

## **Available Payment Methods**

The City of Shoreview provides a variety of methods for payment of utility bills, including:

- City hall front desk during office hours (8 a.m. to 4:30 p.m.)
- Drop box near the city hall entrance
- Drop box at Rainbow Foods (corner of Highway 49 & 96)
- By mail
- Credit card, by calling utility billing (VISA/MasterCard)
- Direct debit (from your bank account)
- On line via the City's website (look for "Online Payments")

## **Contact Information**

Utility billing questions information

- Phone - (651) 490-4630
- Email - [utilities@shoreviewmn.gov](mailto:utilities@shoreviewmn.gov)

Utility maintenance questions

- Phone - (651) 490-4657 (public works secretary)
- Phone - (651) 490-4661 (utilities supervisor)
- Email - [dcurlley@shoreviewmn.gov](mailto:dcurlley@shoreviewmn.gov)

Water and sewer emergencies

- Mon-Fri, 7:00 a.m.-3:30 p.m. (651) 490-4661
- Evenings, weekends and holidays, call the Ramsey County Sheriff (651) 484-3366. The Sheriff's office will contact the utility maintenance person on call.

We hope this information has been helpful in explaining the City's utility systems.

Shoreview Utility Department  
4600 Victoria Street North  
Shoreview, MN 55126  
[www.shoreviewmn.gov](http://www.shoreviewmn.gov)



## *Utility Operations and 2010 Utility Rates*



Water,  
Sewer,  
Surface Water, and  
Street Lighting

## What is safe tap water worth to you?

We turn on the tap every day for water to support our daily lives. Our water towers and the pipes below the streets need constant attention to keep water flowing at the right pressure without fail. Consistent access to a safe water supply helps:

- Keep us healthy
- Fight fires
- Support our economy
- Enhance our high quality of life

The revenue generated by our water bills keep the system strong and reliable and supports maintenance of the water system.

Ensuring continued access to safe water also involves the proper collection and treatment of waste water (sewage), and it doesn't stop there. In order to protect the quality of our lakes and streams it is also necessary to properly collect and direct storm water through the use of storm systems and ponds, and by removing debris in the form of sand and salt from roadways.

The process of protecting our varied and numerous water assets requires a coordinated effort to manage each of the resources carefully, and to comply with increasing regulations that govern these activities. This document is intended to provide an overview of Shoreview's utility systems and utility rates in an effort to describe what it takes to run the City's utility operations.

## Water Operations

Shoreview's water system provides drinking water to about 9,000 homes and businesses within City limits, and provides limited service (at higher billing rates) to neighboring communities through service agreements.

## What Does This Mean for My Utility Bill?

The impact of the 2010 water and sewer rates on any individual customer depends on the amount of water consumed because rates are based on the philosophy that customers putting greater demands on the system should pay more than customers with lesser demand. The table below provides a breakdown of residential customers in

5 usage levels. As shown, 42% of residential customers fall into the middle category (using an average of 22,000 gallons of water per quarter, and using about 15,000 gallons per quarter in the winter).

Use Level	% of Homes	Water Gallons	Sewer Gallons
Very low	10%	5,000	4,000
Low	18%	10,000	8,000
Average	42%	22,000	15,000
Above avg	18%	40,000	22,000
High	6%	55,000	26,000
Very high	6%	80,000	34,000

The next table illustrates the change in utility bills for 2010 in each of the usage levels.

Use Level	Total Utility Bill		Change in Total Bill
	2009	2010	
Very low	\$ 82.55	\$ 83.91	\$ 1.36
Low	\$ 96.18	\$ 98.42	\$ 2.24
Average	\$ 124.46	\$ 133.30	\$ 8.84
Above avg	\$ 177.97	\$ 190.63	\$ 12.66
High	\$ 219.04	\$ 234.78	\$ 15.74
Very high	\$ 301.41	\$ 323.11	\$ 21.70

It should be noted that the cost estimates shown above include a water connection fee of \$1.59 per quarter, mandated by and paid to the State of Minnesota.

The table at right shows estimated street lighting income and expense for 2009 and 2010.

The planned operating surplus is intended to partially offset street light replacements of \$85,000 in 2009, and \$62,000 in 2010.

	Estimated 2009	Projected 2010
<b>Income</b>		
User charges	\$ 333,000	\$ 347,000
Interest earnings	3,000	3,000
<b>Total Income</b>	<b>336,000</b>	<b>350,000</b>
<b>Expense</b>		
Operations	56,887	55,878
Electric costs	160,000	165,000
Street light repairs	25,000	25,000
Depreciation	36,000	36,000
Transfers out	3,000	6,000
Debt service (int & fees)	-	-
<b>Total Expense</b>	<b>280,887</b>	<b>287,878</b>
<b>Net</b>	<b>55,113</b>	<b>62,122</b>
Contributed capital assets	-	-
<b>Net Increase or (Decrease)</b>	<b>\$ 55,113</b>	<b>\$ 62,122</b>

In the next 5 years, energy, repair and replacement costs will be the primary driving force when establishing street lighting charges.

- Energy costs account for 57% of total expense in 2010 (the largest expense for the fund).
- Repair costs are expected to rise in the future as street lights continue to age.
- Plans to replace 140 street lights over the next 5 years (as part of street renewal projects and individual replacements) will result in capital costs of \$536,000.

The City's water system includes:

- 1,318 water hydrants
- 6 wells
- 2 elevated storage tanks (water towers)
- 1 underground water reservoir
- 103 miles of water lines

In recent years watering restrictions have become necessary to reduce the peak in daily demand for water, and to more evenly spread water use over different days. This enables the City to avoid the high cost of constructing additional wells and water storage capacity.

Operating and maintaining the system, so that water is available at any time, requires managing the following:

- Produce and store water
- Treat water (including a future water treatment facility)
- Operate distribution pumps
- Flush water mains (semi-annually)
- Repair, replace and maintain water system infrastructure
- Read meters (quarterly) and replace meters as needed
- Sample and test water per Department of Natural Resources and Minnesota Department of Health requirements

Hydrant flushing is performed by utility maintenance crews each spring and fall to remove mineral buildup in the system and to ensure the reliability of hydrants. The systematic and controlled flushing of the system improves the overall quality of water, assists in overall system maintenance, helps remove sediments and stale water, and maintains chlorine residuals.

The City is nearing completion of a meter replacement project that will more accurately measure water use (through new meters), and more efficiently gather readings (through automated radio-read capability). The result is more accurate water use readings and lower costs for gathering meter readings.

## Water Rates

Starting in 2010, state law requires the City to bill all water customers on a conservation-based rate structure (tiered rates). Further, the law requires billing each residential unit with the same allocation of gallons per tier, and using the same rates.

Residential water rates are set in 2 components: a quarterly availability charge of \$10 (down from \$13.17 in 2009), and 3 tiered rates for water used in the preceding quarter. Tiered rates for 2010 are shown at right:

Residential Water Rates (quarterly)		
Water Tiers	Cost Per Thousand Gallons	Gallons Per Penny
Tier 1 (10,000 gal per unit)	\$ 0.92	10.9
Tier 2 (20,000 gal per unit)	\$ 1.86	5.4
Tier 3 (remaining water)	\$ 2.95	3.4

- The first 10 thousand gallons is billed at 92-cents per thousand gallons (about 10.9 gallons for one cent). Multi-unit buildings are allocated up to 10 thousand gallons per unit.
- The next 20 thousand gallons is billed \$1.86 per thousand gallons (about 5.4 gallons for one cent). Multi-unit buildings are allocated up to 20 thousand gallons per unit.
- Remaining water is billed at the highest rate of \$2.95 per thousand gallons (about 3.4 gallons for a penny).

Commercial customers are billed the same tiered rates, except the lowest tier is more expensive (at \$1.40 per thousand gallons).

Compared to bottled water, tap water is remarkably inexpensive. For instance, a gallon of self-serve spring water costs about 30-cents, or about \$300 for a thousand gallons. City tap water costs 92-cents for a thousand gallons (at the lowest tier) and \$2.95 for a thousand gallons (at the highest tier).

## Street Lighting Assets

The historical cost of the City's street lighting system is \$1.2 million, which results in depreciation expense near \$36,000 per year. Since the creation of the street lighting fund in 2004, the fund has spent about \$130,000 on lighting repairs and replacements. Over the next 5 years the City expects to spend even more on street lighting repairs and replacements due to the age of many of the lights in the system.

## Street Lighting Budget

The table below provides a history of street lighting fund income and expense since the fund was created in 2004. As shown, the fund ended each of the first 3 years with a net loss, and would have in 2007 as well if not for a transfer from the City's General Fund. That means that street lighting income was not sufficient to offset operating, repair and depreciation expense. This occurred partly because repair costs exceeded expectations, and partly due to rising electric costs.

	Actual 2004	Actual 2005	Actual 2006	Actual 2007	Actual 2008
<b>Income</b>					
User charges	\$ 197,552	\$ 197,102	\$ 218,112	\$ 232,375	\$ 302,600
Other-operating	-	6	(11)	44	1,097
Transfers in	-	-	-	60,000	-
Interest earnings	52	-	262	1,036	3,982
<b>Total Income</b>	<b>197,604</b>	<b>197,108</b>	<b>218,363</b>	<b>293,455</b>	<b>307,679</b>
<b>Expense</b>					
Operations	25,435	25,704	34,683	35,541	52,843
Electric costs	127,896	137,292	146,030	148,570	152,324
Street light repairs	39,505	24,680	36,930	29,606	13,109
Depreciation	41,043	38,137	39,223	40,871	38,825
Transfers out	-	-	-	-	-
Debt service (int & fees)	-	-	263	421	-
<b>Total Expense</b>	<b>233,879</b>	<b>225,813</b>	<b>257,129</b>	<b>255,009</b>	<b>257,101</b>
<b>Net</b>	<b>(36,275)</b>	<b>(28,705)</b>	<b>(38,766)</b>	<b>38,446</b>	<b>50,578</b>
Contributed capital assets	380,979	95,053	-	-	-
<b>Net Increase or (Decrease)</b>	<b>\$ 344,704</b>	<b>\$ 66,348</b>	<b>\$ (38,766)</b>	<b>\$ 38,446</b>	<b>\$ 50,578</b>

## Street Lighting Operations

The City of Shoreview operates a street lighting system throughout the community in support of safe vehicle and pedestrian traffic. The City's street light system includes lighting owned by the City or leased from Xcel Energy.

- 694 city-owned street lights
- Leased street lights

Operation and maintenance of the City's street light system includes:

- Periodic rewiring of existing lights
- Energy costs associated with operation of the lighting system
- Installation of new street lights
- Repair and replacement of existing lights

## **Street Lighting Rates**

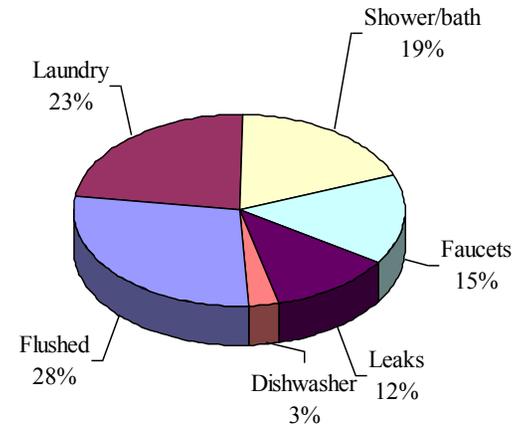
Street lighting user charges are based upon property type. The table below shows 2010 street lighting rates for all classes of property. Apartments and mobile homes pay a lower fee than homes because there are significantly more homes per acre in those developments.

Street Lighting Rates (quarterly)		
Property Type	Rate	Basis
Residential, townhome	\$ 6.94	per unit
Apartment, condo, mobile home	\$ 5.20	per unit
Comm, ind, schl, church	\$ 20.82	per acre

All properties in Shoreview, regardless of locations or types of street light fixtures, are assessed street light charges. All properties receive benefit from the street light system through illumination of streets, which in turn enhances safety for drivers and pedestrians.

## **Household Water Use**

According to the American Water Works Association (AWWA), about half of household water use is from flushing and laundry.

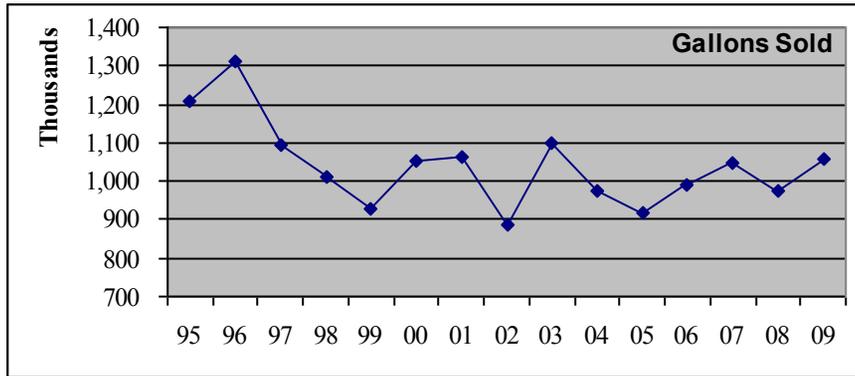


The pie chart at right illustrates average household water consumption. Some easy ways to reduce water consumption include:

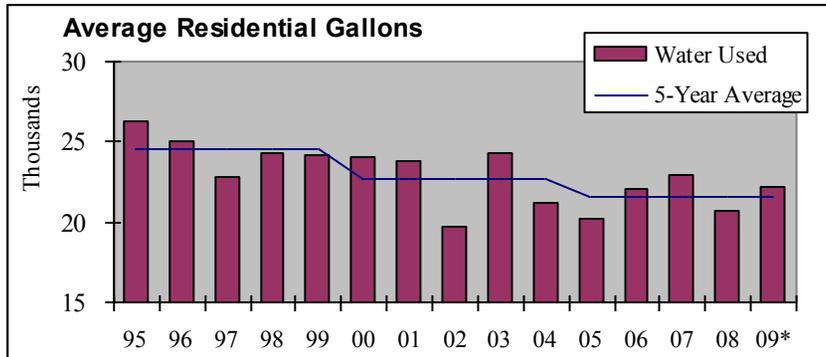
- Turn the water off while washing dishes by hand
- Run the clothes washer only when full, or get a high efficiency washing machine
- Use a water-efficient shower head (saves 750 gallons a month)
- Shorten shower time (1 to 2 minutes shorter saves 25 gallons a month)
- Upgrade older toilets with water efficient models
- Use sprinklers that deliver big drops of water close to the ground because smaller water drops and mist often evaporate before they hit the ground
- Adjust sprinklers so only the lawn is watered, and not the house, sidewalk or street
- Water the lawn and garden in the morning or evening when temperatures are cooler to minimize evaporation
- Check soil moisture to determine when to water rather than following a set watering schedule
- Set a timer when watering, as a reminder to stop, because a running hose can discharge up to 10 gallons a minute
- Adjust the lawn mower to a higher setting, allowing longer grass to shade the root system and hold soil moisture better

## Water Use Trends

Water use fluctuates from year to year, primarily due to differences in rainfall. About 50% of the water sold is consumed during the four months of the growing season.



Other factors that reduce household water use include water conservation efforts, an aging population, new plumbing fixtures, and fewer people per household. The graph below shows average quarterly water consumption per home (estimated gallons are shown for 2009\*). Because this graph shows total average consumption throughout the year, both rainfall and water conservation efforts impact these results.



The table at right contains estimated surface water income and expense for 2009 and 2010. As shown, a net loss is anticipated for 2010 due to the rise in debt services costs and pond dredging.

	Estimated 2009	Projected 2010
<b>Income</b>		
User charges	\$ 790,000	\$ 870,000
Snail Lk Aug charges	42,451	44,279
Other-operating	5,000	5,000
Other-capital/intergovernment	105,000	-
Interest earnings	30,000	28,000
<b>Total Income</b>	<b>972,451</b>	<b>947,279</b>
<b>Expense</b>		
Operations	527,231	588,813
Snail Lake augmentation costs	71,708	28,895
Pond dredging	60,000	89,400
Depreciation	167,000	177,000
Transfers out	20,000	40,000
Debt service (int & fees)	55,000	118,200
<b>Total Expense</b>	<b>900,939</b>	<b>1,042,308</b>
<b>Net</b>	<b>71,512</b>	<b>(95,029)</b>
Contributed capital assets	-	-
<b>Net Increase or (Decrease)</b>	<b>\$ 71,512</b>	<b>\$ (95,029)</b>

Significant surface water system costs planned for 2010 include:

- Repair and replace storm systems
- Improve and expand storm system as part of street projects
- Dredge ponds
- Construct pretreatment structure for Lake Wabasso

Over the next 5 years, surface water system costs include:

- Dredge ponds
- Update storm sewer lift station controls
- Construct storm ponds
- Improve storm system as part of street projects

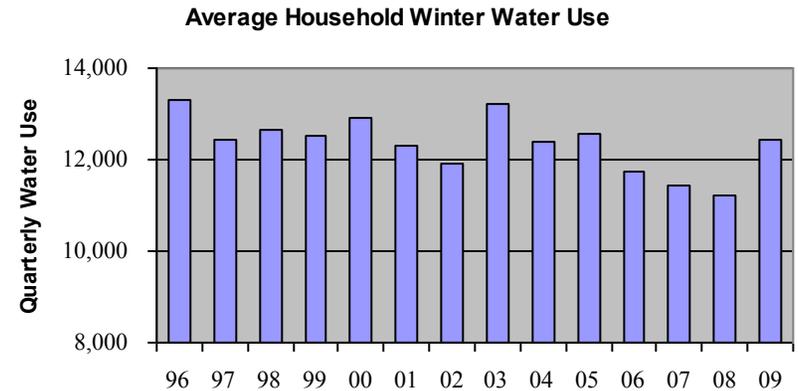
## Surface Water Management Budget

The table below provides a 5-year history of surface water fund income and expense. As shown, unlike the sewer and water funds, the surface water fund has ended each of the last 5 years with a net gain. This has been necessary because the surface water fund has not yet accumulated sufficient cash balances to enable the fund to absorb dramatic shifts in capital costs from year to year, and because of expected future pond dredging costs.

	Actual 2004	Actual 2005	Actual 2006	Actual 2007	Actual 2008
<b>Income</b>					
User charges	\$ 583,241	\$ 589,757	\$ 612,947	\$ 656,750	\$ 723,966
Snail Lk Aug charges	7,258	3,804	13,853	10,731	12,884
Other-operating	6,066	5,815	5,355	16,906	13,117
Other-capital/intergovernment	7,756	-	286	20,512	50,000
Interest earnings	17,990	19,193	38,336	46,861	37,161
Total Income	622,311	618,569	670,777	751,760	837,128
<b>Expense</b>					
Operations	368,740	391,061	468,245	413,808	460,869
Study/plan costs	46,329	13,260	-	-	-
Snail Lake augmentation costs	12,231	6,420	23,400	18,123	21,796
Pond dredging	-	10,904	344	84,595	63,454
Depreciation	120,284	130,263	140,903	151,543	159,159
Transfers out	-	-	-	-	-
Debt service (int & fees)	29,451	27,538	26,492	32,303	48,344
Total Expense	577,035	579,446	659,384	700,372	753,622
<b>Net</b>	<b>45,276</b>	<b>39,123</b>	<b>11,393</b>	<b>51,388</b>	<b>83,506</b>
Contributed capital assets	47,107	247,124	98,062	-	37,063
Net Increase or (Decrease)	\$ 92,383	\$ 286,247	\$ 109,455	\$ 51,388	\$ 120,569

The accumulation of net income in recent years allows the City to partially support anticipated capital costs for storm replacements and improvements mandated by the City's Surface Water Management Plan.

Examining winter water consumption is the easiest way to measure inside household water use (without the impact of summer watering). The graph below shows the decline in average quarterly winter water use.



The winter average in the last 5 years is about 5% lower than the previous 5-year period. Even though water conservation protects the long-term viability of the City's water source, it also means that water revenues decline in some years despite an increase in water rates. Eventually existing customers need to pay more for the same level of service, in order to cover costs.

## Water System Assets

The historical cost to build the City's water system is \$21 million, which results in depreciation expense of \$566,000 for 2010. In the last 5 years the water fund has spent \$4.4 million on water system repairs, replacements, improvements to system controls and water meter replacement. Over the next 5 years the City expects to spend \$1.8 million on water system assets. Nearly all of the cost is for repairs and maintenance of existing assets (meters, wells, towers and water lines).

## Water Budget

Water rates are set with the knowledge that predicting water income is far more difficult than predicting expense and capital costs. In setting rates the City expects fluctuations in water consumption from year to year, and therefore expects a net loss in some years and a net profit in others. The rate setting process is designed to make gradual changes in rates whenever possible, focusing on a long-term strategy.

	Actual 2004	Actual 2005	Actual 2006	Actual 2007	Actual 2008
<b>Income</b>					
User charges	\$ 1,339,006	\$ 1,313,313	\$ 1,584,700	\$ 1,829,484	\$ 1,883,743
Facility charges	107,379	15,644	46,315	5,500	13,750
Meter sales	14,233	20,323	11,944	4,551	10,232
Other	11,072	10,854	6,195	8,312	12,635
Interest earnings	58,830	55,639	99,989	133,727	112,658
Total Income	1,530,520	1,415,773	1,749,143	1,981,574	2,033,018
<b>Expense</b>					
Operations	1,010,200	1,144,102	1,164,562	1,193,418	1,235,925
Meters	32,426	41,747	79,160	46,513	94,056
Depreciation	391,392	414,137	430,841	448,850	465,963
Transfers out	193,267	123,190	120,000	120,000	120,000
Debt service (int & fees)	96,561	73,373	101,273	103,071	126,890
Total Expense	1,723,846	1,796,549	1,895,836	1,911,852	2,042,834
<b>Net</b>	<b>(193,326)</b>	<b>(380,776)</b>	<b>(146,693)</b>	<b>69,722</b>	<b>(9,816)</b>
Contributed capital assets	124,280	50,730	30,485	-	212,000
Net Increase or (Decrease)	\$ (69,046)	\$ (330,046)	\$ (116,208)	\$ 69,722	\$ 202,184

The table below provides a 5-year history of water fund income and expense. As shown, in 4 of the last 5 years the City's water fund ended with a net loss. That means that water income was not sufficient to offset costs. This happened in part because of declining water use.

Once lower water consumption becomes a trend, rather than a temporary fluctuation, it becomes necessary to adjust rates more significantly to close the gap between income and expense.

Operating the surface water system includes:

- Maintain, inspect, replace and improvement storm sewer systems (including storm lines)
- Maintain storm sewer lift stations (pumping stations)
- Maintain and inspect storm water ponds
- Construct new storm water ponds
- Collect debris from City streets through street sweeping
- Provide technical support to water management organizations
- Implement Surface Water Management Plan

## Surface Water Rates

Surface water charges are set by type of property, considering the amount of impervious surface present (in an attempt to address varying levels of rainfall runoff). The table below shows 2010 surface water rates for all classes of property. Town homes pay a slightly higher rate because town home developments have more impervious surface area and therefore generate more rainfall runoff.

Surface Water Rates (quarterly)		
Property Type	Rate	Basis
Residential	\$ 14.52	per unit
Townhomes	\$ 15.38	per unit
Condo, apartment, commercial, industrial, school, church	\$ 121.44	per acre

## Surface Water System Assets

The historical cost of building the City's storm sewer system is \$8.6 million, which results in depreciation expense of about \$177,000 per year. In the last 5 years the surface water fund has spent \$1.9 million on storm system repairs and replacements, and has spent about one-half million in improvements to the system, including pond development. Over the next 5 years the City expects to spend \$1.3 million on a combination of storm system repairs, pond dredging, new pond construction and storm system improvements.

## Surface Water Operations

The City of Shoreview maintains a storm water system that collects and directs storm water runoff and provides protection for ground water quality. The City's surface water system includes:

- 4 storm water lift (pumping) stations
- 200 storm water ponds
- 485 storm inlets/outlets
- 35 miles of storm lines
- 50 structural pollution control devices

The purpose of the surface water management program is to preserve and use natural water storage and retention systems as much as is practical to reduce the amount of public capital expenditures necessary to:

- Control excessive volumes and runoff rates
- Improve water quality
- Prevent flooding and erosion from surface water flows
- Promote ground water recharge
- Protect and enhance fish and wildlife habitat and water recreational facilities (lakes, etc.)

The City's Surface Water Management program seeks to prevent flooding and improve ground water quality through the best possible utilization of wetlands and artificial detention areas. Wetland management allows the City to maintain the integrity of its wetlands, improve water quality and reduce City maintenance efforts. Emphasis is placed on sediment removal as the primary method of water quality improvement.

Lake water quality modeling and monitoring is the responsibility of Water Management Organizations such as Grass Lake and Rice Creek until such time as a larger City role is necessary.

The table at right shows estimated water income and expense for 2009 and 2010. The 2010 budget is based on the expectation that water consumption levels will continue at reduced rates even though dry weather in 2009 drove water use higher. Despite rate increases in both years, a slight net loss is expected for 2010.

	Estimated 2009	Projected 2010
<b>Income</b>		
User charges	\$ 2,106,500	\$ 2,123,000
Facility charges	5,500	5,500
Meter sales	4,000	4,000
Other	9,500	7,500
Interest earnings	130,000	100,000
Total Income	2,255,500	2,240,000
<b>Expense</b>		
Operations	1,334,358	1,330,320
Meters	-	10,000
Depreciation	516,000	566,000
Transfers out	130,000	145,000
Debt service (int & fees)	220,000	200,000
Total Expense	2,200,358	2,251,320
<b>Net</b>	<b>55,142</b>	<b>(11,320)</b>
Contributed capital assets	50,000	-
Net Increase or (Decrease)	\$ 105,142	\$ (11,320)

The City expects to close the gap between income and expense within 2 years through more accurate water use data (as a result of the meter replacement program) and planned annual rate adjustments.

Significant water system costs planned for 2010 include:

- Rehabilitate underground water reservoir
- Repair and replace water lines in conjunction with the 2010 Street Renewal project

Over the next 5 years, significant water system costs include:

- Replace exterior coatings on the South water tower
- Update SCADA system controls
- Repair and replace water lines

## Sewer Operations

Shoreview operates a sanitary sewer system that collects and directs waste water discharged from homes and businesses throughout the City. The City's sewer system includes:

- 17 lift (pumping) stations
- 108 miles of sanitary sewer lines
- 2,500 man holes

Operating and maintaining the sewer system so that it functions adequately and consistently includes:

- Operate, maintain and inspect lift stations daily
- Treat collected sewage (performed by Metropolitan Council Environmental Services)
- Reline sewer pipes
- Replace, repair and maintain sewer system infrastructure
- Inspect man holes
- Sewer line cleaning

## **Sewer Rates**

Residential sewer charges are set in 2 components: a quarterly sewer availability charge of \$32.51 per unit, and 5 tiered rates for water used in the winter quarter (because winter water use provides the best measure of water entering the sewer lines). The sewer availability charge is billed regardless of whether sewer discharge occurs because the City must maintain, repair, operate and replace the sewer system.

Tiered rates for 2010 are shown in the table at right, and are described at the top of the next page.

Residential Sewer Rates (quarterly)	
Sewer Tiers	Sewer Tiers
Tier 1 (less than 5,000 gal per unit)	\$ 13.74
Tier 2 (5,001-10,000 gal per unit)	\$ 23.65
Tier 3 (10,001-20,000 gal per unit)	\$ 36.27
Tier 4 (20,001-30,000 gal per unit)	\$ 49.33
Tier 5 (more than 30,000 gal per unit)	\$ 64.09

The table at right shows estimated sewer income and expense for 2009 and 2010. The projected budget is based on the continued trend toward lower residential winter water consumption. As shown, even with adjustments to sewer rates, the City expects to end with a net loss in both years.

	Estimated 2009	Projected 2010
<b>Income</b>		
User charges	\$3,120,000	\$3,260,000
Facility charges	3,500	3,500
Other operating	2,500	2,500
Interest earnings	70,000	53,000
<b>Total Income</b>	<b>3,196,000</b>	<b>3,319,000</b>
<b>Expense</b>		
Sewage treatment	1,657,500	1,757,600
Operations	1,131,999	1,155,970
Televising	-	-
I & I Inspection program	260,000	-
Depreciation	261,000	278,000
Transfers out	120,000	121,000
Debt service (int & fees)	57,000	60,400
<b>Total Expense</b>	<b>3,487,499</b>	<b>3,372,970</b>
<b>Net</b>	<b>(291,499)</b>	<b>(53,970)</b>
Contributed capital assets	-	-
<b>Net Increase or (Decrease)</b>	<b>\$ (291,499)</b>	<b>\$ (53,970)</b>

With planned annual adjustments to sewer rates, and considering current usage trends, the City expects to reach a net profit position within 3 years.

Sewer system costs planned for 2010 include:

- Repair and reline sewer lines
- Rehabilitate 7 lift stations (pumping stations)
- Repair and replace sewer lines in conjunction with the 2010 Street Renewal project

Over the next 5 years, sewer system costs include:

- Televise and reline sewer lines
- Repair and replace sewer lines

## Sewer Budget

Establishing sewer rates and predicting sewer revenue is somewhat easier than predicting water revenue, because winter water consumption is used to determine residential sewer charges. However, the decline in water use is also impacting the City's sewer fund because the gradual decline in winter water use is shifting more customers into lower sewer tiers.

The table below provides a 5-year history of sewer fund income and expense. As shown, in each of the last 5 years the City's sewer fund ended with a net loss, even though the gap is narrowing. That means that sewer income was not sufficient to offset operating and other expense.

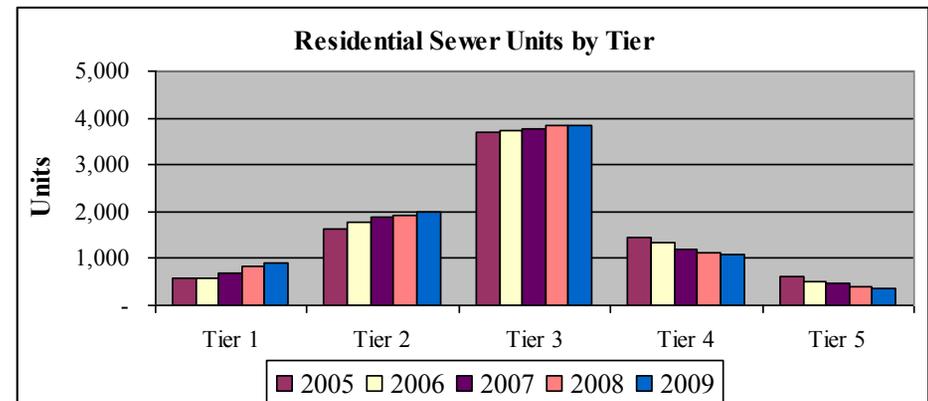
	Actual 2004	Actual 2005	Actual 2006	Actual 2007	Actual 2008
<b>Income</b>					
User charges	\$2,333,859	\$2,444,623	\$2,575,807	\$2,688,544	\$2,841,078
Facility charges	8,583	13,777	36,350	2,475	4,125
Other operating	4,765	4,006	3,886	4,895	3,797
Interest earnings	50,948	50,714	88,847	103,979	74,581
<b>Total Income</b>	<b>2,403,207</b>	<b>2,513,120</b>	<b>2,706,604</b>	<b>2,799,893</b>	<b>2,923,581</b>
<b>Expense</b>					
Sewage treatment	1,365,072	1,492,122	1,472,338	1,438,485	1,496,964
Operations	880,752	929,252	983,068	973,590	1,082,974
Televising	46,526	-	-	4,070	10,644
I & I Inspection program					-
Depreciation	202,753	211,236	226,161	243,644	251,630
Transfers out	189,593	123,190	120,000	120,000	120,000
Debt service (int & fees)	11,231	10,923	21,362	23,635	34,913
<b>Total Expense</b>	<b>2,695,927</b>	<b>2,766,723</b>	<b>2,822,929</b>	<b>2,803,424</b>	<b>2,997,125</b>
<b>Net</b>	<b>(292,720)</b>	<b>(253,603)</b>	<b>(116,325)</b>	<b>(3,531)</b>	<b>(73,544)</b>
Contributed capital assets	105,000	-	-	200,000	24,000
<b>Net Increase or (Decrease)</b>	<b>\$ (187,720)</b>	<b>\$ (253,603)</b>	<b>\$ (116,325)</b>	<b>\$ 196,469</b>	<b>\$ (49,544)</b>

The rate setting process is designed to make gradual changes in rates whenever possible, focusing on a long-term strategy. Regardless, as lower water consumption becomes a trend, it becomes necessary to charge higher rates for the same level of service to offset operating expenses.

- Tier 1— homes using less than 5 thousand gallons in the winter quarter pay \$13.74 per quarter.
- Tier 2— homes using between 5 and 10 thousand gallons in the winter quarter pay \$23.65 per quarter.
- Tier 3— homes using between 10 and 20 thousand gallons in the winter quarter pay \$36.27 per quarter.
- Tier 4— homes using between 20 and 30 thousand gallons in the winter quarter pay \$49.33 per quarter.
- Tier 5— homes using more than 30 thousand gallons in the winter quarter pay \$64.09 per quarter.

Overall, the sewer rates are designed to reward low volume customers, and to charge high volume customers more because they contribute more flow to the sewer system. Further, rates are designed to treat single-family homes and multi-family units equally, by establishing the multi-family charge on a per unit basis.

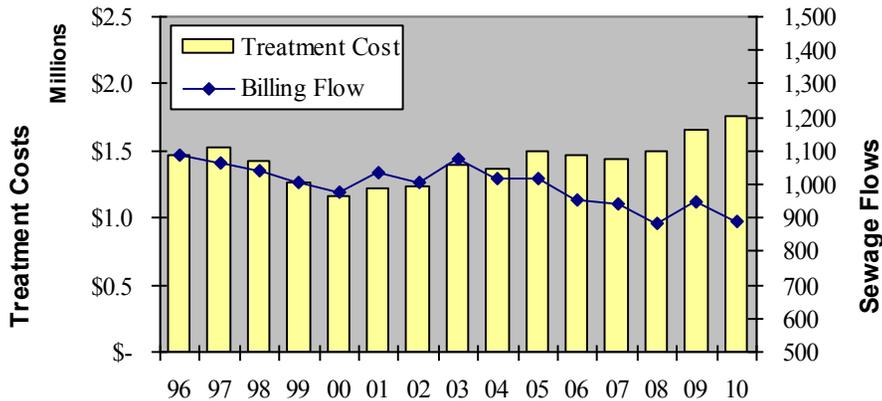
The graph below illustrates the number of residential sewer customers billed in each of the 5 sewer tiers over the last 5 years. As shown, the majority of homes are billed at tier 3, and the fewest number of homes are billed at tier 5. The number of customers billed in the first 3 tiers is rising, while the number of customers in tiers 4 and 5 is declining.



## Sewage Treatment

Sewage is collected in City-owned sanitary sewer mains and is routed or pumped into facilities owned and operated by the Metropolitan Council Environmental Services Division (MCES). Sewage flows are monitored and metered by MCES for the purpose of determining the City's sewage treatment costs. These costs are dependent on the amount of flow contributed to the system, and therefore water use impacts the City's sewage treatment costs.

Unfortunately, even when sewage flow declines (as it has since 2003) sewage treatment costs don't necessarily follow because the rate charged by the MCES continues to rise. As shown in the table below, sewage flow has declined in recent years, and sewage treatment costs are rising.



Sewage flows can also be impacted by groundwater infiltration and storm water inflow, particularly during periods of heavy downpours. Cracks in sewer lines, openings in manholes, and illegal connections of roof drains and/or sump pumps to the sewer system, allow water to flow directly into sewer pipes, which in turn drives up sewer flows and sewage treatment costs.

In an effort to reduce sewage flow, the City is actively working to evaluate sewer lines and to utilize sewer relining to repair lines more cost effectively. The City is also nearing completion of a commercial roof and residential sump pump inspection program, to eliminate illegal discharges into the sewer system.

The table below provides an 8-year summary of the City's

sewage treatment costs. The sewage flow used for the 2010 bill is 17% lower than 2003 flows. Conversely, the 2010 rate per million gallons is 52% higher than in 2003. The net result is a sewage treatment bill that is \$1,757,000 (26% higher than in 2003). If sewage flows had continued to grow, the cost would have been even higher.

Year	Billing Flow (millions)	Rate Per Million Gallons	Annual Cost (thousands)
2003	1,076	\$ 1,300	\$ 1,398
2004	1,019	\$ 1,340	\$ 1,365
2005	1,019	\$ 1,465	\$ 1,492
2006	955	\$ 1,543	\$ 1,472
2007	943	\$ 1,527	\$ 1,438
2008	883	\$ 1,697	\$ 1,497
2009	945	\$ 1,754	\$ 1,657
2010	888	\$ 1,981	\$ 1,757

Beginning in 2007 the MCES has considered charging an inflow/infiltration surcharge for the estimated increase in sewage flows generated by ground water infiltration. So far, Shoreview has avoided this cost because of the City's efforts to reduce inflow and infiltration of ground and storm water into the system.

## Sewer System Assets

The historical cost to build the City's sewer system is \$11.1 million, which results in depreciation expense of \$278,000 for 2010. In the last 5 years the sewer fund has spent \$1.8 million on sewer system repairs, replacements, improvements to system controls and new sewer lines. Over the next 5 years the City expects to spend \$730,000 on sewer system repairs and replacements.