

# ***Saint Paul Regional Water Services***

## ***2005-2006 Annual Report***



# ***Our Vision, Our Mission, Our Values***

## **Our Vision**

*To be a regional and national water industry leader emphasizing quality product, services, and cost containment.*

## **Our Mission**

*To provide reliable, quality water and services at a reasonable cost.*

## **Our Values**

*Maintain a focus on our customers.*

*Show respect for all.*

*Encourage teamwork.*

*Accommodate open, honest communications.*

*Deliver responsive service.*

*Optimize efficiency in all of our endeavors.*



## **2005- 2006 Board of Water Commissioners**

President	Pat Harris
Vice President	John Zanmiller
Commissioner	Matt Anfang
Commissioner	Dave Thune
Commissioner	Debbie Montgomery
Commissioner	Bob Cardinal (2005)
Commissioner	Gregory Kleindl (2006)

## **2005 -2006 SPRWS Management**

General Manager	Steve Schneider
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## **Division Managers**

Engineering	Dave Schuler
Production	Jim Graupmann
Distribution	Steve Gleason
Business	Dave Wagner





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# *A message from the General Manager*

## Tackling taste and odor issues, Planning a customer information and billing system



**Steve Schneider**  
General Manager

Saint Paul Regional Water Services is proud of its long history of providing quality water and services to our customers. Begun in the 1860s as the St. Paul Water Company, what has evolved over the years into a regional water service is a well-managed, financially responsible, public entity with our customers' needs at the heart of our concerns.

Our efforts were recognized with the Directors Award from the Partnership for Safe Water, spelling out our commitment to providing superior quality water to our customers beyond the requirements of the United State Environmental Protection Agency. (See page 7.) We were also recognized for our management excellence, earning the Platinum Award for Sustained Com-

petitiveness Achievement from the Association of Metropolitan Water Agencies. We were one of only nine large water systems in the country to earn such recognition. (See article page 3.)

Keeping with our desire for customer satisfaction, we began the process of implementing a new Customer Information and Billing System that will allow us to better track customer accounts, provide customers with improved payment options and methods, and increase efficiency in our work process to serve our clients better. Our efforts have not gone unnoticed, as our customer service survey showed an average customer satisfaction rate of nearly 90 percent. We continue to conduct outreach to schools and the community by making presentations, providing informational materials, and holding open houses for the public; two every year at the Highland Water Tower and one at McCarrons Center every other year.

Since the first water was hauled up from Phalen Lake, taste and odor issues have periodically surfaced with the weather. We continually work to improve the quality of water delivered to utility customers. Our largest effort to date is the installation of a granular activated carbon (GAC) filtration system. We replaced filter beds, re-designed our finished water reservoirs, and re-directed where our disinfection

processes take place. Beginning in 2005 and largely completed by the end of the 2006, the new GAC filters were ready to go by the start of 2007. With these measures, along with restoration of the Lambert Lake wetlands, we hope to decrease or eliminate the number of taste and odor complaints we receive. We continued drilling wells to eventually complete 10 wells, or the number needed to provide us with our daily average water consumption of about 50 million gallons. This will provide us with a backup to our water supply, as well as an additional source during peak water usage.

In continuing our efforts to invest in our employees, we conducted our annual employee conference and increased the amount of tuition reimbursement per employee to encourage individual educational and training growth.

These major initiatives are just some of the thousands of things we do everyday to ensure safe, quality drinking water is available to all of our customers at a reasonable price when they turn on their tap.

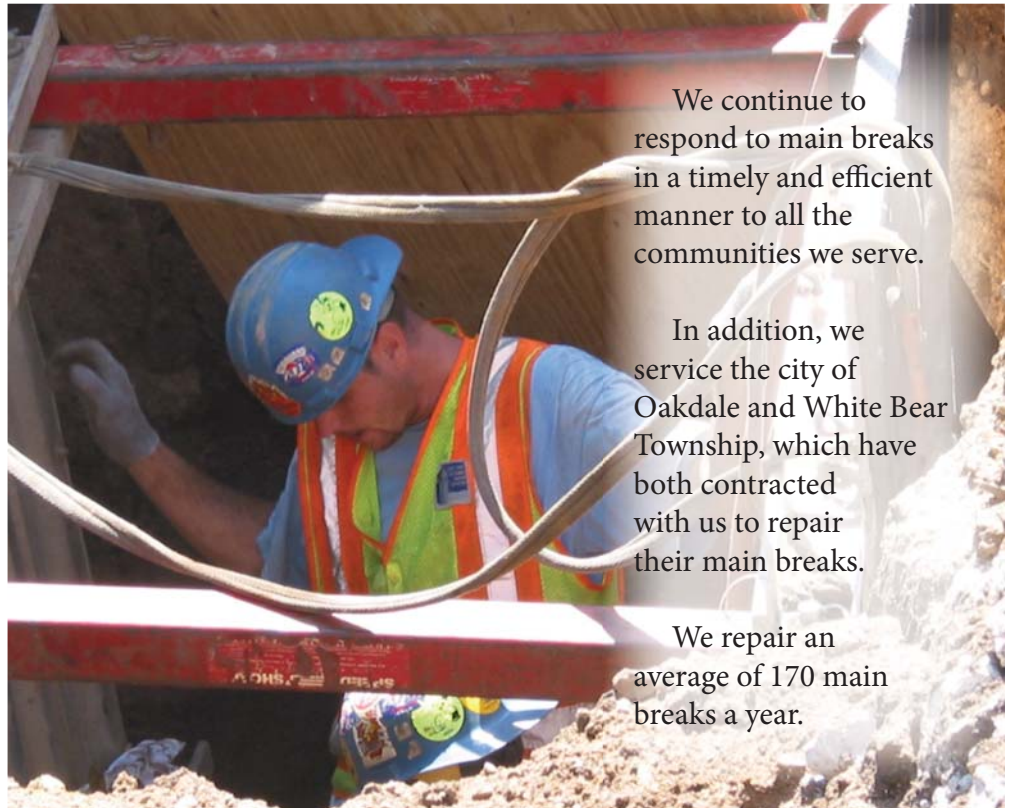
We continue to pursue excellence in the service and the quality of our products we provide to you, our customers, every day, in all that we do.

A handwritten signature in blue ink that reads "Steve Schneider". The signature is fluid and cursive, with the first letters of the first and last names being capitalized and prominent.

# Operate in an efficient manner

Improvements in our asset management lead to greater efficiency at the utility.

We continue to market our expertise and water services to additional communities and agencies to establish an even larger customer base.



We continue to respond to main breaks in a timely and efficient manner to all the communities we serve.

In addition, we service the city of Oakdale and White Bear Township, which have both contracted with us to repair their main breaks.

We repair an average of 170 main breaks a year.

## Earning recognition for management excellence

Saint Paul Regional Water Services (SPRWS) has been recognized for management excellence. We received the Platinum Award for Sustained Competitiveness Achievement from the Association of Metropolitan Water Agencies (AMWA).

SPRWS is one of only nine large water systems in the country to be honored in 2006 with the Platinum Award, which recognizes long-term

excellence in utility management.

Platinum Award winners are all previous Gold Award winners who have successfully maintained and expanded their competitiveness initiatives, such as benchmarking, charting new financial courses, and meeting new strategies for meeting an ever-expanding array of customer service needs and expectations. SPRWS won the Gold Award in 2001.

In winning the Platinum Award, SPRWS was acknowledged for updating its strategic plan and capital improvement program; developing an IT road map, which set out a five-year strategic plan for ongoing technology improvements; and reducing operations and maintenance costs by \$2.4 million over five years without employee layoffs, undue increases in water rates, or a decrease in services.

### Expanding our services

We continued to expand the scope of the services we offer by taking on additional billing services for several of the suburban communities we serve.

In addition, we executed a new, 20-year contract for wholesale water service with the city of Roseville and began accepting lime sludge from White Bear Lake for disposal along with our own.

### Partnering with Public Works

In 2005 we worked out a partnership with Public Works to operate a lock box on their behalf to process all of Public Works' sewer maintenance and right-of-way payments.



# Enhance Customer Service

Customers are the reason the utility exists. Serving the people who buy and use our water for everything from personal hygiene and consumption to the production of goods at local manufacturing plants is our top priority.

## Helping our customers is job No. 1

Whether we are out in the field replacing water mains and establishing temporary water lines to provide un-interrupted water service or in the office answering questions about water bills, we are working for our customers.

To better track our customer accounts and provide them with improved payment options, we began working toward the implementation of a new Customer Information and Billing System (CIS). It will

allow us to better track customer accounts, provide customers with improved payment options and methods, and increase efficiency in our work process to serve our clients better.

We team up with our customers to assist those who need help paying their water and sewer bills, using *Water Works*. SPRWS initiated the program that now helps nearly 100 families a year.

(See below.)

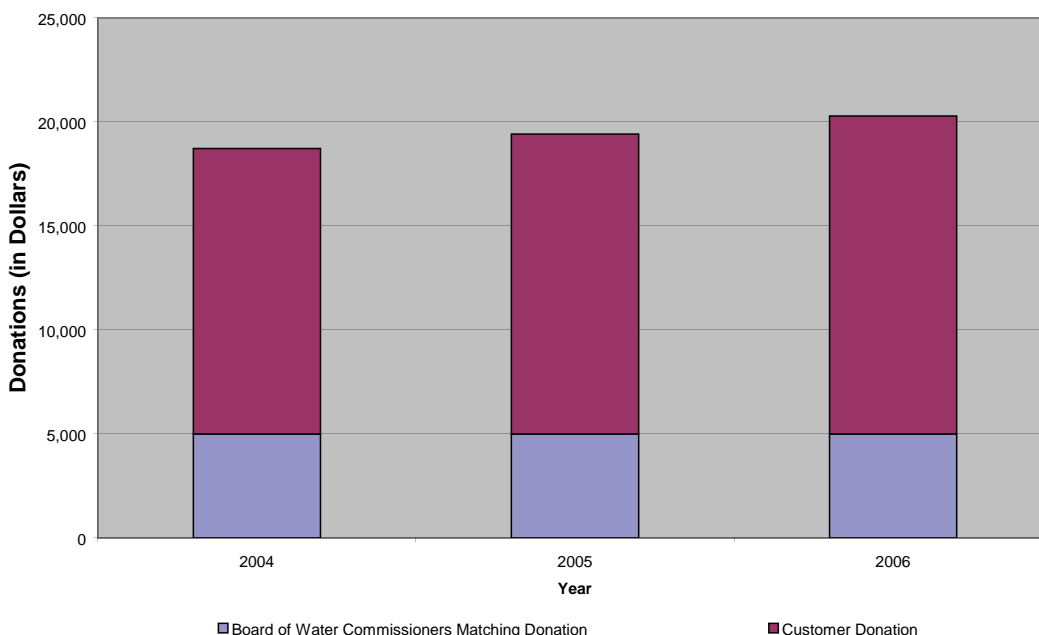
## WaterWorks Donations Top \$20,000

WaterWorks is a voluntary contribution program initiated by Saint Paul Regional Water Services and

administered jointly by SPRWS and the Community Action Partnership of Ramsey and Washington Counties.

Our customers generously assist low-income families with their water and sewer bills.

WaterWorks Donations 2004-2006



### 2004

Grants provided to 60 needy families

### 2005

Grants provided to 96 needy families

### 2006

Grants provided to 99 needy families

## Learning about SPRWS via public information services

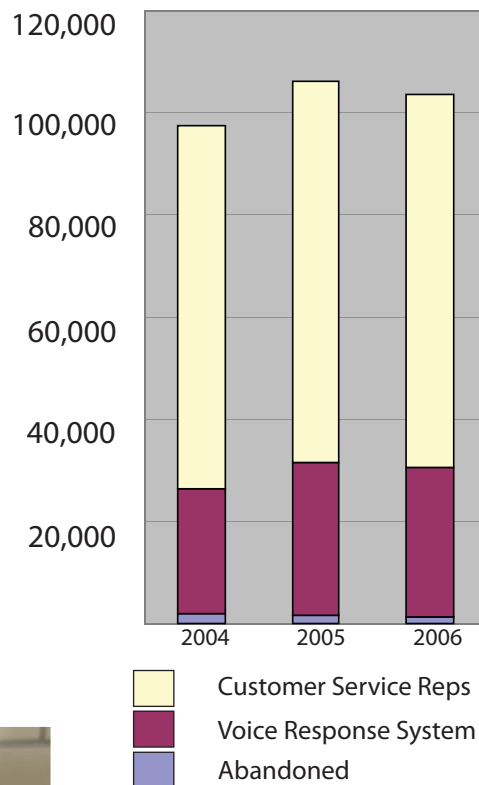
The public information arm of the customer service section provides information to our customers and the public, updates the utility web site, and hosts open houses for customers and the public to learn more about the water utility.

In 2005-2006, staff from public information:

- ◆ Re-designed the web site
- ◆ Updated *Beyond the Faucet*, a booklet that explains our water sources and distribution system
- ◆ Produced *Tapping the Waters...the History of the Saint Paul Water Utility*

- ◆ Produced the 2005 and 2006 water quality reports
- ◆ Distributed *Customer Service Connections*, a quarterly newsletter for customers
- ◆ Updated and re-designed the *WaterWorks* brochure
- ◆ Held two open houses each year at the Highland water tower
- ◆ Held an open house at the new facilities at McCarrons Center
- ◆ Created a new Highland Tower postcard featuring a reproduction of Clarence "Cap" Wigington's original architectural rendering of the tower.

## Call Center surpasses 100,000 calls



## Hosting a statewide Drinking Water Institute

SPRWS was the site of one of two statewide Drinking Water Institutes in Minnesota held by the Minnesota Section of the American Water Works Association and the Minnesota Department of Health, along with additional participation from The Science Museum of Minnesota.

The three-day workshop is for middle school science teachers, who learn about water supply, treatment, and distribution, as well as how to teach about water in the classroom.

Teachers received two graduate credits for the course, in which they have to develop action plans for incorporating inquiry-based activities on water into their existing curriculum.

**Saint Paul  
Regional  
Water Services  
has a customer  
satisfaction  
rate of nearly  
90 percent**



# Continue to improve the quality of water

Our staff has been significantly involved in helping to develop drinking water protection in the Upper Mississippi River watershed. Working with the cities of St. Cloud and Minneapolis, which also draw their water from the Mississippi River, along with the Minnesota Department of Health, we are participating in the Upper Mississippi River Source Water Protection initiative.

This initiative is bringing resources to various watershed groups throughout the watershed and pursuing funding to establish a total daily maximum load of potential contaminants for several areas of the river between St. Cloud and the Minneapolis intake that could threaten water quality. This work will help ensure the quality of the water we all drink before it ever reaches our treatment plant.

Water quality at the tap begins at the source.

For SPRWS customers, that source is largely the Mississippi River and the chain of lakes that we flow our water through on the way to our treatment plant.

## Taking a role in Sustainable Saint Paul

The utility took a role in Sustainable Saint Paul, which examines how development and the long-term health of the environment need to be balanced. Sustainable design features built into the new facilities at SPRWS in 2004 included such as energy-efficient and energy-saving attributes as interior lighting, low-E-glazing, and highly efficient technical systems. Native plants like grass, wildflowers, shrubs, and trees have reduced maintenance costs and improved biodiversity.

A buffer of native plants runs between the buildings and Trout Brook to capture storm water before it enters the stream. We reduce energy use during peak hours and generate our own electricity. The utility has an extensive history of having a long-term view of our assets, land, and watersheds beginning as far back as the 1890s, when we planted extensive forests to help stop erosion. We are replanting Sandy Lake with native wild grasses, as well.

## Controlling taste and odor

We have continued efforts to restore the Lambert Lake wetland area and constructed a 500-foot weir to direct the flow of water, allowing phosphorus levels to drop naturally before the water flows into Vadnais Lake. Vadnais is the final resting place of our source water prior to reaching our treatment facilities.

Our efforts to control taste and odor episodes in our water by implementing granular activated carbon (GAC) were cited in the University of Minnesota's Institute of Technology magazine, *Inventing Tomorrow*. The article focused on the U of M's collaboration with utility staff to conduct the pilot study on the effectiveness of GAC and ozone.

The installation of granular activated carbon officially got underway in 2005 with the redesign of the finished water reservoirs. We added large baffles to mix our disinfection products in with the water and changed the location in which we added those products. Twelve of our filter beds were rebuilt to accommodate the new GAC media.

By the end of 2006, the first 12 filter beds were filled with GAC and ready to go, with the 12 remaining beds set for media replacement from anthracite coal to GAC in 2007.



## Reaping the rewards of hard work

In 2005, the Partnership for Safe Water honored SPRWS with a Directors Award for “commitment to providing superior quality water to” our customers “beyond the requirements” of the regulations of the United States Environmental Protection Agency (EPA).

The Partnership, started in 1995, is a voluntary initiative sponsored by the EPA and five other safe drinking water organizations, including the American Waterworks Association (AWWA), the Association of Drinking Water Administrators, the Association of Metropolitan Water Agencies, the National Association of Water Companies, and the AWWA Research Foundation.

The Partnership’s program, which consists of four separate phases, seeks to improve water quality “by using flexible technical tools” that enable water utilities to customize improvements

to their treatment methods with limited spending.

The award to SPRWS was for completion of Phase III, which focused on improving turbidity (or particulate matter) in our drinking water. The EPA regulation calls for a 0.3 turbidity reading (measured in “NTUs”) as the water leaves our treatment plant, while the more ambitious goal for the Partnership is less than 0.1 NTU, 95 percent of the time. During the June 2004 — June 2005 reporting period, SPRWS reached less than 0.1 NTU, 97.36 percent of the time. (Our 95th percentile was 0.092 NTU.)

Hundreds of utilities participate in the Partnership’s program, but only 40 percent have reached Phase III. Moreover, SPRWS was one of only three water utilities in the Upper Midwest to receive the Directors Award for completion of Phase III.

## Drilling new wells

We drilled two deep wells in 2005 to add to our water contingency plans. We will continue to drill wells until we reach a 50 million gallon a day capacity, which is about our average water production level.

## Testing for lead

After many years of mandated lead testing, the utility once again passed lead testing requirements, allowing us to test lead levels at the consumers’ taps every three years instead of annually.

## Divesting our land

We divested ourselves of our remaining land in the Rice Creek watershed, selling to agencies that will preserve the wetland and wildlife from future development.

While we retained the water rights to these properties, our backup supply will rely on wells in the future.

## Facing the challenges of today and tomorrow

Our water quality coming into the plant remained good in 2005, but we saw a major taste and odor episode in the spring of 2006. Also, 2006 was a drought year, with our main source of water, the Mississippi River, dropping to levels not seen since the last significant drought in 1988. The Department of Natural Resources appealed to consumers to conserve water as the river levels dropped, though SPRWS did not issue water use restrictions.

In addition, the DNR declared the Mississippi River from Brainerd

to the Twin Cities infested with zebra mussels. Our staff worked with the DNR to try to control the spread of this invasive species from the river into our lake system by applying copper sulfate at our intake station.

We now test at Charley and Pleasant lakes for the species. Though no zebra mussels were found, the actions to prevent the spread of the zebra mussels along with a taste and odor episode contributed to our increase in chemical costs.

In 2006, it cost us \$133.51 per million gallons to produce our water, a 16 percent increase from 2005.

Despite the drought, the quantity of water being consumed has been declining to levels not seen since the 1960s. In 2005, we produced an average of 45 million gallons per day, with only a slight increase to 45.7 million gallons a day in 2006.

Future predictions are for 2007 to be another drought year, as there was a lack of precipitation in the fall of 2006.

# Invest in our employees

**While our customers are the reason we operate, we recognize that our employees are the heart of our operations. We need people to fix main breaks, flush hydrants, inspect plumbing, read water meters, and help our customers with their questions and concerns.**

## Learning about what we do

To help our employees understand the utility and their role in it, we offered source water tours to allow employees to see first hand what we do out in the field, at booster stations, and water towers. We toured the site where we draw in water from the Mississippi River and from there, where it flows through various wetlands before coming to our facilities. We offered classes on our distribution system, and staff learned the difference between water pressure and water flow, and about how our treatment plant works.

## Enriching our professional and personal lives

In addition, we host an annual employee conference in which speakers from inside and outside of the utility offer courses on topics that pertain to both jobs within the utility and concerns employees might have outside of the utility, such as financial planning and healthy lifestyles.

## Furthering our education

To further encourage staff to take advantage of additional education and training to enhance their job skills and opportunities for advancement, the Board of Water Commissioners voted to increase the amount of tuition reimbursement for utility employees. Full-time employees are now eligible for up to \$1,000 a year in tuition reimbursement while part time employees can receive up to \$600.

## Recognizing our dedication

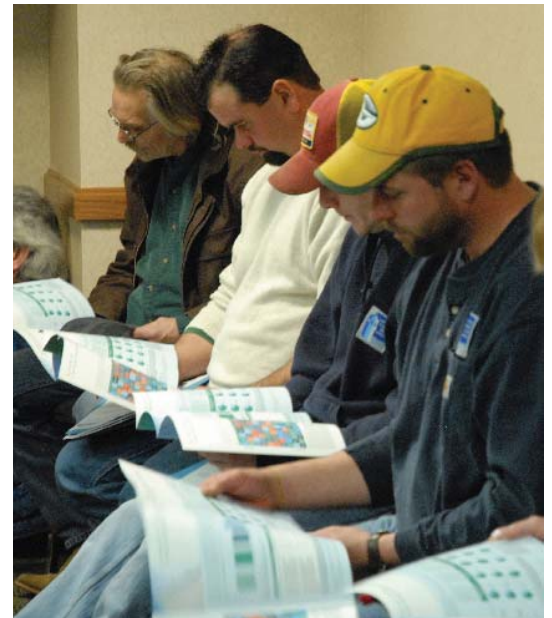
Through the city and the utility, employee's years of service are recognized. The utility also rewards good attendance with an annual free lunch for those who use less than 24 hours of sick leave during the course of the year.

## Recruiting new employees

To help us recruit new employees to the utility, we created a job and career informational brochure and attended various job and career fairs to achieve that end.

## Getting to know our co-workers

We updated and produced our employee directory, providing all employees with copies to help them identify their co-workers and know the jobs they hold.



## Keeping on top of current events

In addition, all employees receive a bi-monthly newsletter featuring projects the utility is working on and messages from the General Manager. Employees can see themselves and their co-workers being recognized for the work that they do.



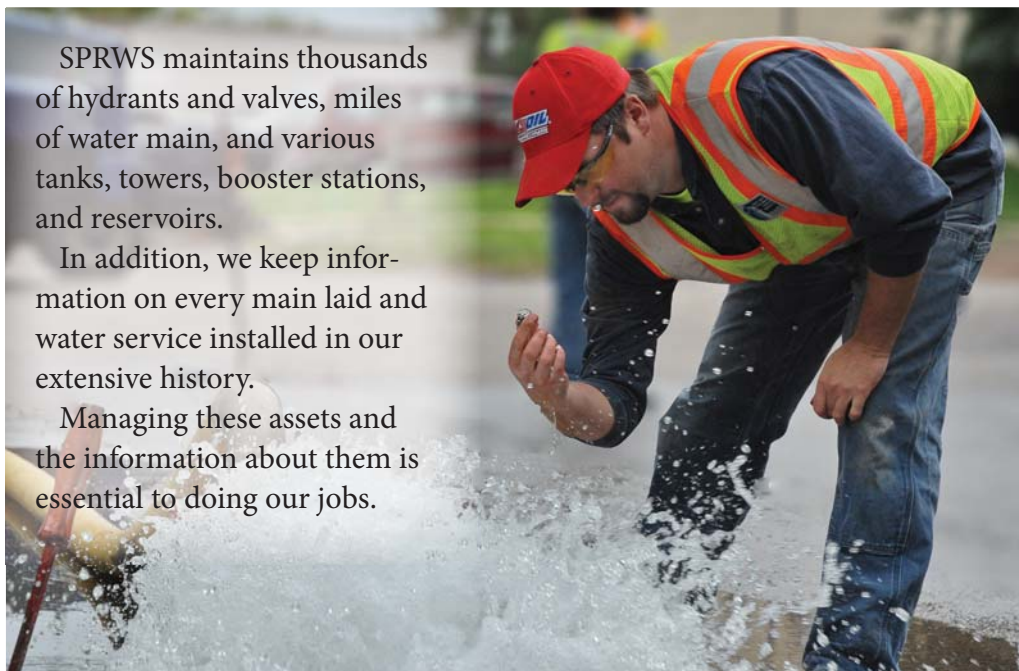
# Improve Asset Management

Improving how we manage our assets increases efficiency, ensures the reliability of our assets, and makes certain that all of our systems work together to provide our customers with the most efficient organization we can provide.

SPRWS maintains thousands of hydrants and valves, miles of water main, and various tanks, towers, booster stations, and reservoirs.

In addition, we keep information on every main laid and water service installed in our extensive history.

Managing these assets and the information about them is essential to doing our jobs.



## Maintaining and upgrading our infrastructure

Coordinating with city street construction projects, we installed 11.7 miles of new and replacement water mains, along with new hydrants in those areas and 885 copper services in place of the old lead ones.

In areas outside of the city construction projects, we installed an additional 640 copper service replacements and replaced 377 hydrants. Also, we inspected 7,790 hydrants, exercised 237 large main valves, and flushed 200 miles of main.

In 2005, we cleaned and lined 3.2 miles of cast iron main, including a 36-inch, high-service main and a 30-inch, low-service main, which were originally installed early in the history of the utility and provide water to large sections of Saint Paul.



## Ensuring operations in an emergency

The utility undertook a business impact analysis, which identified areas that might be affected if we experienced a major disruption to service.

Using that information, staff developed a business continuity plan to ensure that critical business operations could be up and running within 24 hours in an emergency situation.



Meter readers began using a StreetPilot GPS (global positioning system) for navigation to the radio read meters on their commercial routes.

## Implementing GIS mapping

Staff working with maps and records digitized the mains, hydrants, and services records into a geographic information system (GIS) format for use with our new mapping system.

This new mapping system was rectified to Ramsey County coordinates in a joint effort with the county GIS unit. The information was then integrated with the Computerized Maintenance Management System (CMMS); it will become the central platform for all mapping, asset management, and maintenance activities.

## Preserving old utility records

We are preserving our old utility records by scanning them into a document management system; this process also allows us better records maintenance and the ability to look up information without damaging 120-year documents.

## Increasing efficiency through automation

We continued to increase efficiency in other areas by automating the input of procurement card purchases and continued reporting development with our computerized maintenance management system.

## Adopting new modeling techniques

Staff adopted and implemented state of the art modeling techniques using GIS based applications. These are more comprehensive and powerful than previous tools used to model distribution system hydraulics and water quality, including such variables as water pressure, head losses, pump operations, and tank operations.

Using these techniques, what previously took up to six months to calculate manually can now be determined in a matter of seconds.

## Using wireless mobile computers

Our field personnel are now equipped with wireless mobile computers, which allows them to access information about facilities while on the job site.

Employees have web access to the CMMS and GIS of the SPRWS service area in their vehicles.

The PCs allow emergency tickets for main breaks to be sent directly out to crews in the field, rather than to dispatch staff that had to rely the information via phone. The wireless technology will eliminate response delays.





# Making automation improvements to our systems

- ◆ Installed an alternate fiber telecommunications link to the city of Saint Paul's computer network to provide a redundant connection to vital software applications.


- ◆ Developed a standardized central address system with the city of Saint Paul.

- ◆ Installed a new enterprise back-up system to handle computer administration issues more efficiently.

- ◆ Streamlined the process for handling metering issues for automatic fire services.

- ◆ Implemented a new backflow prevention program for managing testing requirements for customers who have reduced pressure zone assemblies.

## Planning a meter replacement project



With about 95,000 metered accounts, we have continued to obtain actual meter readings more than 97 percent of the time, estimating water use in the remaining 3 percent. We installed radio read systems for commercial accounts in which obtaining actual readings has proven difficult due to the location of the meter.

We are planning a residential meter replacement project to begin in 2009 in which we will begin to replace existing residential meters. The last such project took place in 1985-1989. Meter test data contracted for by SPRWS revealed that meters have a service life of 20 years, after which they begin to slow down and under register the actual amount of water used. We plan to continue with our current operating system and look at advancements in technology that might provide new reading technology in conjunction with the meter replacement.

# Financial Report

## Select financial information from 2005 - 2006

### Condensed Statement of Net Assets (in thousands)

	Fiscal Year <u>2006</u>	Fiscal Year <u>2005</u>	Dollar <u>Change</u>	Total % <u>Change</u>
Assets				
Cash and Investments	\$ 16,477	\$ 25,885	\$ (9,408)	(36.3)
Other Current Assets	\$ 9,994	\$ 9,148	\$ 846	9.2
Capital Assets - net	\$ 222,549	\$ 211,384	\$ 11,165	5.3
Other Noncurrent Assets	\$ 5,852	\$ 6,080	\$ (228)	(3.8)
Total Assets	\$ 254,872	\$ 252,497	\$ 2,375	0.9
Liabilities				
Current Liabilities	\$ 11,322	\$ 10,310	\$ 1,012	9.8
Noncurrent Liabilities	\$ 42,040	\$ 45,115	\$ (3,075)	(6.8)
Total Liabilities	\$ 53,362	\$ 55,425	\$ (2,063)	(3.7)
Net Assets				
Invested in Capital Assets Net of Related Debt	\$ 181,465	\$ 175,322	\$ 6,143	3.5
Restricted for Debt Service	8,338	8,051	287	3.6
Unrestricted	11,707	13,699	(1,992)	(14.5)
Total Net Assets	\$ 201,510	\$ 197,072	\$ 4,438	2.3

### Condensed Statement of Revenues, Expenses, and Changes in Net Assets (in thousands)

	Fiscal Year <u>2006</u>	Fiscal Year <u>2005</u>	Dollar <u>Change</u>	Total % <u>Change</u>
Operating Revenues	\$ 35,290	\$ 33,386	\$ 1,904	5.7
Nonoperating Revenues (Expenses)	(183)	(84)	(99)	117.9
Total Revenues	\$ 35,107	\$ 33,302	\$ 1,805	5.4
Operating Expenses	\$ 32,123	\$ 31,345	\$ 778	2.5
Income (Loss) Before Transfers and Contributions	\$ 2,984	\$ 1,957	\$ 1,027	52.5
Capital Contributions				
Cash Contributions for Capital Acquisitions	\$ 928	\$ 1,161	\$ (233)	(20.1)
Capital Asset Contributions	526	187	339	181.3
Total Capital Contributions	\$ 1,454	\$ 1,348	\$ 106	7.9
Change in Net Assets	\$ 4,438	\$ 3,305	\$ 1,133	34.3
Net Assets - January 1	\$ 197,072	193,767	3,305	1.7
Net Assets - December 31	\$ 201,510	\$ 197,072	\$ 4,438	2.3

*The notes to the financial statements are an integral part of this statement.*

Complete financial reports for 2005 and 2006 are available at Saint Paul Regional Water Services.  
To obtain a copy, contact the Financial Services Department at: 1900 Rice Street, Saint Paul, MN 55113.







1900 Rice Street  
Saint Paul, MN 55113