

# Introduction to SPRWS

SPRWS has been in the business of producing drinking water for more than 130 years.

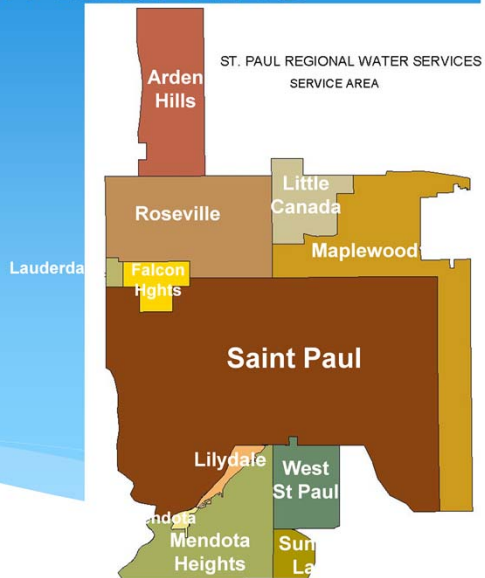


Saint Paul Regional Water Services has been providing drinking water to Saint Paul and our surrounding suburban communities for many years. We are proud of our history in providing reliable water and services to all of our customers at a reasonable cost.



## Introduction to SPRWS

- Serve approximately 425,000 people
  - 9 retail municipalities
  - 2 wholesale municipalities
- 90,000 domestic accounts
- 4,000 commercial accounts



We provide water and services to about 425,000 people 24 hours a day, 7 days a week. There are over 94,000 individual locations that we serve. These are located in Saint Paul and 10 surrounding communities.

# Introduction to SPRWS

We have 253 employees



We have 253 employees that work together to ensure we have virtually uninterrupted water service every day of the year.

Where do we get our  
drinking water?



SPRWS receives the majority of our water from the Mississippi River from our intakes in Fridley, Minnesota.

## Where do we get our drinking water?



The water is pumped from that location through large pipes to a chain of lakes in northern Ramsey County. The water flows through these lakes to our final intakes in Vadnais Lake.

## Where do we get our drinking water?



From there, the water flows to our water treatment plant in Maplewood, Minnesota through large pipes. We also have 10 wells along these pipes where we can use ground water for source water if the need arises.

# We treat the water

Softening

Filtration

Sedimentation

Disinfection



At McCarrons Treatment plant we treat the water to ensure it is of good quality and is safe to drink. To do this we first add chemicals to remove minerals and contaminants from the water, filter the water to remove even finer particles and finally, disinfect the water to ensure it contains no harmful bacteria or viruses.



## We test the water

During the treatment process, we run dozens of tests on the water to ensure that the water meets all the standards for high quality drinking water. SPRWS meets all EPA standards for drinking water.



Our certified laboratory conducts many tests to ensure that the water meets the standard for drinking water. Many of our parameters are monitored 24 hours a day. Our water meets all EPA standards for drinking water.



## Distribution System Water Quality

Once the water has been treated, it is ready to be sent out into the distribution system to homes and businesses. At that point, it is high quality drinking water that has had impurities removed. There is no lead in the water as it leaves our treatment plant.



When the water leaves the treatment plant it is ready to be consumed from your tap. This high quality water does not contain lead at the point it is finished with treatment.

## Distribution System Water Quality

This water can be consumed straight from the tap with a high level of confidence in the quality of the water.



The water at your tap can be consumed with confidence.

## Tap water vs. bottled water

- \* Why tap water?
  - ✓ Tap water has stricter standards than does bottled water
  - ✓ Tap water is delivered directly to your home- no need to go out to get it
  - ✓ Tap water is far less expensive

How many of those here drink bottled or bulk water purchased from a store on a regular basis? Here are some reasons you may want to consider tap water.

Tap water has stricter standards than does bottled water

Tap water is delivered directly to your home- no need to go out to get it

Tap water is far less expensive

## Tap water vs. bottled water

For \$1.00, you can buy:



1 quart of  
Bottled water

Vs

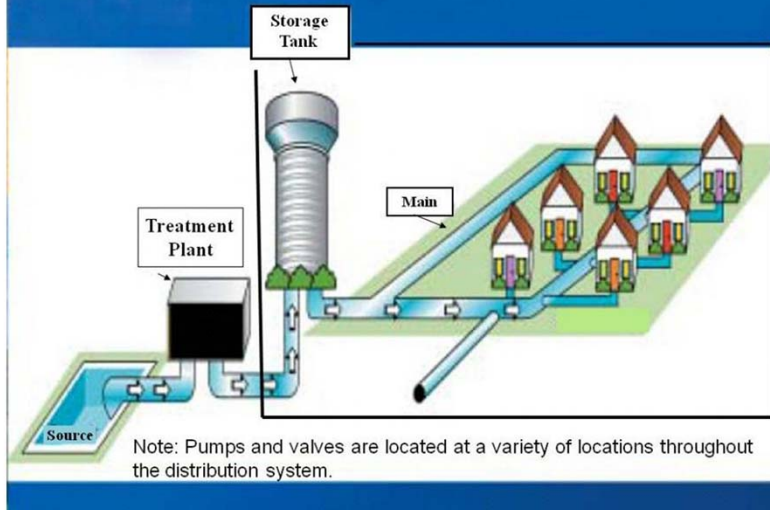
291 gallons  
of tap water



One dollar will purchase 291 gallons of high quality SPRWS tap water. Remember that tap water has more stringent standards that must be met versus bottled water.

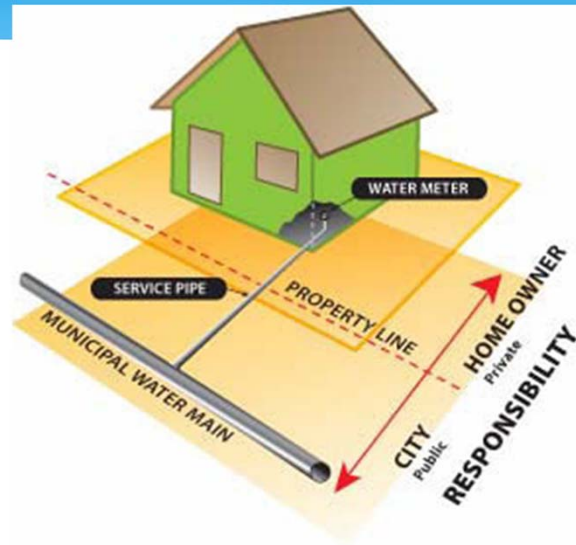
# How water gets to your home

## Water Supply Distribution System



All water is treated to drinking water standards at the McCarrons treatment plant. The water is then pumped and may be delivered to your street through a water tower or it may remain in our underground water pipes all the way there.

## How water gets to your home



Once the water is near your home, it is delivered into the house through a water service connection. It is then metered and available for your use. The water service connection is owned partially by SPRWS and partially by the owner of the home.

# Home water services

We provide water to about 90,000 homes in Saint Paul and several surrounding communities.

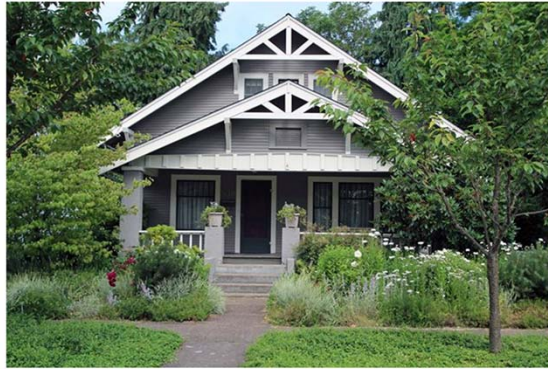


There are over 90,000 residential services in our system. Each of these provide drinking water to a private home.



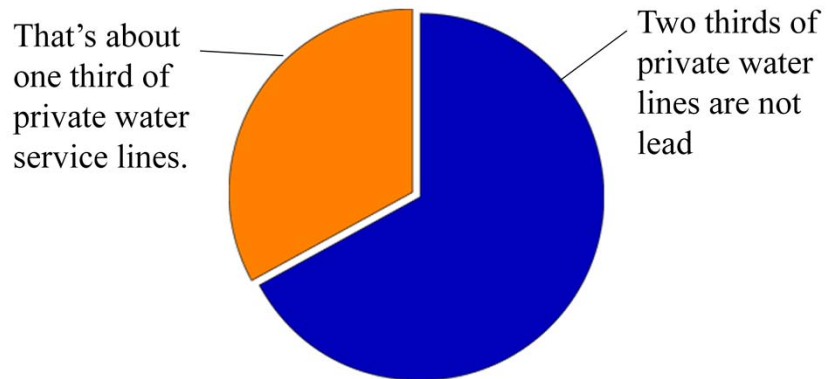
## Home water services

Perhaps as many as 28,000 homes still have private water service lines that contain lead.



These water service connections were constructed over the years with predominately copper, cast iron and lead materials. A recent review of our records indicate that as many as 28,000 homes may still have all or a portion of the service connection consisting of lead. This can either be the SPRWS owned portion or the property owner portion of the connection.

## Home water services



This equals about one out of every three of our service lines.

## Why is lead an issue?

Lead can be harmful.

It can:

- impact normal physical and mental development in babies and young children
- cause deficits in the attention span, hearing, and learning abilities of children
- increase blood pressure in adults

Lead can be harmful, especially to young children. It can affect the physical and mental development in growing children and increase blood pressure in adults.

Remember:

Lead is not present in the drinking water leaving the plant.



It is important to note that lead is not present in the drinking water leaving the water treatment plant.

## Lead and the Distribution System

Lead gets in the water at the site of the home, from the water service, lead in fixtures or lead solder in the home.

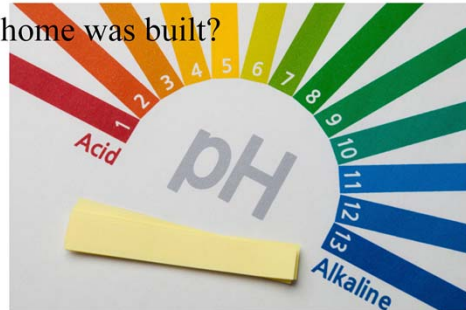


Lead can, however, enter the drinking water through lead service lines, brass fittings and fixtures and lead solder that was commonly used in private plumbing systems.

## Lead and the Distribution System

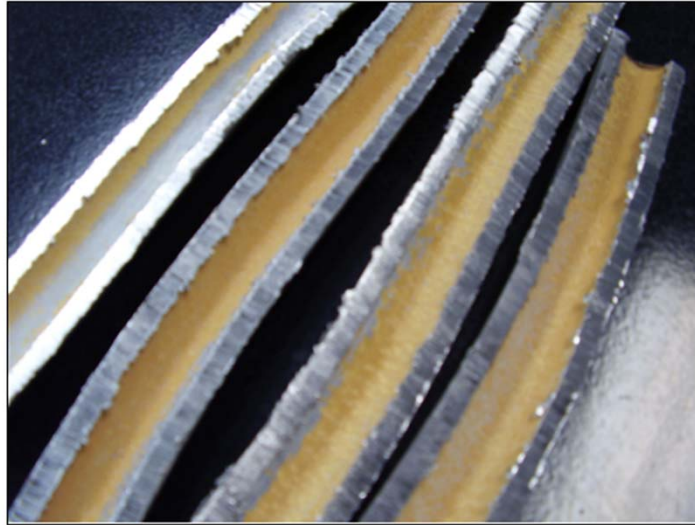
Many homes in the SPRWS distribution system were built before 1927, when lead stopped being used for water service lines. Those homes may still have lead water service lines.

To help control corrosion out in the distribution system, we adjust our pH and alkalinity at the water treatment plant.



Do you know when your home was built? Most homes in Saint Paul that were built in 1927 and earlier, had water service lines made of lead materials. To help limit the amount of corrosion that occurs in the system, SPRWS has very tight controls on the pH and alkalinity of the water we provide.

The proper pH and alkalinity help to create a coating on the inside of the lead water service lines, as seen below.



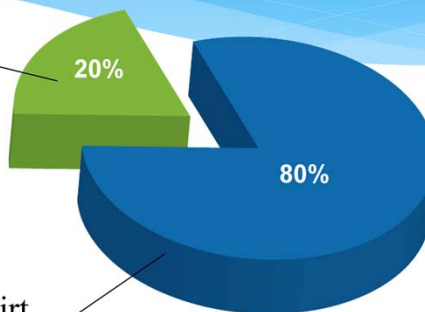
This allows us to produce a water that creates a thin coating on the inside of all the pipes in our system that limits the contact between the water and pipe materials.



## Important things to know about lead

EPA estimates that  
20% of exposure to  
lead comes from  
water.

The remaining 80% of  
exposure comes from  
other sources, such as dirt,  
lead paint, household dust,  
pottery, and air.



It is our goal to limit the amount of lead that exists in your drinking water. It is important to know that there are other common sources of lead in our environment. These include old paint, dirt and household dust. According to the EPA, about 20 percent of lead exposure comes from water, and about 80 percent from those other sources.

# What is SPRWS doing?



- SPRWS replaces hundreds of lead services in the street each year.
- We have been doing this since the early 1980's.
- We will replace the street half of any lead service replaced by the homeowner.
- We provide financing for interested customers.

What are we doing to address this issue?

First, we continue to replace lead water services in the street. Every year, we replace several hundred and have been doing so since the 1980's. If a homeowner replaces the privately owned portion of their service, we will replace our half as well.

We are educating our customers about lead and lead in drinking water.

We offer financing for Saint Paul residents to facilitate the replacement of their lead service.

## What we are doing

This year, we also started providing filter pitchers to those customers who have had a partial lead replacement. We include filters that will give six months of service.



Any time there is work done that disturbs a lead water service anywhere from the water main to the water meter, we provide that homeowner with a filtering water pitcher that is certified to remove lead from the water. We also provide enough filters to last for approximately six months.

## What you can do

### ☐ Know if you have a lead service

You can call our engineering desk for help in determining if your home has lead service lines at 651-266-6270.



What can you do to limit your exposure?

First and foremost, find out if you have a lead water service. We can help you with this. However, we may not have records that detail what is in private property. In some cases you may need to have someone help you determine what material you have in private property.

## What you can do

☐ Know if you have a lead service

If you have a copper service, that's great!  
Your chances of having an issue with high  
lead levels in your water are small!

If you have a copper service all the way into the home, your chances of having high levels of lead in your water are significantly reduced.

## What you can do

### ☐ Replace your lead water service

- \* The best way to reduce lead levels in your water is to replace your lead water service.
- \* We can help with financing through our assessment program.

If you have a lead water service, the best thing you can do is replace it. Again, we can help finance this and we will commit to replacing our portion if you replace yours first.

## What you can do

☐ Flush your water if it has not been used for hours

If you know that your home has a lead service line, you can let your water run for 3 -5 minutes any time the water has been sitting stagnant for several hours, such as overnight.



If you choose not to replace your service, running your water for 3-5 minutes if there has been no water use for several hours is very effective at reducing the amount of lead that may be in the water.



## What you can do

### ☐ Use a filter pitcher or other device to remove lead

You can purchase and use a water filter pitcher certified by the NSF International for lead removal to remove lead from your water before drinking or cooking.



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## What you can do

### ☐ Have your water tested for lead

If you are concerned about lead levels in your home, you can contact our water quality lab at 651-266-1635 to have a lead test conducted to determine the lead levels in your water.

We will conduct the tests and help you to interpret the results.



SPRWS offers a free water test if you are concerned about lead in your drinking water. We will communicate the results and help you interpret them.

## What you can do

To summarize:

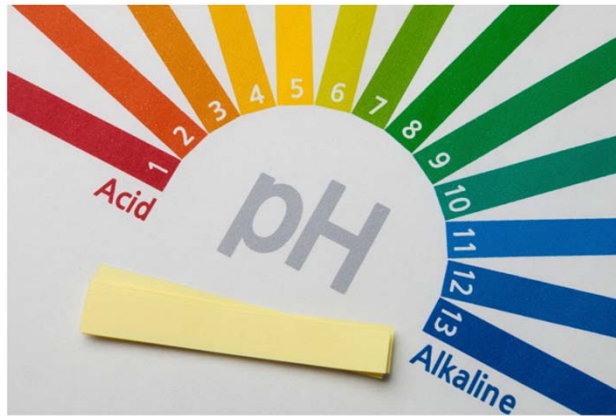
- \* If you have a copper service, you probably have little to worry about with lead in your water.
- \* If you have a lead service, replacing it is the best option.
- \* If you can't replace it or don't want to, use a filter pitcher and/or flush your system to reduce lead levels.

We are always available to help if you have questions.

We are always available to help if you have any questions. Our professional water quality, engineering and customer service staff will gladly review how we can work together to address this issue.

## Final thoughts

We have been treating the water to reduce the possible leaching of lead into the drinking water from water service lines and lead solder since the 1990s.



SPRWS has been aggressively addressing this issue for decades. We will continue to work with you to minimize your exposure to lead in your drinking water.

## Final thoughts

We continue to be in compliance with all EPA and Minnesota Department of Health regulations on drinking water.

We are in full compliance with all applicable regulations for drinking water.

## Final thoughts

Tap water is still the most:

- Economical
- Convenient
- Regulated

Source of drinking water

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## Final thoughts

We take pride in producing high quality drinking water to our customers and continue to do everything we can to extend the trust our customers have placed in us and in their drinking water.



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# Questions?

There is much more information available on-line about lead. You can refer to the pamphlet for more information.

## Contact Information

Water quality lab  
651-266-1635

Engineering desk  
651-266-6270

Customer service  
651-266-6350

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