1,139,931	1,087,304
Northshore	2,831,155	2,927,079	2,857,930	2,728,851	2,872,274	2,716,809	2,833,106	2,547,889	2,833,696	2,983,637	2,838,343	2,556,349	2,698,337	2,555,901
Olympic View	615,810	519,619	444,107	600,267	648,842	462,821	439,561	360,013	382,872	475,345	462,990	414,859	549,538	406,617
Redmond	0	90,669	117,846	141,407	198,550	169,630	230,796	259,585	385,288	364,646	461,140	471,211	668,574	452,805
Renton	73	94	244	1,177	8,623	125,765	111,747	101,894	69,078	62,364	64,549	51,841	48,314	51,959
Shoreline	1,119,290	1,065,840	1,043,676	1,044,327	1,047,211	1,001,449	1,053,182	888,156	908,984	968,906	936,967	866,334	917,711	871,042
Skyway	183,149	164,235	163,172	162,979	180,418	173,355	203,520	316,097	318,079	326,364	235,574	226,417	212,135	201,841
Soos Creek	2,134,666	2,069,831	2,146,459	2,067,796	2,076,737	1,860,482	2,045,482	1,993,363	2,173,499	2,296,099	2,336,428	2,126,144	2,205,083	2,126,508
Tukwila	862,309	880,582	1,183,810	1,241,880	1,143,486	1,198,360	1,096,157	1,095,812	1,119,261	1,092,216	1,136,059	1,069,148	1,068,642	1,060,170
Woodinville	1,909,654	1,843,899	1,955,053	1,859,299	2,189,506	2,077,944	2,197,389	2,040,624	2,070,493	2,371,019	2,243,238	126,416	2,032,328	1,996,289
W.D. 20	1,494,279	1,496,058	1,485,935	1,440,893	1,574,917	1,559,582	1,366,147	1,346,239	1,285,424	1,427,155	1,346,869	603,604	1,416,165	1,339,902
W.D. 45	106,501	105,040	139,241	141,892	150,932	142,361	156,010	105,556	137,852	133,350	127,217	1,325,298	105,832	95,913
W.D. 49	700,404	727,103	762,238	689,425	689,310	685,368	673,859	616,296	625,111	611,986	640,512	116,943	599,956	636,898
W.D. 85	42,820	34,591	38,259	37,387	35,211	45,286	74,155	34,458	45,048			Merged with WD 20		
W.D. 90	755,466	762,344	740,993	694,136	718,975	708,119	735,758	683,434	538,035	496,043	503,774	587,490	539,675	542,270
W.D. 119	89,238	91,726	90,961	99,109	98,828	101,798	117,447	132,490	128,518	139,875	133,744	452,581	131,697	121,176
W.D. 125	656,989	751,273	763,424	730,878	698,405	688,626	778,596	560,097	580,052	560,331	646,969	1,873,605	623,262	597,401
Total	**32,419,903**	**32,012,069**	**32,213,777**	**31,507,597**	**33,143,835**	**32,156,694**	**32,493,178**	**29,722,750**	**31,147,672**	**33,330,243**	**32,502,533**	**29,656,708**	**31,852,728**	**30,402,664**

Figure 2.2

WHOLESALE CUSTOMERS RANKED BY 2007 ANNUAL RETAIL BILLED SALES

Purveyor	Retail Sales
Bellevue	6,851,810
Renton	3,083,313
Highline	2,976,073
Northshore	2,501,954
Soos Creek	1,972,069
Woodinville	1,884,117
Kirkland	1,729,375
Edmonds	1,395,963
W.D. 20	1,141,240
Mercer Island	978,013
Tukwila	918,957
Cedar River	904,362
Shoreline	783,434
Bothell	733,484
W.D. 90	664,617
W.D. 125	637,662
Olympic View	612,943
W.D. 49	602,572
Coal Creek	491,502
Skyway	285,914
Duvall	220,032
W.D. 119	109,394
Lake Forest Park	96,000
W.D. 45	90,092
Redmond*	No Data
Total*	**31,664,892**



* Note that Redmond did not provide consumption data for 2007 and is not included in the total.

Table 2.2

Annual Retail Water Sales by Wholesale Customer: 1994-2007

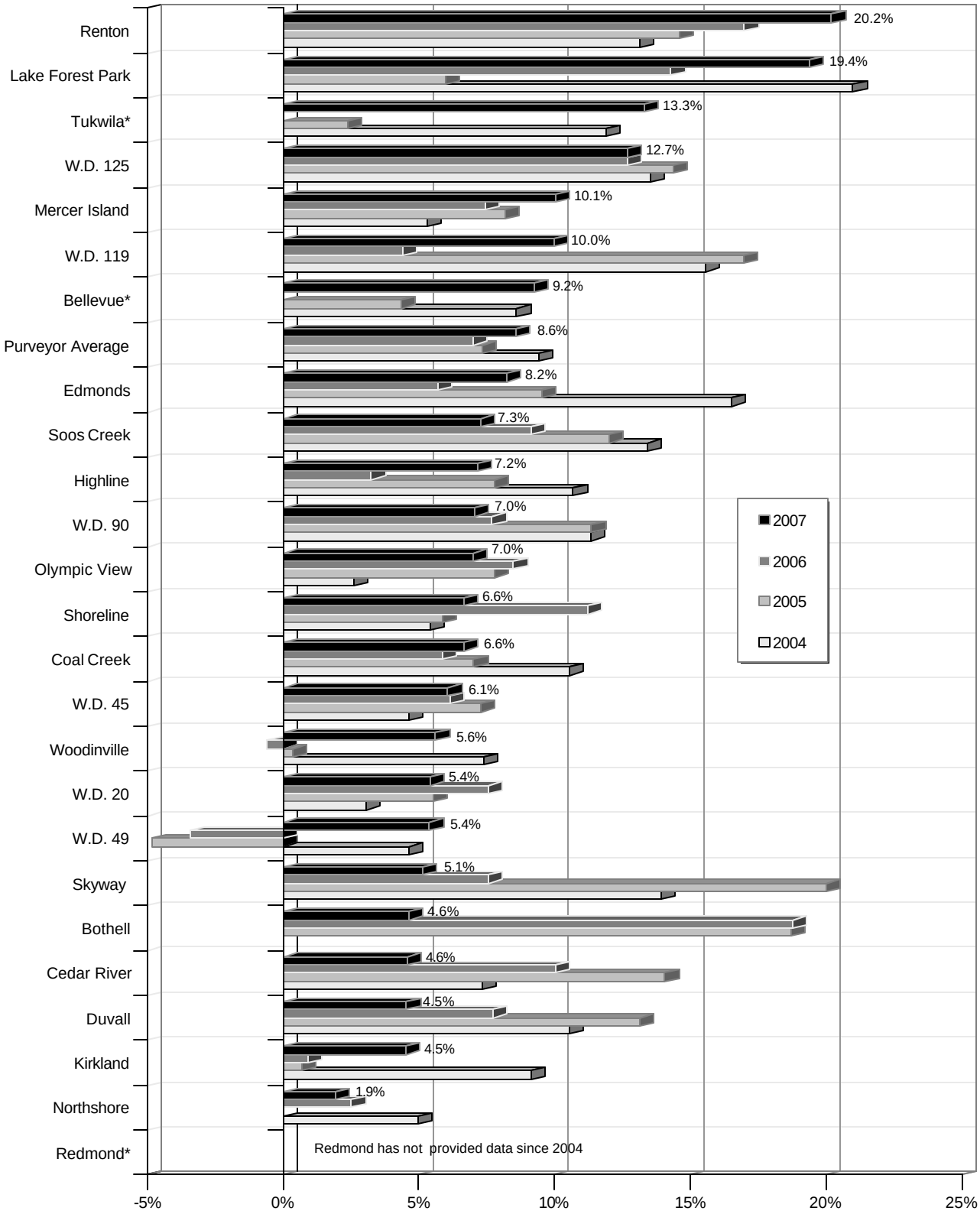
Purveyor	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004*	2005*	2006*	2007*
Bellevue*	6,831,423	6,917,700	6,569,687	6,430,842	6,809,415	6,723,028	6,791,413	6,332,424	6,519,723	7,055,800	7,078,453	6,783,981	No Data	6,851,810
Bothell*	613,357	615,555	634,087	642,172	724,060	659,376	739,669	684,621	714,466	760,131	**No Data**	577,806	656,619	733,484
Bryn Mawr	181,830	184,439	186,626	184,553	190,430	185,172				Merged with Skyway				
Cedar River	700,900	725,404	765,703	750,953	838,602	791,379	854,728	784,795	858,905	949,620	925,955	855,114	964,037	904,362
Coal Creek	949,769	935,974	940,637	927,646	1,075,618	1,056,803	1,070,525	1,013,672	1,084,280	1,219,567	543,762	488,466	563,705	491,502
Duvall	152,923	157,615	153,524	164,201	197,891	178,958	191,604	187,714	197,080	231,577	218,230	205,341	223,653	220,032
Edmonds	1,530,836	1,500,991	1,441,370	1,467,343	1,508,951	1,390,499	1,456,809	1,334,776	1,421,775	1,512,175	1,465,301	1,406,291	1,504,473	1,395,963
Highline	3,172,396	3,119,713	3,186,456	3,153,323	3,250,553	3,190,115	3,229,719	3,020,857	3,090,006	3,302,253	3,149,274	3,029,761	3,066,659	2,976,073
Kirkland	1,769,978	1,758,480	1,765,124	1,731,510	1,872,837	1,837,946	1,936,149	1,645,395	1,790,609	1,906,772	1,739,111	1,833,509	1,843,186	1,729,375
Lake Forest Park	132,282	104,000	136,852	137,960	132,282	140,077	140,077	102,375	107,268	116,970	105,794	101,256	106,343	96,000
Mercer Island	1,137,390	1,069,147	1,037,486	1,019,781	1,129,403	1,064,830	1,104,852	954,551	1,089,710	1,149,546	1,155,137	984,570	996,235	978,013
Northshore*	2,779,279	2,687,786	2,669,776	2,585,391	2,754,149	2,674,545	2,665,229	2,831,579	2,630,028	2,808,235	2,676,062	**No Data**	2,676,062	2,501,954
Olympic View	716,211	678,424	659,387	638,465	694,953	673,260	671,687	607,893	648,736	703,425	699,541	627,376	659,836	612,943
Redmond*	2,706,393	2,603,278	2,748,404	2,746,029	3,011,322	2,975,707	2,979,125	2,783,755	2,940,175	3,254,994	**No Data**	**No Data**	**No Data**	**No Data**
Shoreline	939,194	1,000,101	984,836	966,178	940,873	925,532 *	956,858 *	871,251	862,972	914,477	886,232	782,673	814,773	783,434
Skyway	154,426	145,953	145,894	142,329	149,880	153,043	356,220	309,537	325,930	329,497	309,832	280,643	292,983	285,914
Soos Creek	1,877,871	1,896,870	1,901,225	1,857,564	2,009,017	1,947,093	1,995,096	1,822,072	1,941,211	2,191,349	2,023,063	1,870,978	2,003,456	1,972,069
Tukwila*	690,615	696,646	910,897	953,471	1,024,494	1,040,590	1,030,948	925,230	903,189	938,989	1,000,684	1,043,575	**No Data**	918,957
Woodinville	2,003,864	1,900,675	1,987,758	1,904,444	2,145,836	1,999,930	2,104,568	1,887,481	2,003,091	2,232,174	2,077,734	1,867,062	2,044,244	1,884,117
W.D. 20	1,268,799	1,253,936	1,263,083	1,255,113	1,334,597	1,310,712	1,238,771	1,137,766	1,137,678	1,216,998	1,200,605	1,144,053	1,196,913	1,141,240
W.D. 45	89,216	102,951	139,017	148,574	154,728	131,770	145,677	130,769	138,113	132,207	121,307	108,416	99,325	90,092
W.D. 49	722,961	726,946	685,230	689,433	660,912	668,462	653,378	613,239	614,343	645,016	610,845	616,020	620,546	602,572
W.D. 85	61,650	64,506	65,403	61,331	63,761	68,419 *	69,231 *	52,480	54,985			Merged with WD 20		
W.D. 90	597,339	600,360	589,946	591,370	559,987	570,985	602,704	555,734	599,564	656,449	665,985	602,173	694,640	664,617
W.D. 119	89,517	89,254	93,572	96,432	100,814	102,391	106,602	103,963	108,359	124,407	113,288	105,277	126,326	109,394
W.D. 125	681,602	693,299	686,828	693,765	734,486	682,754	729,943	641,283	718,981	678,557	652,703	611,276	636,882	637,662
TOTAL*	**32,552,021**	**32,230,004**	**32,348,808**	**31,940,173**	**34,069,851**	**33,143,376**	**33,821,582**	**31,335,212**	**32,501,177**	**35,031,184**	***29,418,898***	***25,925,617***	***21,790,896***	***28,581,579***
Seattle	**35,925,417**	**35,216,783**	**34,532,115**	**33,771,744**	**34,741,440**	**32,994,553**	**33,581,789**	**30,325,199**	**30,829,010**	**30,422,909**	**29,994,131**	**28,340,298**	**29,114,620**	**28,490,213**

* Consumption data is missing for Bothell in 2004 and Northshore in 2005. Redmond did not provide data for 2004, 2005, 2006, and 2007. Bellevue and Tukwila did not provide data for 2006. For this reason, retail consumption totals calculated for 2004, 2005, 2006, and 2007 exclude the utilities for which data are missing and are therefore less than the actual total.

Figure 2.3

2007 Wholesale Customer Non-Revenue Water as a Percentage of Total Water Use

(2004, 2005, & 2006 Non-Revenue Shown in Gray)



* Non-revenue data not available for Redmond.

Table 2.3

Wholesale Customer Distribution System Non-Revenue Water: 1994-2007

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	Average
Bellevue	7.6%	2.2%	8.3%	9.3%	10.4%	8.5%	7.8%	4.6%	6.0%	5.0%	8.6%	4.3%	NA	9.2%	7.1%
Bothell	10.3%	17.7%	-7.9%	5.7%	5.4%	7.9%	7.6%	7.4%	7.1%	6.6%	NA	18.7%	18.8%	4.6%	8.5%
Bryn Mawr*	5.2%	6.5%	6.4%	6.6%	4.8%	10.4%				Merged with Skyway					6.7%
Cedar River	6.6%	6.9%	8.0%	8.4%	4.4%	7.0%	5.3%	7.0%	6.3%	4.1%	7.3%	14.1%	10.0%	4.6%	7.1%
Coal Creek	0.6%	1.5%	9.0%	4.0%	2.4%	4.9%	4.8%	-7.6%	3.3%	1.4%	10.6%	7.0%	5.9%	6.6%	3.9%
Duvall	11.9%	5.0%	8.2%	5.3%	-1.6%	7.6%	9.3%	-11.2%	2.9%	10.1%	10.5%	13.1%	7.7%	4.5%	6.0%
Edmonds	15.2%	14.0%	14.1%	8.6%	12.6%	10.1%	17.3%	16.4%	18.1%	15.1%	16.5%	9.5%	5.7%	8.2%	13.0%
Highline	14.4%	16.3%	12.4%	8.6%	3.9%	5.8%	6.6%	4.3%	5.0%	5.7%	10.7%	7.8%	3.2%	7.2%	8.0%
Kirkland	10.1%	6.2%	3.4%	1.2%	-3.7%	2.7%	-1.3%	7.4%	2.5%	5.0%	9.1%	0.7%	0.9%	4.5%	3.5%
Lake Forest Park	NA	-5.0%	NA	4.0%	-19.7%	11.0%	NA	14.4%	13.9%	15.4%	21.0%	6.0%	14.3%	19.4%	8.6%
Mercer Island	2.7%	5.6%	7.0%	6.3%	4.0%	6.7%	7.8%	7.6%	0.1%	1.4%	5.3%	8.2%	7.4%	10.1%	5.7%
Northshore	1.2%	7.5%	5.7%	4.2%	4.1%	0.0%	4.4%	-12.0%	6.4%	4.8%	5.0%	NA	2.5%	1.9%	2.8%
Olympic View	7.1%	6.7%	-0.6%	12.5%	13.4%	7.3%	7.3%	2.0%	-1.4%	-6.2%	2.6%	7.8%	8.5%	7.0%	5.3%
Redmond***	-9.3%	6.3%	-2.6%	-1.7%	-3.7%	1.7%	3.5%	2.6%	6.5%	3.4%	NA	NA	NA	NA	0.7%
Renton	NA	NA	NA	NA	NA	NA	NA	13.5%	13.2%	12.1%	13.1%	14.3%	17.0%	20.2%	14.8%
Shoreline	9.3%	6.2%	13.2%	7.2%	4.4%	NA	9.1%	1.9%	0.8%	5.6%	5.4%	5.9%	11.2%	6.6%	6.7%
Skyway*	11.4%	7.3%	6.6%	6.9%	11.7%	7.3%	3.4%	7.7%	2.7%	4.3%	13.9%	20.0%	7.6%	5.1%	8.3%
Soos Creek	12.0%	8.4%	11.2%	10.2%	3.3%	-4.7%	2.5%	8.7%	10.7%	4.6%	13.4%	12.0%	9.1%	7.3%	7.8%
Tukwila	19.9%	20.9%	22.5%	23.2%	10.9%	13.5%	6.6%	16.7%	20.0%	14.8%	11.9%	2.4%	NA	13.3%	15.1%
Woodinville	-4.9%	-3.1%	-1.9%	-2.4%	2.0%	5.4%	4.2%	7.5%	3.3%	5.9%	7.4%	0.3%	-0.6%	5.6%	2.0%
W.D. 20**	5.4%	7.7%	6.0%	4.3%	5.6%	8.3%	7.1%	6.2%	0.6%	7.6%	3.1%	5.5%	7.6%	5.4%	5.7%
W.D. 45	16.2%	2.0%	0.2%	-4.7%	-2.5%	7.4%	6.6%	-23.9%	-0.2%	0.9%	4.6%	7.3%	6.1%	6.1%	1.9%
W.D. 49	-1.2%	2.0%	11.8%	1.3%	5.3%	3.4%	3.3%	0.6%	1.7%	-5.4%	4.6%	-4.9%	-3.4%	5.4%	1.8%
W.D. 85**	-2.3%	8.4%	10.7%	7.5%	4.2%	NA	13.7%	10.8%	41.0%			Merged with WD 20			11.8%
W.D. 90	20.9%	21.2%	20.4%	14.8%	22.1%	19.4%	18.1%	18.7%	9.3%	9.2%	11.3%	11.4%	7.7%	7.0%	15.1%
W.D. 119	0.1%	3.1%	-2.5%	3.1%	-1.7%	-0.3%	9.5%	21.7%	16.0%	11.4%	15.5%	17.0%	4.4%	10.0%	7.7%
W.D. 125	8.6%	20.4%	18.6%	14.2%	8.1%	7.7%	9.4%	14.3%	6.5%	15.4%	13.5%	14.4%	12.7%	12.7%	12.6%
Purveyor Average	7.0%	7.6%	7.7%	6.7%	5.3%	5.8%	6.2%	6.1%	6.8%	6.1%	9.4%	7.3%	7.0%	8.6%	7.0%

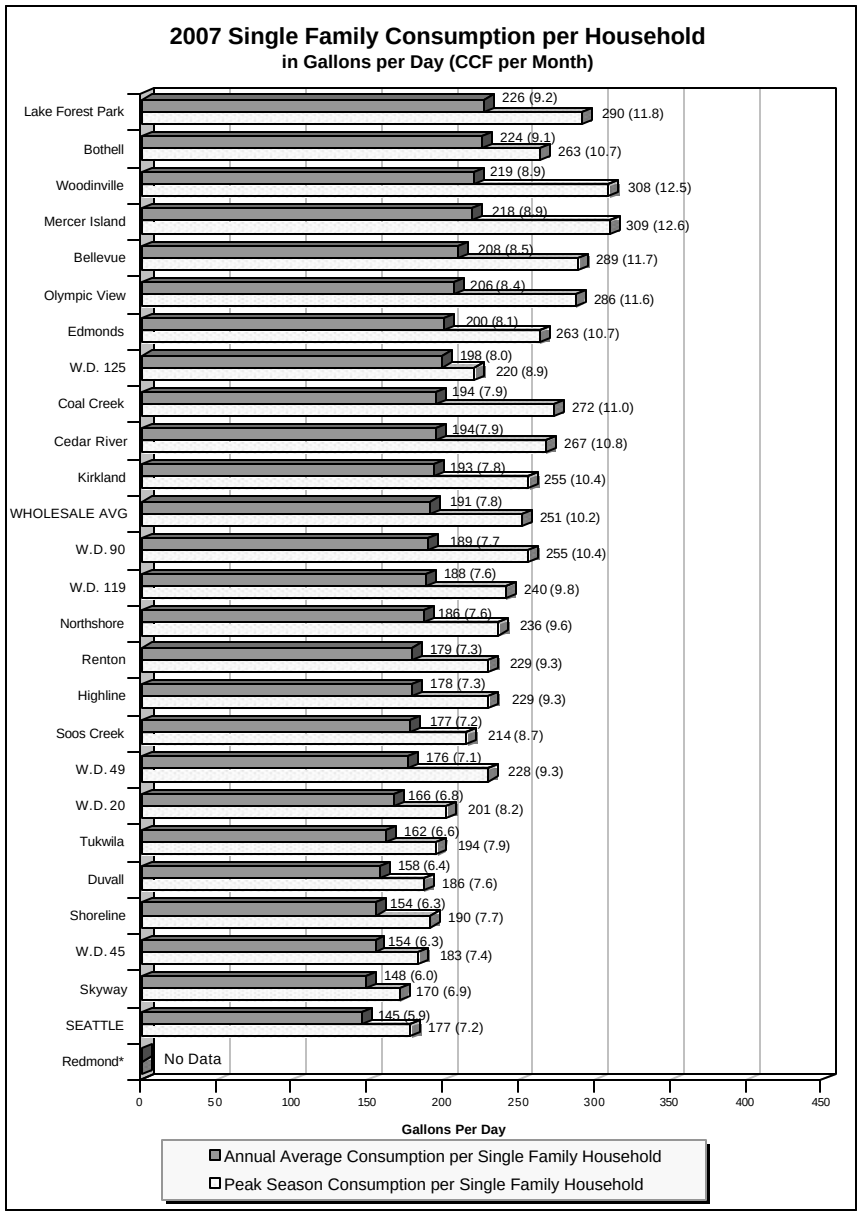
* Formerly Bryn Mawr-Lakeridge Water & Sewer District. Skyway Water & Sewer District merged with Bryn Mawr-Lakeridge as of June 1, 1999 and the name was changed back to Skyway in 2002

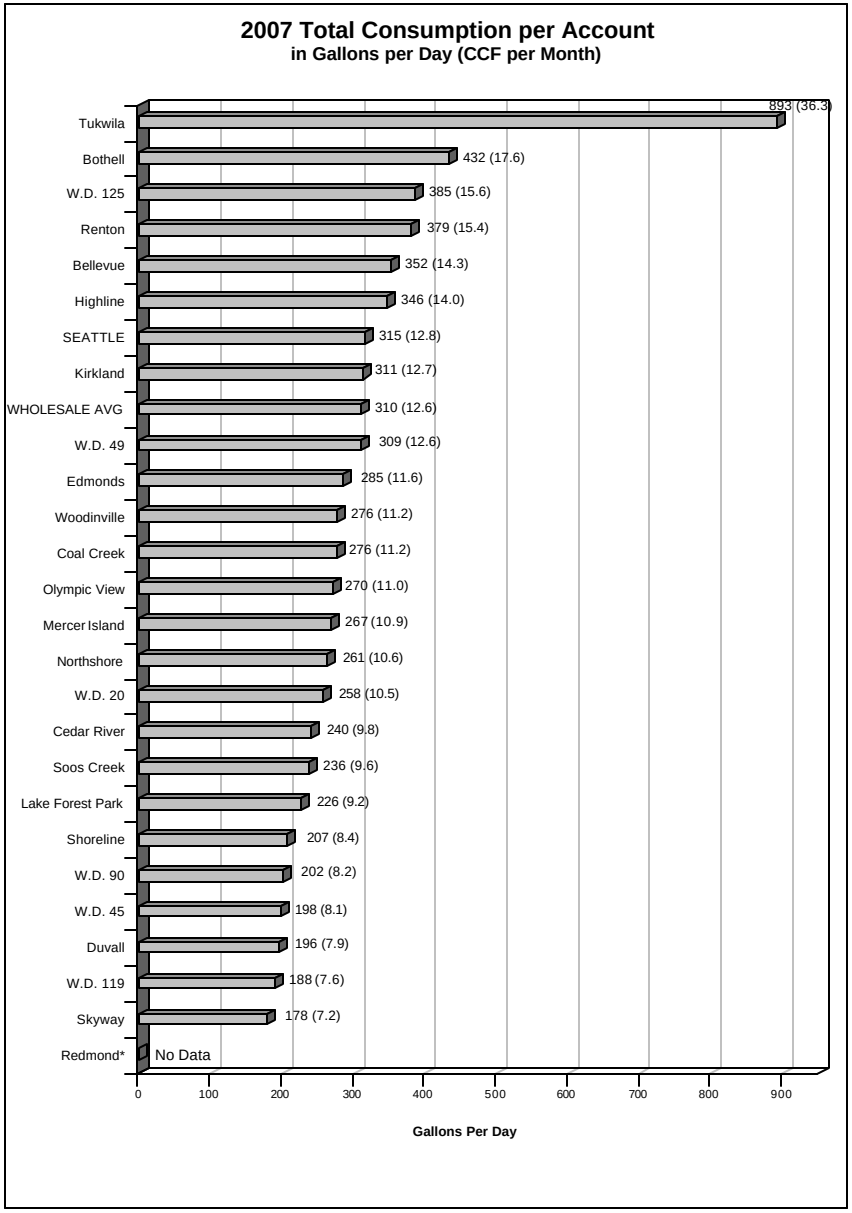
** Water District 85 merged with Water District 20 in 2003.

*** Redmond did not provide consumption data for 2007.

Figure 2.4

2007 Measures of Consumption per Unit





* Note that Redmond did not participate in this year's survey.

Table 2.4

Single Family Residential Consumption per Household by Wholesale Customer: 1994-2007
(in CCF per Household per Month)

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Bellevue	10.4	10.0	9.8	9.4	10.0	9.6	9.7	8.9	9.1	9.7	10.4	8.5	**NA**	8.5
Bothell	8.5	7.9	8.1	7.9	8.4	7.6	8.0	7.5	7.6	8.0	**NA**	5.7	5.7	9.1
Bryn Mawr	**NA**	**NA**	**NA**	**NA**	**NA**	7.5	**Merged with Skyway**							
Cedar River	9.9	9.7	9.7	9.1	9.6	8.9	9.5	8.0	8.6	9.1	8.6	7.8	8.5	7.9
Coal Creek	10.1	9.5	9.4	9.2	9.9	9.1	9.1	8.0	8.6	9.3	9.4	8.2	8.9	7.9
Duvall	**NA**	8.6	8.3	8.9	9.7	8.1	8.8	7.1	7.2	8.4	7.6	6.8	7.4	6.4
Edmonds	9.9	9.7	8.6	8.1	9.5	8.6	10.2	8.5	8.8	9.5	9.0	8.1	8.4	8.1
Highline	9.2	9.0	8.6	9.0	8.8	8.3	8.5	7.6	8.1	8.2	7.9	7.5	7.6	7.3
Kirkland	8.8	8.6	8.5	8.5	8.6	8.2	9.3	7.5	8.0	8.9	7.8	10.4	7.8	7.8
Lake Forest Park	**NA**	**NA**	11.4	12.8	10.7	12.2	12.2	9.9	10.4	11.3	10.3	9.8	10.2	9.2
Mercer Island	NA	10.7	9.9	9.8	11.0	10.0	10.5	9.2	10.0	10.6	10.5	9.9	9.8	8.9
Northshore	9.6	9.2	9.0	8.6	9.8	8.7	8.5	8.1	8.4	8.9	8.4	**NA**	8.4	7.6
Olympic View	9.9	9.8	9.5	8.9	9.5	9.0	9.3	8.1	9.0	9.7	9.2	8.3	9.0	8.4
Redmond*	9.4	9.0	9.1	8.7	9.1	8.6	8.3	7.7	7.7	8.2	**NA**	**NA**	**NA**	**NA**
Shoreline	8.3	7.9	7.8	7.5	7.9	**NA**	7.7	6.7	7.0	7.4	7.0	6.5	6.5	6.3
Skyway	7.5	7.2	7.3	7.0	7.2	6.8	7.8	6.3	7.0	7.1	6.7	6.0	6.3	6.0
Soos Creek	8.7	8.4	8.4	7.7	8.2	7.8	7.8	7.0	7.5	8.5	8.1	6.8	6.9	7.2
Tukwila	7.5	6.4	7.7	7.4	7.4	7.2	7.0	6.7	6.9	7.2	6.2	5.8	**NA**	6.6
Woodinville	12.0	11.1	11.3	10.5	11.7	10.7	11.1	10.8	10.4	11.6	10.4	9.1	10.2	8.9
W.D. 20	8.3	8.2	8.0	7.7	8.5	8.1	7.9	7.0	7.1	7.7	7.4	6.9	7.2	6.8
W.D. 45	**NA**	8.9	**NA**	**NA**	**NA**	6.8	7.5	6.8	7.6	6.9	6.4	6.2	6.4	6.3
W.D. 49	9.1	9.6	8.7	8.5	8.4	8.2	7.9	7.2	7.7	8.1	7.7	7.2	8.0	7.1
W.D. 85	**NA**	**NA**	**NA**	**NA**	**NA**	9.9	9.7	6.9	7.2	**Merged with WD 20**				
W.D. 90	**NA**	**NA**	**NA**	**NA**	**NA**	8.4	9.5	8.5	8.8	8.7	8.5	7.5	8.2	7.7
W.D. 119	**NA**	**NA**	**NA**	**NA**	**NA**	8.1	8.2	7.7	8.1	9.1	8.2	7.5	9.0	7.6
W.D. 125	8.4	8.3	8.3	8.2	8.3	8.1	8.3	8.5	9.4	8.5	8.1	7.8	8.0	8.0
Wholesale Average	**9.7**	**9.4**	**9.2**	**8.9**	**9.5**	**8.9**	**9.1**	**8.1**	**8.4**	**9.0**	**8.7**	**7.9**	**8.0**	**7.8**
Seattle	**7.9**	**7.6**	**7.4**	**7.1**	**7.1**	**7.1**	**7.3**	**6.5**	**6.7**	**6.6**	**6.4**	**6.0**	**6.2**	**5.9**

Redmond did not provide consumption data for 2007.

Figure 2.5