

# The Water System

## Description of System Facilities

The District water system consists of storage reservoirs, booster pump stations, and transmission and distribution piping facilities. The City of Everett delivers water at three points, through master meters, on the west side of the District. The Clearview Water Supply Agency delivers water at three points, through master meters, on the east side of the District. The District has three steel storage reservoirs, with a fourth reservoir under construction. At each reservoir site is a booster station, which pumps water from the reservoir into the transmission and distribution system to maintain a constant hydraulic grade line. The capacity of each storage reservoir is as follows:

<b>Reservoir</b>	<b>Storage Capacity</b>
Reservoir No. 1	1.5 Million Gallons
Reservoir No. 2	4.2 Million Gallons
Reservoir No. 3	4.2 Million Gallons
Reservoir No. 4	8.0 Million Gallons (under construction)

The transmission and distribution system consists of approximately 183 miles of pipe, ranging in diameter from 4-inch to 16-inch. The breakdown of pipe material is approximately 80.20% ductile iron and approximately 19.8% cast iron. There is no steel pipe in the distribution system. All installations since 1977 have been with ductile iron pipe. The average life of ductile iron pipes is 50 years.

## Contractual Agreements

Since the incorporation of the District in 1934, the District has purchased water from the City of Everett. It continues to do so, but now the District is also a member, with Alderwood Water & Wastewater District and Cross Valley Water District, of the Clearview Water Supply Agency. (CWSA) CWSA constructed and now operates a pump station and transmission line west of the Highway 9 corridor and is a source of water to the three Districts which are members of CWSA. This redundant pipe alignment provides the District customers with a more reliable water delivery system. Through a contract with the Alderwood Water and Wastewater District the CWSA has a contract for supply of water from the City of Everett which expires January 1, 2055. These contracts have a formula for cost of water generally based on cost of service rate making principles. The formula helps stabilize the water rates of the District. These water supplies are sufficient to meet projected demands of the District at buildout.



The District also services over 2,400 fire hydrants and 153 fire sprinkler meters.



The District responding after hours water line break.



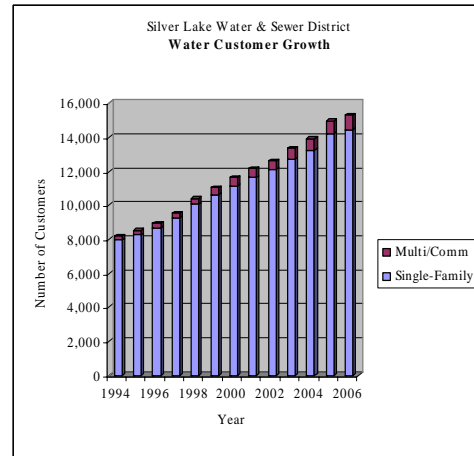
Clearview Water Line being constructed.



Clearview Water Line being installed.

Customer Accounts

The District provides water to approximately 15,300 customer accounts, 96.7 percent of which are residential. Virtually all of the District's residents receive water through the District's water system. The District's source of water is the City of Everett, which relies on the Sultan River Basin as its water source. Growth in the District has been extraordinary with 7,135 net new customer accounts being added to the systems since 1994.



**Silver Lake Water & Sewer District Water Accounts Historical Count**

Water	1994	1995	1996	1997	1998	1999	2000
Single-Family	7,956	8,271	8,661	9,253	10,050	10,613	11,142
Multi/Comm	216	249	267	285	343	423	484
<b>Totals</b>	<b>8,172</b>	<b>8,520</b>	<b>8,928</b>	<b>9,538</b>	<b>10,393</b>	<b>11,036</b>	<b>11,626</b>

Water	2001	2002	2003	2004	2005	2006
Single-Family	11,640	12,133	12,700	13,221	14,205	14,458
Multi/Comm	515	486	658	682	774	849
<b>Totals</b>	<b>12,155</b>	<b>12,619</b>	<b>13,358</b>	<b>13,903</b>	<b>14,979</b>	<b>15,307</b>

<b>Silver Lake Water &amp; Sewer District</b>	
Outstanding Debt as of December 31, 2006	
<b>Refund and Revenue Bonds</b>	
1999 Refund and Revenue Bonds	\$ 5,970,000.00
<b>Outstanding Refund and Revenue Bonds</b>	<b>5,970,000.00</b>
<i>1999 Refund and Revenue Bond Issue Matures 2018</i>	
<b>Public Works Trust Fund Loans</b>	
Clearview Water Construction	4,504,319.61
Seismic Upgrade	63,880.17
<b>Outstanding PWTF Loans</b>	<b>4,568,199.78</b>
<i>Clearview Water Construction PWTF Matures 2019</i>	
<i>Seismic Upgrade PWTF Matures 2018</i>	
<b>Utility Local Improvement District (ULID) Bonds</b>	
2002 Morningside Estates Sewer Extension *	265,000.00
<b>Outstanding ULID Bonds</b>	<b>265,000.00</b>
<b>Total Outstanding Debt</b>	<b>\$ 10,803,199.78</b>
<i>2002 Morningside Estates Matures 2016 and Debt Service Payments are Provided by Special Assessments to Benefiting Properties.</i>	

# The Sewer System

## District Facilities

The basic system, consisting of 12-inch and 18-inch gravity interceptor sewers and four primary pumping stations with eight-inch and ten-inch force mains, was constructed in 1970 and 1971. Since that time, developer extensions have accounted for the majority of the sewer system expansion, which now includes nineteen secondary pump stations and approximately 175 miles of line ranging in size from 4 to 18 inches.

All underground piping is constructed with rubber gasket joints. Pipe materials are concrete, PVC and ductile iron. At selected locations on the gravity sewers ductile iron pipe is used if required by unusual installation conditions. Side sewers on private property are constructed of concrete or PVC with rubber gasket joints.

## Wastewater Treatment

Sewage that is generated in the south area flows by gravity to the Alderwood Water & Wastewater District (“Alderwood”) and then to the King County Department of Natural Resources (“Metro”) for treatment and disposal. All other sewage is pumped west and north to the City of Everett (the “City”) for treatment and disposal. The District has entered into service contracts with the City and Alderwood for the transportation, treatment and disposal of wastewater from the District.

## City of Everett Contract

The District’s service contract with the City expires on December 31, 2010, with five-year extensions until 2032, at which time the parties shall negotiate mutually acceptable terms for continued service. Currently, the City is contractually bound to provide the District 16.6 MGD of peak flow capacity in the City’s major wastewater transmission facilities and treatment plant, the headworks, and 6.6 MGD in maximum winter month capacity in the City’s treatment plant. The District is required to pay its fair share of improvements required of certain portions of the City’s sewer system and its treatment plant to transport and treat the District’s wastewater.

## Alderwood Contract

An update and amendment of the District’s service contract with Alderwood was entered into on July 6, 2006, and extends for the life of Alderwood’s agreement with Metro. The



A wet well mounted lift station pump being serviced by District staff.



District staff conducting confined space training for entry into lift stations and mains.



Telemetry equipment providing 24/7 monitoring of critical systems.

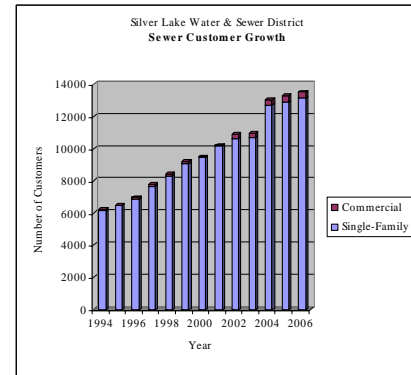


2004 lift station improvements.

District has agreed to comply with the present or future conditions of the agreement for sewage disposal between Alderwood and Metro originally entered into on December 1, 1966. The Alderwood Contract provides for transmittal by Alderwood of wastewater from specified areas of the District to Metro facilities for treatment and disposal and specifies certain rates for this service. The current and original Alderwood Contracts are based on providing service to a geographic area and neither is volume based. To the extent that Alderwood has sufficient capacity to provide service to the District, it has agreed to do so. It is expected that currently planned future trunk line improvements will provide sufficient capacity for the foreseeable future.

Service Area and Customers

The District provides sewer service to approximately 13,500 accounts, 97.05 percent of which are residential, encompassing nearly all of the District’s residents. As shown below, the District has experienced tremendous expansion, with a net of 7,259 new customer accounts connecting to the District’s system since 1994.



Sewer	1994	1995	1996	1997	1998	1999	2000
Single-Family	6130	6480	6848	7644	8256	9026	9425
Multi/Comm	104	115	118	142	151	176	68
<b>Totals</b>	<b>6,234</b>	<b>6,595</b>	<b>6,966</b>	<b>7,786</b>	<b>8,407</b>	<b>9,202</b>	<b>9,493</b>

Sewer	2001	2002	2003	2004	2005	2006
Single-Family	10128	10625	10664	12670	12852	13095
Multi/Comm	64	260	279	347	392	398
<b>Totals</b>	<b>10,192</b>	<b>10,885</b>	<b>10,943</b>	<b>13,017</b>	<b>13,244</b>	<b>13,493</b>

Capital Improvement Program

The District’s current Wastewater Comprehensive Plan and its Capital Improvement Program (CIP) for the sanitary sewer system was developed in 2003. Certain improvements in the CIP, such as the Everett Wastewater Treatment Plant expansion and Outfall improvements are ongoing. Nearly all the listed improvements in the 6 year CIP have been completed. The following capital improvement projects have been completed at District expense since January 2003 at a total cost of approximately seventeen million dollars:

- ✓ Expansion of Lift Station No. 3
- ✓ Expansion of the Pioneer Trails Lift Station
- ✓ Elimination of Silver Crest Lift Station
- ✓ New Headquarter Site and Maintenance Shop
- ✓ Replacement and Expansion of Lift Station No. 2
- ✓ Replacement of Lift Station No. 2 Forcemain SCADA telemetry upgrade
- ✓ Sewer Line Improvements on Dumas Road
- ✓ Elimination of Murphy Corner Lift Station
- ✓ Replacement of Woodlands East Lift Station
- ✓ Replacement of Lift Station No. 4
- ✓ Installation of Emergency Generator at Woodlands East Lift Station
- ✓ Installation of Emergency Generator at Woodlands North Lift Station