2012 ANNUAL REPORT

Saint Paul Regional Water Services

Mission

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

Vision

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

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Photo: The gate house and boat house on Vadnais Lake.

Dear Customers:

Safe, reliable drinking water is essential to every community. SPRWS provides that water to more than 415,000 in Saint Paul and neighboring cities. A staff of 250 employees ensures we are true to SPRWS' mission of providing water to its customers at a reasonable cost.

2012 brought an emphasis on replacement of some aging infrastructure. We are nearing the end of a project consisting of replacement of every water meter in our retail service area. Our employees work in lock step with our contractor, ensuring a minimal inconvenience to our customers during this extremely invasive project. We have also worked with the contractor along University Avenue to relocate our buried infrastructure in preparation for the new light rail transit.

Investments in our water distribution system elsewhere include the replacement of water mains, hydrants, and valves. Continuing to replace this aging infrastructure will ensure high quality water will continue to be reliably delivered to area homes and businesses for generations to come.

We are working with other city staff in preparation for the implementation of a new finance, human resources and procurement system. When complete, we will have improved access to financial and budget information in addition to improved work flows in many aspects of our business.

All of us here at SPRWS strive to provide the best service possible to all of our customers while keeping that service affordable for all. We will continue to look to the future and work towards a sustainable utility for many generations to come.

I am proud of our accomplishments and the daily efforts put forth by our employees. I hope you share in that sentiment and I thank you for your interest in SPRWS.

"I am proud of our accomplishments and the daily efforts put forth by our employees."

Steve Schneider,
General Manager

Board of Water Commissioners

2012 Board of Water Commissioners, from left: *Commissioner Greg Kleindl, Commissioner James Bykowski, Commissioner Kathy Lantry, President Matt Anfang, Vice President Amy Brendmoen, Commissioner Will Rossbach, Commissioner Chris Tolbert.*

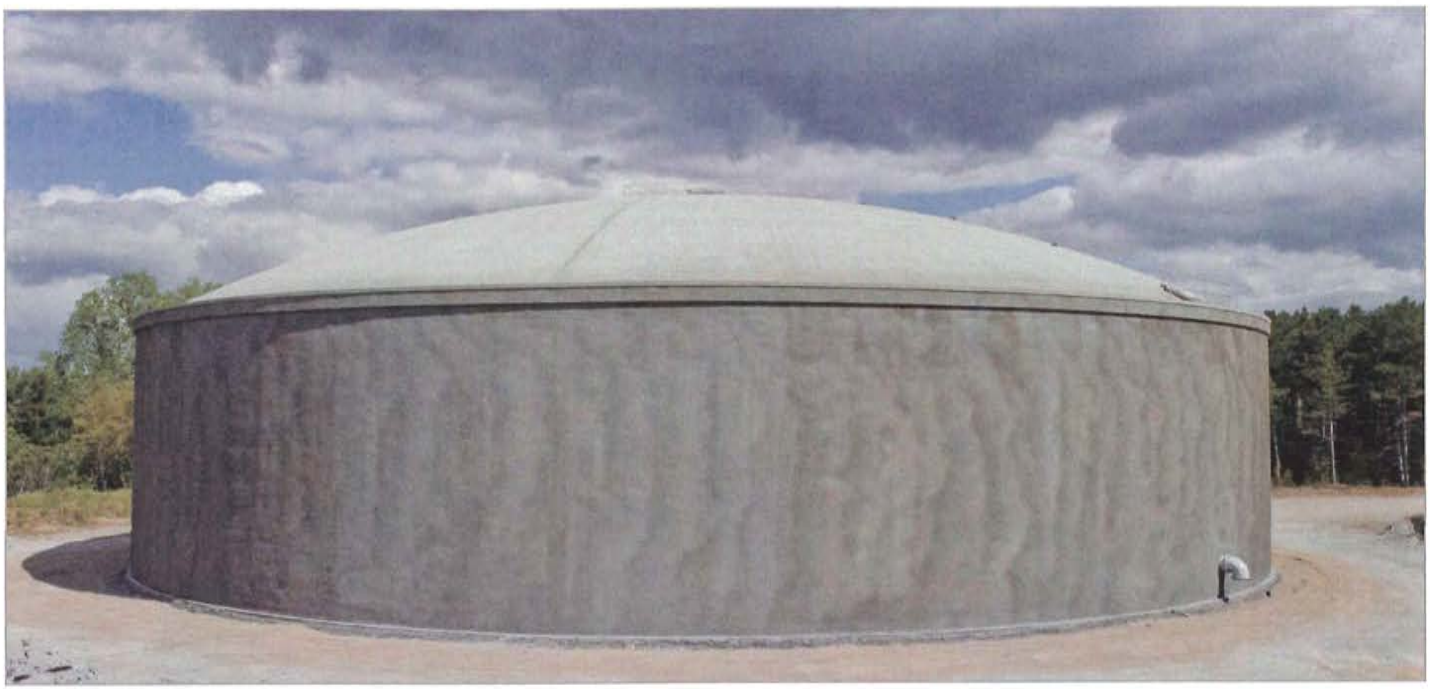
SPRWS Division Managers

Dave Schuler
Engineering

Dave Wagner
Distribution

Jim Graupmann
Production

Steve Gleason
Business



Engineering Division

Engineering includes planning and construction coordination for water main construction, valve replacement, and lead service replacement as well as for water supply and water treatment.

Significant progress on a number of large projects was made in 2012 that will serve St. Paul Regional Water Services and its customers well into the future. Some of these large projects include:

DALE STREET RESERVOIR

The 30-million-gallon Dale Street reservoir was built in 1919 and was demolished in 2010. The new 10-million-gallon reservoir has been constructed, including baffle walls, side panels, and roof. The reservoir is finished and has been operational since the fall of 2012.

DISTRIBUTION SYSTEM MODELING

The SPRWS engineering division has adopted and implemented state-of-the-art modeling techniques to model distribution system hydraulics and water quality. The programming and calibration of the model is complete.

Photos: Top: The new 10-million-gallon tank at the Dale Street Reservoir. Left: The baffle wall in the interior of the 10 MG reservoir.

HYPOLIMNETIC OXYGENATION

We have completed the installation of the Vadnais Lake oxygenation system. The system is fully operational and is performing beyond expectations. The design of the Pleasant Lake oxygenation system is complete, the old aerators have been demolished, and installation of a new oxygenation system is scheduled for the summer of 2013.

LIGHT RAIL TRANSIT

We have been involved with the relocation of underground water utilities from the fall of 2009 to the end of 2012. The major portion SPRWS's involvement in the project is over and SPRWS activities are winding down to correcting deficiencies.

PLANT HEATING

We have awarded a contract to design and install a new heating system for the water filter and treatment plant. The design will be finished by February 2013 and the installation will be complete by fall of 2013.

SLUDGE PRESS ADDITION

We have awarded a contract to install a fourth plate and frame press to handle our solids waste stream from the treatment plant. The installation should be completed by the end of 2013.

DISTRIBUTION PIPE REHABILITATION

SPRWS has enhanced the buried pipe rehabilitation to include replacing all of the cast iron within public works' street projects. We are investigating trenchless technologies and are moving outside the street projects to rehabilitate problem areas within the service area. The immediate goal is to reduce the replacement cycle of the distribution system piping from 140 years to 100 years.

Engineering work in the distribution system included planning and construction coordination for its water main construction, valve replacement, and lead service replacement programs. The SPRWS revenue funded capital plan includes replacement of all existing cast iron pipe within the project areas. The total pipe replacement for 2012 was 13.6 miles.

FUTURE OPERATIONS

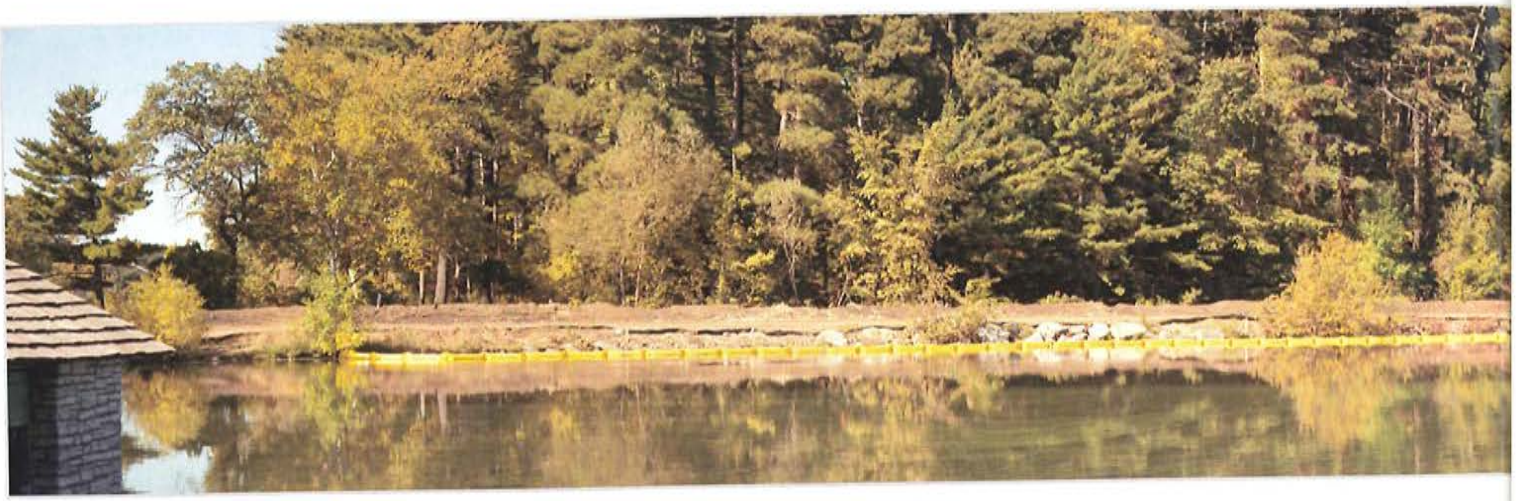
The Engineering division will continue to focus primarily on three initiatives:

1) Leverage the electronic programs and tools that are now available to increase our effectiveness and efficiency;

2) Work with the Vadnais Lake Area Watershed Management Organization and the Upper Mississippi River Source Water Protection Initiative to assist in completing E.Coli Total Maximum Daily Load programs (TMDL) for the Upper Mississippi River and County Ditch #14; and

3) Focus on further enhancement of our asset management program.

Photo: SPRWS supervisor inspects work done on the last segment of the light rail project.



Production Division

The production division brings water from the Mississippi River, through a series of lakes to Lake Vadnais and to the treatment plant. Treated water is then pumped out into the distribution system, including mains, tanks, towers, and reservoirs.

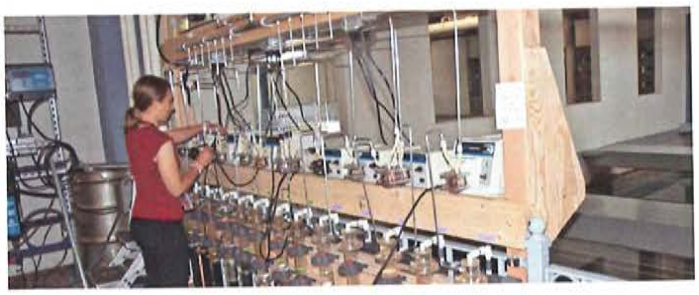
We started the year 2012 on a very dry note, with very little precipitation since August of 2011. Through April, precipitation was close to normal. Then in May, we had a little over nine inches of rain, which is nearly six inches above normal, and concerns of a drought became concerns of a flood.

Once again though, August and the rest of the fall were dry, and we ended the year just over an inch below normal for precipitation. Concerns at the end of 2012 were once again for a drought. July and the year as a whole were much warmer than normal, and combined with the dry, late summer made for increased demand for water. Pumping for July through September averaged just shy of 60 million gallons per day (MGD), the highest volume for those three months since 2008. That helped push our pumping for the year to an average of 44.8 MGD, which nearly matched the projection in our budget.

The Mississippi River was flowing at approximately 3,000 cubic feet per second (CFS) at the time of ice interference in December. Precipitation through the winter and spring will be key to keeping the river at levels above 2,000 CFS. We are required to put in place conservation measures if the river level goes below 2,000 CFS and pumping from the river may be restricted if the river level continues to decline.

WATER QUALITY

We had another excellent year as far as water quality is concerned. There were only 16 water quality complaints, matching the total from 2011. That is now six consecutive years of minimal water quality complaints, as our Granular Activated Carbon (GAC) filters continue to perform admirably. Higher demands on the system in the late summer and fall may have contributed to the small number of nitrification problems in the system; this is also similar to 2011.



COSTS STABILIZE

Chemical and electrical costs continued to stabilize. Our cost per million gallons for chemicals was slightly less than in 2011. Lime pricing for 2013 will be higher and will very likely mean an increase in chemical costs for 2013, reversing a three-year downward trend.

POWER OUTAGES

A severe storm in June caused power outages at three of our booster stations. Power was not restored in time to keep the elevated tank in West Saint Paul from reaching very low levels. As a result, we delivered a *do not drink* order to about half of the city of West Saint Paul. Tests showed that no contamination was present, and though inconvenient, many residents appreciated that we sent the precautionary notice. Plans for a smaller generator; that will be quicker to put into use at the station are underway.

Photos: Opposite: A University of Minnesota student works on a GAC experiment at the treatment plant. Top: Work begins on the Vadnais Trail on Lake Vadnais.

OXYGENATION SYSTEM

Our new oxygenation system in Vadnais Lake performed as expected and allowed us to keep hypolimnetic oxygen at very good levels in the lake. This had a good effect on water quality and bodes well for future water quality from Vadnais Lake.

VADNAIS TRAIL

Ramsey County replaced the park road between Vadnais Lake and the West Arm with a bike path and enhanced fishing locations. The contractor will finish up in the spring of 2013, but what has been done so far looks very good.

FUTURE OPERATIONS

Similar to last year, we are watching precipitation totals and are hoping for adequate flows on the river. Four new wells are scheduled to go on line by early summer. These will give us capacity to produce an average day demand strictly by using groundwater. This will give us a great option if flows on the river are restricted. A new pump at Fridley is also expected to be on-line by spring of 2013, aiding with our firm capacity from the river.

We will attempt to repair the valve on the lake side of the east 90" conduit. This will allow us to get into the chamber and repair the screen slides, which will enable us to use our new copper screens. If successful, the new screens should limit the attachment of zebra mussels, and save us maintenance. We could then replace the screens in the west gatehouse and at Pleasant Lake, and save on the labor we now spend cleaning screens.

A new oxygenation system for Pleasant Lake is in process; this is similar to the one installed in Vadnais Lake. This should improve water quality in Pleasant Lake and give us better water quality coming in to the McCarron's water treatment plant.

We continue to invest in the future by replacing aging infrastructure.

Distribution Division

Work in the distribution division includes capital construction and maintenance of our distribution system, fleet management and warehouse operations.

We continue to replace and upgrade an aging infrastructure of unlined cast iron water mains, older hydrants and lead water services.

Much of the water main replacement was accomplished in coordination with street reconstruction projects.

LIGHT RAIL

In 2012, much work was done in coordination with the Central Corridor Light Rail Transit (light rail) construction. Along University Avenue in Saint Paul, 5.4 miles of main were replaced with light rail construction using a combination of contracted and staff crews.

Construction for light rail took many resources during the year. Staff performed various work on the project including the installation of temporary water main, maintenance of the temporary water main during construction, reconnection of water services to the new mains, valve installation, and valve operation.

Photos: Left: SPRWS workers put in a new water main. Opposite: A worker sawcuts the asphalt to begin work on a lead replacement.

MAIN REPLACEMENT

Utilty crews replaced 8.2 miles of main in 2012. This work was done in collabortion with street reconstruction projects. In areas of water main replacement, temporary water mains are installed in order to serve customers while the existing water main is being replaced. For every mile of water main replaced, three times the amount of temporary service piping needs to be set up and again taken down when construction is completed. This requires significant coordination of efforts and it also provides a customer service opportunity that is generally well received by our customers.

LEAD REPLACEMENTS

In addition to water main construction, 558 lead water services were replaced; 397 of these replacements were done in coordination with street reconstruction projects. The other 161 lead service replacements were performed in those areas throughout the service area where property owners have previously replaced their portion of the lead service in private property and where old services were leaking, requiring replacement.

Two-hundred and forty-seven of the 9,500 system hydrants were replaced during the year. We also began installing Storz connections on newly installed hydrants. A Storz connection is a quick connecting coupling on hydrant nozzles that accommodates fire hoses.

SYSTEM MAINTENANCE

Preventive maintenance of the system is needed to ensure adequate reliability of the distribution system and improve water quality. Preventive maintenance work includes hydrant inspection, Uni-Directional Flushing (UDF), and valve exercising. All public fire hydrants in the system were inspected during the year. This involves the operation of hydrants and performing minor repair work as necessary.

With UDF, valves are operated and the system thoroughly flushed for improved distribution water quality. The UDF work was limited in the year due to resources placed towards light rail construction. In addition, our large valve exercising program was put on hold in 2011 and 2012 with resources put towards light rail construction.

We perform emergency repairs on water mains and services. We also provide water main break repair services to other municipalities outside our service area, responding to main breaks in the city of Oakdale and White Bear Township. Last year we repaired 99 main breaks within our service area and 28 repairs in communities outside our service area.

BIRCHWOOD VILLAGE

In 2012, we became a water operator for the community of Birchwood Village. This involves maintaining and operating the distribution system and performing routine maintenance.

FUTURE OPERATIONS

In 2013, emphasis will be placed on water main replacement in street reconstruction project areas. We plan to continue to put increased emphasis on our valve maintenance program and UDF. Our infrastructure funding for 2013 will allow for 10.1 miles of main replacement in project areas. Additional funding in this vital area is needed to ensure proper investment for the future.

Business Division

The business division includes financial services, information services, meter operations, billing, public information, and customer service. The business division offers support services to other divisions within the utility as well as direct contact with individual customers and communities at large.

In 2012, a new Business Improvement Unit was added to the division. This unit's goal is to analyze, recommend and exploit business improvement opportunities in support of SPRWS' mission. The intent is to make this service available to all divisions within the utility. In 2012, many projects were identified and prioritized and business process reviews got underway.

CUSTOMER SERVICE

Our Customer Information System, CIS Infinity, saw several software enhancements in 2012. The meter replacement project required a new interface with new meter reading software. Enhancements to the payment allocation process, tax certification, and equalized payment plan are in progress.

In 2012, we continued to increase the number of registered users of our on-line pay option, *Infinity Link*. This CIS module provides customers a self-service choice of viewing their personal account and paying their bill on-line and also provides interested customers the option to receive an e-Bill rather than a bill through the U.S. mail. By the end of 2012, we had nearly 13,000 registered users.

WATER METER REPLACEMENT

Through a contract with Northern Water Works Supply, we made great progress with the meter replacement project. It began in late 2010 and included the installation of some 95,000 replacement water meters. By year end, only about 3,000 meters in the system still needed to be replaced.

The complexities of coordinating customer appointments and ensuring customers participated in the program was successfully carried out between SPRWS customer service, billing and meter operation staff. Business division staff is very proud of the meter project success. The meter replacement project and warranty work will continue to the end of 2013.

Throughout the year water billings continued to meet schedules.

As part of the meter project, the Board of Water Commissioners offered alternate meter reading systems, which provide customers a non-radio or outside radio alternative. This alternate program facilitated the continuation of the project and gave customers a choice that was well received. At the end of the project 225 accounts chose a non-radio read option and 350 accounts chose an outside mounted, radio-read option.

TECHNOLOGY & INFORMATION

We continued to improve the retrieval and display of asset information in our Geospatial Information System (GIS) and provide this information both in the office and in the field.

Work continued on expanding the use of our document management system (DMS). Our CIS, GIS, and Work and Asset Management System now link to supporting documents housed in our DMS. We continued our effort to index record documents properly to the asset for efficient retrieval. DMS was enhanced to more readily present our standard operating procedures, policies, safety information, and paid invoices for easy look-up by staff.

SPRWS has implemented much technology and SPRWS IS staff work and have generally succeeded in making it available 100% of the time for things within their control.

CUSTOMER SERVICE

The Customer Service Call Center received 172,812 calls in 2012, a 7.5 percent increase from 2011. About 85,650 calls (or 50 percent) were handled by call center staff and 87,162, by the Interactive Voice Response unit (IVR). The abandoned call percentage was under 1 percent, substantially lower than our goal of less than 2 percent.

Our IVR offers menu options and responses in both English and Spanish. Approximately 1,419 callers took advantage of the Spanish language alternative.

We certified $437,973.92 to taxes in Ramsey and Dakota Counties for 2,283 delinquent accounts.

FINANCIAL SERVICES

Our financial services unit was recognized for its outstanding work preparing the SPRWS 2011 annual financial report for audit. Preliminary work continued on the implementation of the city of Saint Paul's new Lawson finance system.

PUBLIC INFORMATION

To improve public outreach and provide information, we updated our website with helpful meter replacement project information especially about the alternate metering system choices for customers. We held open houses at the Highland Park water tower. We produced several external publications, including *Customer Service Connections,* a quarterly newsletter for customers, and the annual water quality report. The water quality report was made available on-line in accordance with Minnesota Department of Health requirements.

Internally, we continued to provide employees with communication updates by featuring timely articles in our bi-weekly employee newsletter, the *Pipeline Express*.

FUTURE OPERATIONS

In 2013, we anticipate implementing V4, a version upgrade to our Customer Information System, CIS Infinity.

We will be performing BETA testing and anticipate go-live with the new version by fourth quarter of 2013. The new version is written in .net computer language that facilitates broad search and filtering capabilities, enhanced report writing and data retrieval, and improvements to overall ease of use and reliability.

In 2013, we anticipate implementing the new Lawson financial system along with the new Time and Attendance and Scheduling System (TASS). The city of Saint Paul is implementing a new Lawson finance system. This implementation will significantly impact SPRWS information systems. Finance and information services staff will support design, software configuration, and testing of SPRWS business processes. Data conversion and testing to implement a new chart of accounts in both CIS Infinity and our Computerized Maintenance Management System (CMMS) will require significant SPRWS resources. This means, along with testing all financial transactions in the new Lawson system, significant effort to test the new chart of accounts and update system reports as a result of the new chart of accounts will be very challenging.

We will review and amend our business practices as needed to optimize the effectiveness of the new radio, meter reading system.

We will continue to examine workflow processes throughout the utility looking for improved efficiency and enhanced delivery of information to our employees.

Photo: A customer service representative assists a customer.

SELECT FINANCIAL INFORMATION 2012

Condensed Statement of Net Assets (in thousands)

	Fiscal Year 2012
Assets	
Cash and Investments	$ 26,319
Other Current Assets	12,238
Capital Assets - net	269,953
Other Noncurrent Assets	6,870
Total Assets	$ 315,380
Liabilities	
Current Liabilities	$ 16,928
Noncurrent Liabilities	53,378
Total Liabilities	$ 70,306
Net Assets	
Invested in Capital Assets Net of Related Debt	$ 220,530
Restricted for Debt Service	11,560
Unrestricted	12,984
Total Net Assets	$ 245,074

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

	Fiscal Year 2012
Operating Revenues	$ 51,520
Operating Expenses	41,434
Operating Income	$ 10,086
Nonoperating Expenses	$ 3,471
Income (Loss) Before Contributions	$ 6,615
Capital Contributions	$ 12,231
Change in Net Assets	$ 18,846
Net Assets - January 1	$ 226,228
Net Assets - December 31	$ 245,074

The notes to the financial statements are an integral part of these statements.

The complete financial report for 2012 is available from Saint Paul Regional Water Services. To obtain a copy please visit us at www.stpaul.gov/water or contact the Financial Services Department at 1900 Rice Street, Saint Paul, MN 55113.

BOARD OF WATER COMMISSIONERS

ST. PAUL, MINN.

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