

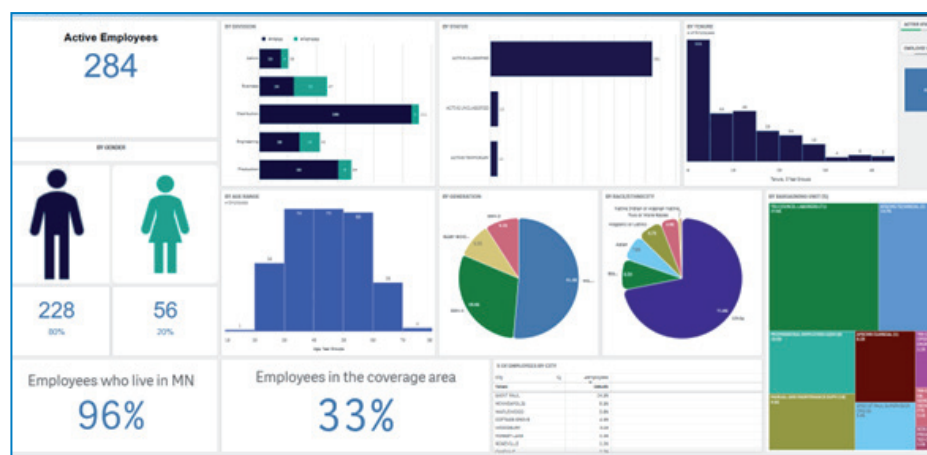


Pipeline Express

Provide high-quality water and exceptional services to the people and communities we support.

SPRWS:

A Snapshot of our Workforce



SPRWS is made up of many individuals that keep our workforce strong.

Saint Paul Regional Water Services is a multi-generational workplace. Our 284 employees include both a growing cohort of newer team members and a core group of long-tenured staff.

- 155 employees have been with the utility for less than 10 years, including 111 who joined us within the past five.
- 45 employees have more than 20 years of service.

- The median tenure across the organization is about seven years.

Four generations work side by side at SPRWS, from Baby Boomers to Generation Z, with Gen X and Millennials in between. Millennials make up over half of our workforce, while Gen X represents nearly 30 percent. Baby Boomers and Gen Z each account for about 9 percent. Our median age is about 44, and

about 11 percent of employees are 60 or older, reflecting a strong mid-career and pre-retirement presence within the organization.

When it comes to gender representation, men outnumber women 4 to 1, with 80 percent male and 20 percent female. The business division is the most balanced, with roughly equal numbers of men and women. In contrast, the distribution division remains the most male-dominated, with 106 men and just 5 women.

In terms of racial and ethnic diversity, approximately 72 percent of employees identify as White, while the remaining 28 percent identify as Black, Asian, Hispanic or Latino, two or more races, or Native Indian or Alaskan Native, in that order.

More than a third of our staff live within the SPRWS service area, and one in four live within the city of Saint Paul itself.

The Pipeline Express is published every two weeks by Saint Paul Regional Water Services. © 2025

Story ideas? Contact Jodi Wallin, 651-266-6308 or Jodi.Wallin@ci.stpaul.mn.us

Vacation Update:

160 Hours Can Carry Over

It's that time of year again — time to review your vacation balance and plan ahead! We've updated the vacation carryover process to make it easier to understand and more flexible for staff, while continuing to support fiscal responsibility.

What's New for 2025

Carryover limit increased:

Employees can now carry over up to 160 hours (previously 120 hours).

Automatic carryover: If your vacation balance is under 160 hours on December 31, 2025, it will automatically roll over into 2026 — no request needed.

Request required for more than 160 hours:

If you wish to carry over more than 160 hours, you'll need to submit a Vacation Carryover Request Form. Your Department Director will review and make a decision on the request.

Deadline: All requests must be submitted and approved by December 1, 2025 — no exceptions.

Approved hours above 160 must be used by June 30, 2026.

Forms and Approvals

Each department has its own form. Forms and additional documents are available on the Vacation Carryover Information page.

<https://tinyurl.com/8het2fnm>

Scroll to the bottom of the page and select Saint Paul Regional Water Services for the department request form.

Questions? Contact your department HR Liaison for assistance.

A Note from Leadership

We know how important vacation time is for rest, family, and overall well-being. Thank you for planning ahead and working with your supervisors to make the most of your time off while helping us maintain responsible budget practices that benefit our entire city team.

VACATION DONATION

Charles Washington is seeking vacation donation



Charles Washington

Vacation donation has been approved for Charles Washington, a water utility worker. He has exhausted all sick and vacation time due to a medical situation.

Please consider donating vacation time to Hugo by notifying the utility payroll person at Pakou.C.Moua@ci.stpaul.mn.us of your donation amount.

Thank you for considering this request.

Sludge: What is it? Where Does it Come From?

By Jeremy Erickson

On any given day Randy Barnes, Roy Bougie, or Matt Chernugal arrive at the SPRWS dewatering building at 4 am to begin their 12-hour shift dewatering the sludge produced from the previous day's drinking water treatment. It is a fairly monumental task considering on average 400,000 gallons are processed each day. That equates to 224 Olympic-size swimming pools of sludge that SPRWS has to process each year! Before going too far into what we do with that amount of sludge let's look at, what exactly is sludge.

The sludge is a by-product of the coagulation/flocculation treatment process that occurs in our new solids contact clarifiers. During this process, coagulants are added to the incoming water from Vadnais Lake. They act like a glue that encourages all of the tiny organic particles in the lake water to stick together in snowflake like



Sludge goes to the thickener to reduce the amount of liquid in the sludge.

particles called "Floc". Nutrients and other particulates also get bound up as well. In addition, we add Lime (calcium hydroxide) to the water for softening. During softening, the major culprits of hard water, magnesium and calcium are precipitated out as magnesium hydroxide and calcium carbonate. These newly formed particles also stick to the Floc. As the Floc gets bigger and bigger, it

becomes heavy enough to settle to the bottom of the contact clarifier whereby it is pumped to the thickeners and ultimately to the dewatering building. The sludge has the consistency of a protein shake that is thinner or thicker depending on the percent solids. On average the sludge percent solids range from 3.5 to 5%.

In dewatering, about 20,000 gallons of sludge are squeezed in hydraulic presses to produce what commonly is called lime cake. The lime cake is around 45% solids. It takes two press loads to fill a semi-truck with press loads taking as much as 2 hours to be made. Even after dewatering, on average 10 semi-truck loads of lime cake are removed each day. However, it would take 34 semi tanker trucks if we had to remove the liquid sludge each day.

Sludge continued on page 4



Sludge as a liquid and as a cake.

Sludge:

What is it? Where Does it Come From? Where Does it go?

Continued from page 3

So, what happens with all of that lime cake? All those semi-truck loads head to farms within a 60-mile radius of SPRWS. The lime cake has a higher pH which helps neutralize the acidic farm soils. This allows the fertilizer nutrients nitrogen and potassium bound up in the acidic soil to be released to the crops. The chemical composition of the solids is tested monthly and yearly so that any changes in the neutralizing power or contaminant changes can be observed. When asked what he likes most about the job Randy said that even though it can be lonely at times and also a challenge working with different consistency sludges and having truckloads of lime cake ready for the semi drivers, he likes the independence of working alone



A sludge cake drops from the sludge press in the dewatering building before being trucked out.

and also being given the freedom to come up with his own system for being

most efficient.

Clarifier No. 2: Historic Dome Demolished



The historic dome on clarifier No. 2 came down on Thursday, October 30 after about an hour of demo work. Built in 1938, the dome was one of two that were added to the treatment plant to allow the solids built up from the softening process and flocculation to settle out. The sludge would sink to the bottom to be sent over to the thickening building while the clear water went on to the recarbonation basin to be treated. The clarifier room was a highlight of treatment plant tours for many years.