SAINT PAUL REGIONAL WATER SERVICES

STRATEGIC PLAN

the path to 2030

SAINT PAUL REGIONAL WATER SERVICES

Plan Structure

ORGANIZATIONAL OVERVIEW

GUIDING PRINCIPALS

KEY INITIATIVES

A Note

from our General Manager

The water industry is experiencing an era of rapid change. From evolving regulatory requirements and emerging environmental challenges to the integration of new technologies and increasing customer expectations, we are facing a landscape that demands innovation, agility, and collaboration. At Saint Paul Regional Water Services (SPRWS), we recognize that thriving in an ever-changing environment requires a clear strategic direction - one that is regularly reviewed and updated to adapt to new challenges and opportunities.

As we look ahead, this Strategic Plan represents a comprehensive approach to navigating these challenges over the next few years, ensuring we continue to deliver safe, reliable, and affordable water to the communities we serve. At the heart of this plan is our commitment to collaboration - within our organization, with our partners, and with our customers.

We recognize that meeting the needs of our communities requires strong teamwork, a deep understanding of emerging trends, and the ability to innovate without losing sight of our mission.

I would like to take this opportunity to extend my deepest gratitude to the 300+ dedicated employees at SPRWS who work tirelessly around the clock to ensure the continued delivery of essential water services. Your commitment, passion, and expertise are the foundation of our success, and I am proud to work alongside you. I also want to express my sincere appreciation to our Board of Water Commissioners and to our customers. Your trust and support are invaluable as we move forward in shaping a sustainable and resilient future for SPRWS.

This Strategic Plan is not just a document; it is a roadmap for the future - one that reflects our shared commitment to growth, innovation, and excellence in service. Together, we will continue to meet the challenges of today and embrace the opportunities of tomorrow.

Racquel Vaske
SPRWS General Manager

SAINT PAUL REGIONAL WATER SERVICES

OVERVIEW

MISSION STATEMENT

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

VISION STATEMENT

To be a trusted partner in building healthy, resilient communities through the delivery of high-quality, sustainable water and services.

Saint Paul Regional Water Services (SPRWS) is a public, regional drinking water utility in the state of Minnesota serving approximately 450,000 customers an average of over 40 million gallons of water each day. SPRWS provides full retail services including the delivery of drinking water and maintenance of all related drinking water infrastructure to the following cities:

- Saint Paul
- Maplewood
- Mendota Heights
- West St. Paul
- Falcon Heights
- Lauderdale

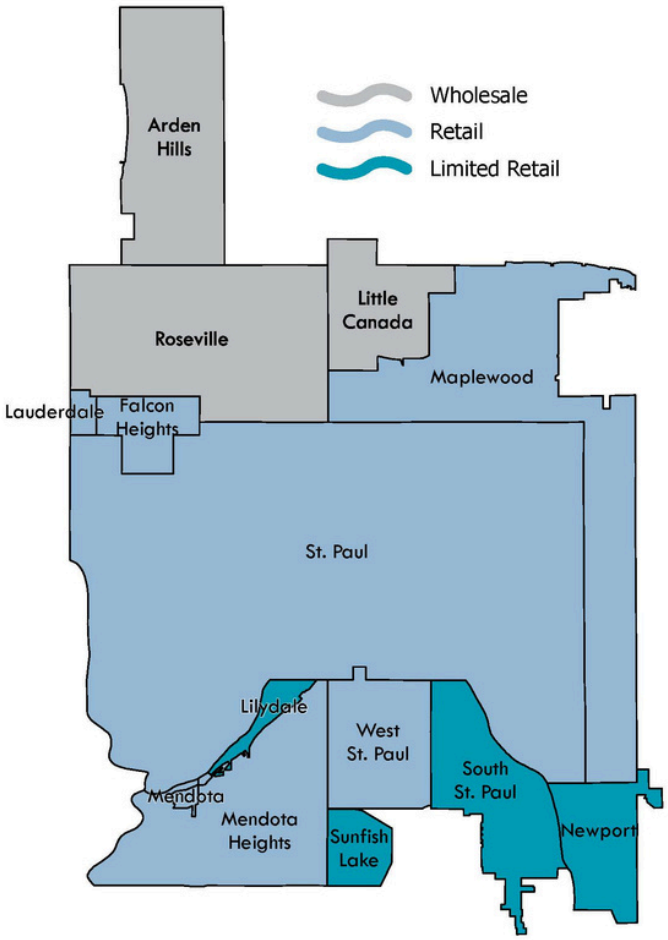
Full retail services are also provided to a limited number of residents in the following cities:

- Mendota
- Lilydale
- Sunfish Lake
- South St. Paul
- Newport

In addition, SPRWS sells wholesale drinking water to the following cities:

- Little Canada
- Roseville, who then sells to Arden Hills.

SPRWS has been a public water utility since 1882 and does not use tax funding to operate. The utility is self-supporting and provides all services using the revenue obtained through the sale of water and payment for services.



Saint Paul Regional Water Services is governed by a seven-member Board of Water Commissioners that sets policy and guides the future direction of the water utility and its staff. The Board consists of three members of the Saint Paul City Council, two Saint Paul citizens, and two representatives of the suburbs served by SPRWS.

THE HISTORY AND PROCESS OF

STRATEGIC PLANNING

SPRWS has developed and utilized Strategic Plans to guide our work and position the organization for long-term success since 1993. New iterations are developed every few years to reflect evolving goals, emerging challenges, and new opportunities. Each strategic planning cycle is a comprehensive, collaborative effort that includes input from various stakeholders. The Board of Water Commissioners, city leadership teams, and SPRWS employees are all encouraged to share their experiences, concerns, and innovative ideas. These open and honest conversations allow us to gather a wide range of perspectives that directly inform our goals and initiatives.

The SPRWS Executive Team leads this process by not only gathering ideas but also by analyzing external trends, monitoring emerging technologies, and conducting a thorough self-assessment using the Effective Utility Management (EUM) framework developed by the U.S. Environmental Protection Agency (EPA). Through this multi-faceted approach, the Executive Team shapes the overarching strategy and priorities for SPRWS - ensuring our direction is both forward-thinking and grounded in operational efficiency.

We extend our sincere thanks to all those involved in this process for their continued dedication, thoughtful contributions, and excitement for the future. Their insights are essential to building a strategic plan that is not only visionary but actionable - one that will continue to move SPRWS forward in serving our communities for years to come.

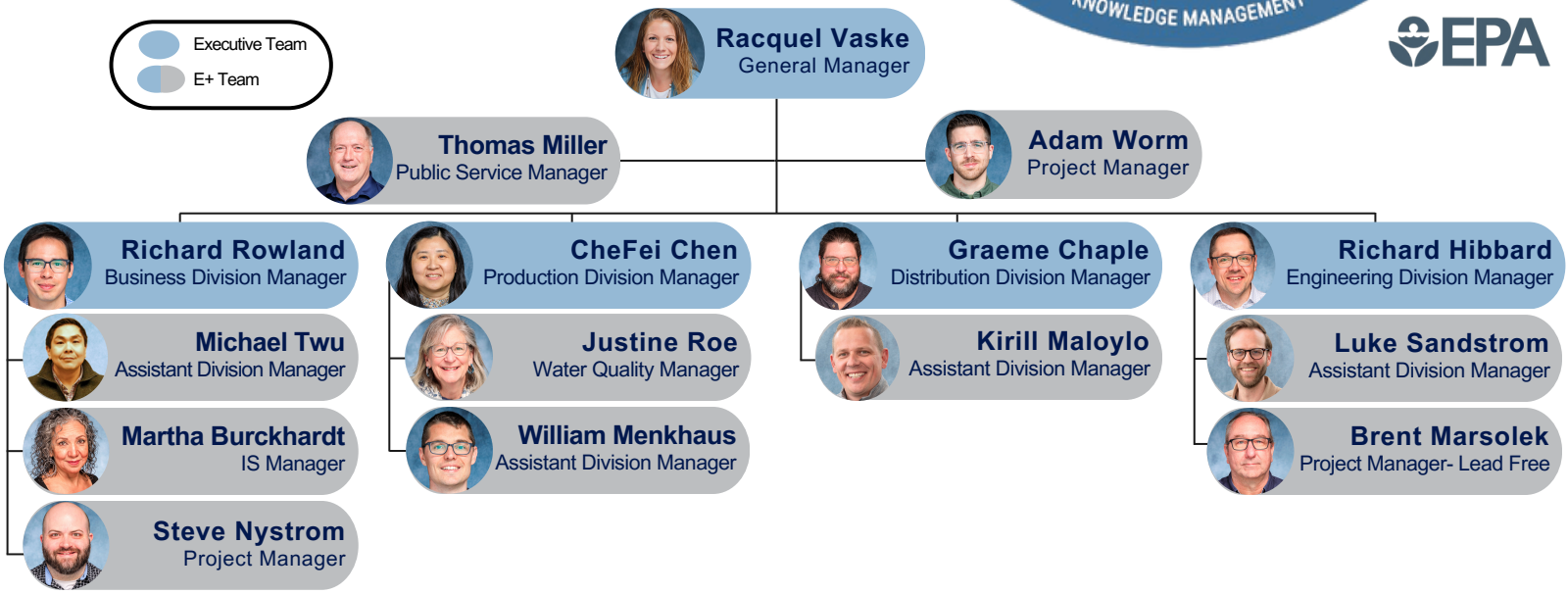
EFFECTIVE UTILITY MANAGEMENT

SPRWS utilizes the Environmental Protection Agency's Ten Attributes of Effectively Managed Water Sector Utilities to provide a strong base for internal evaluation. This balanced structure ensures we continue to evaluate progress on a variety of essential operational areas rather than reactively moving from one problem to the next.

EPA

SAINT PAUL REGIONAL WATER SERVICES

EXECUTIVE LEADERSHIP TEAM



EXTERNAL ANALYSIS OF

INDUSTRY TRENDS

Aging Infrastructure

Water system infrastructure across the country is outdated and in need of replacement or repair. Delays in addressing these needs increase the risk of failures and service disruptions. Ongoing investment in infrastructure renewal is critical to maintaining reliability and safety.

Regulatory Pressures

Regulations around water quality, safety, and reporting continue to expand, often without funding - creating financial and operational strain. Engagement in State and Federal rulemaking is essential to help shape effective regulations.

Financial Challenges

Water use is declining, but infrastructure and service costs are rising. This mismatch creates pressure to raise rates, which must be justified through transparent decision-making, cost control, and efficient operations. Accessing outside funding sources will also be key.

Evolving Customer Expectations

Today's customers expect more than just reliable water - they want clear communication, fast service, and transparency around quality and environmental impact. Meeting these expectations requires better customer service tools and more responsive engagement.

Workforce Changes

Many experienced water industry employees have already or will be retiring soon. Replacing them is difficult due to competition for talent and changing career expectations. Utilities must attract and train the next generation of professionals to ensure continuity and innovation.

Technology and Innovation

New technologies are helping utilities monitor systems, treat water more effectively, and extend infrastructure life. Embracing innovation supports better service and cost savings - but also requires investment and skilled staff to implement.

Energy Costs and Environmental Demands

Energy is a major utility expense, and prices continue to fluctuate. At the same time, utilities are under pressure to reduce emissions and use energy more efficiently. Improving energy performance is essential for both cost control and sustainability.

Resilience and Security

Utilities face increasing risks from climate change, public health emergencies, and cyber threats. As systems become more digital and interconnected, protecting against digital disruptions is critical. Strengthening emergency preparedness, cybersecurity, infrastructure resilience, and staff training helps ensure safe, reliable service and protects both employees and customers.

GUIDING PRINCIPLES TO ACHIEVING OUR MISSION

SPRWS PYRAMID OF SUCCESS

At SPRWS, we understand that meeting the evolving needs of our communities requires more than simply delivering safe, reliable water. To navigate the complex challenges and opportunities ahead, we've established a set of Guiding Principles that shape our actions, decisions, and relationships. These principles are expressed through our Pyramid of Success, a structured framework that aligns our work with our mission.

Each part of the pyramid represents one of these principles, beginning with foundational elements that support organizational strength and stability. As each layer is reinforced, we build the capacity to achieve broader strategic goals - culminating in our highest objective: delivering high-quality water to our customers today and for generations to come. Throughout the organization, these principles serve as a compass - keeping us aligned, responsive, and accountable.

SAINT PAUL REGIONAL WATER SERVICES

VALUES

EQUITY
INNOVATION
RESILIENCE

Surrounding and supporting these guiding principles are the core values that define how we approach our work. These values shape our culture and decision-making, ensuring that we lead with purpose and integrity:

- **Equity** ensures that all communities - especially those historically underserved - have fair and inclusive access to safe, clean drinking water.
- **Innovation** drives us to embrace new technologies, modernize our systems, and develop smarter solutions for a changing world.
- **Resilience** empowers us to anticipate and adapt to environmental, operational, and economic challenges, maintaining reliable service through uncertainty.

GUIDING PRINCIPLES

The next section of this Strategic Plan outlines each of the Guiding Principles in greater detail and highlights broad goals associated with each. While many initiatives naturally support multiple principles, we have organized them under the one where they will have the greatest impact. As we develop more specific goals in day-to-day operations and pursue new initiatives, we remain intentional about aligning every effort with these principles - ensuring our work stays focused on our defined strategy.

Customer and Community-Centered Service

In order to be a successful service provider, we must prioritize understanding and meeting the diverse needs of our customers. People differ in how they communicate, manage payments, and navigate affordability challenges. By fostering inclusive engagement, offering accessible service options, and prioritizing clear, two-way communication, we aim to build trust and ensure equitable access to essential water services for all.

Beyond customer service, we recognize our broader role as a community partner. Our role includes supporting the region's long-term economic, social, and environmental well-being.

Implement New Methods for **Customer Feedback** and Input

Develop and Utilize a **Customer Experience Guide** to Elevate Service at all Customer Touch Points

Launch a **Customer Contact Campaign** to Improve the Availability and Accuracy of Customer Contact Information to Assist in Better Communication

Roll Out **Automated Metering Infrastructure (AMI)** to Catch and Minimize Leaks on Customer Infrastructure

Automated Metering Infrastructure Allows for **Leak Forgiveness and Monthly Billing** in the Future

More Information Regarding AMI Can Be Found in the Key Initiatives Section

Expand Awareness and Use of the New **Customer Portal** including **Auto Pay** & **E-Billing** Services

Continue to Advocate for and Fund Low-Income Assistance Program: **Water Works**

Increase Program Awareness, Usability, and Participation

Workforce Development and Employee Empowerment

It is essential that we foster a workplace where all employees can thrive and contribute meaningfully to the SPRWS mission. Over the past decade, we have experienced a significant loss of institutional knowledge due to retirements. About 40% of our current staff have worked at SPRWS for less than five years. While this presents challenges as we rebuild knowledge - this shift presents a unique opportunity to thoroughly review and evaluate the ways in which we operate to ensure our practices align with current needs. By assessing our operations and making necessary adjustments where needed, we can enhance our efficiency and effectiveness. Our focus will be on creating a culture of continuous learning and development, offering comprehensive training programs, leadership development opportunities, and targeted knowledge transfer initiatives. This will empower employees to take initiative, innovate, and contribute to meeting the evolving challenges. By creating a supportive and inclusive work environment that values diversity, promotes collaboration, and encourages work-life balance, we aim to attract, retain, and develop a talented workforce capable of meeting the needs of the water industry now and into the future.

Continue to Prioritize and Build a **Welcoming & Inclusive Culture**

Build Upon Efforts Aimed at **Local and Diverse Recruitment** to Ensure Workforce Reflects Our Communities

Enhance **Evaluation and Feedback Structures** to Support Continuous Growth for All Employees

Invest in **Development Opportunities** including Skill Building, Cross Training, Mentorship, and Succession Planning

SAINT PAUL REGIONAL WATER SERVICES

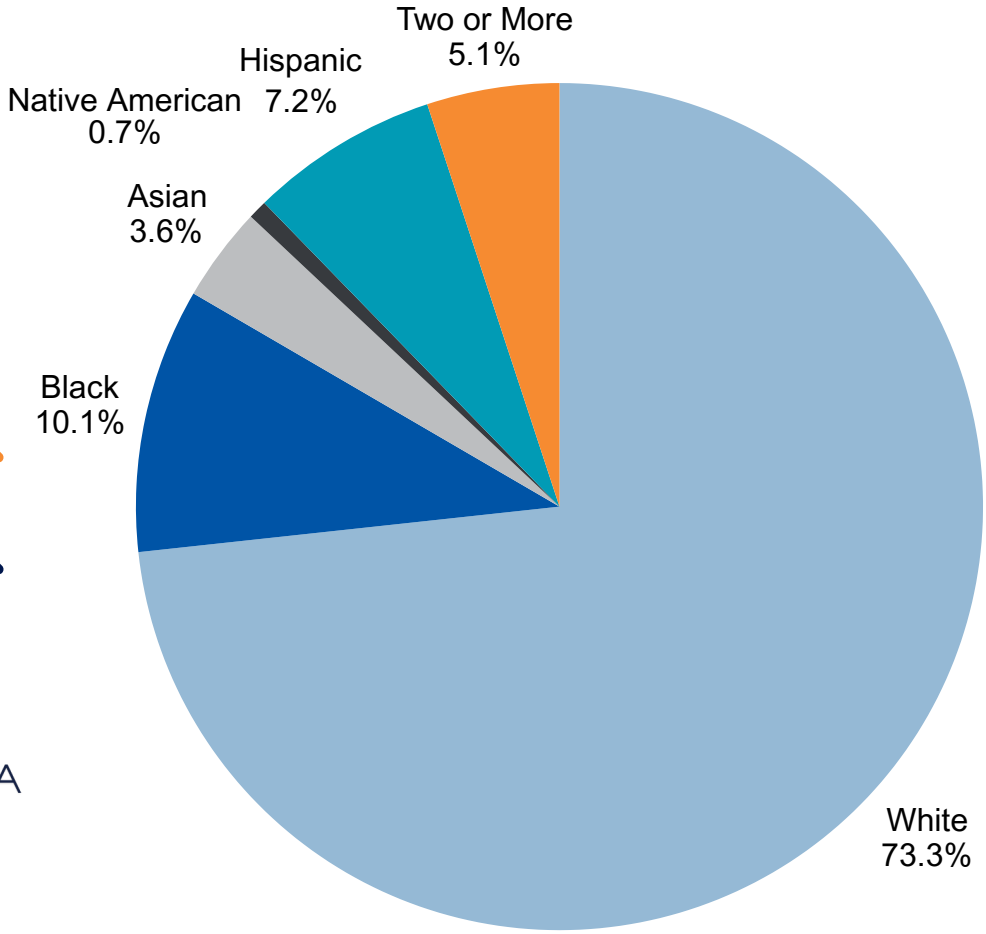
EMPLOYEES BY THE #s

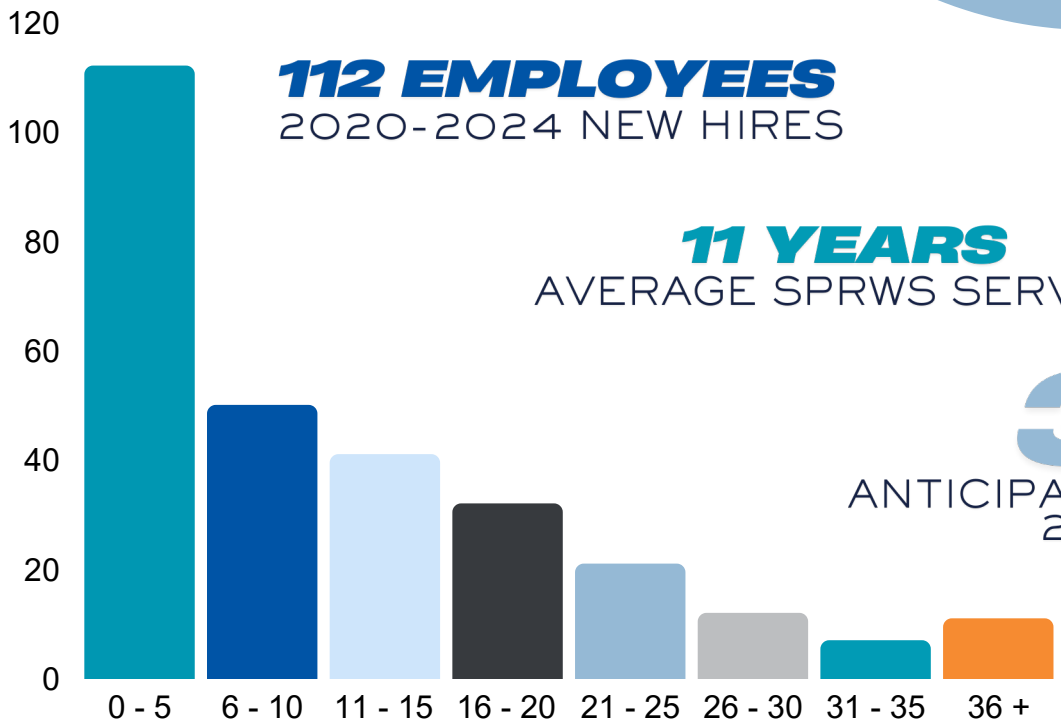
20%

FEMALE EMPLOYEES

32%

LIVE IN SERVICE AREA





112 EMPLOYEES

2020-2024 NEW HIRES

11 YEARS

AVERAGE SPRWS SERVICE

30+

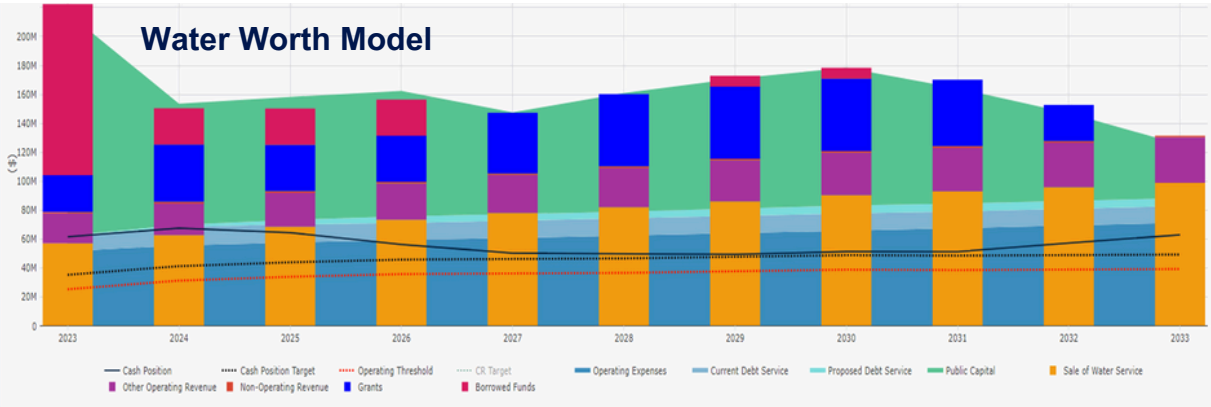
ANTICIPATED RETIREMENTS
2025-2029

Last Updated:
March 2025

Financial Stability

Over the next few years, SPRWS will work to leverage technology and data-driven insights to optimize operational efficiency and financial sustainability. By integrating solutions like Automated Metering Infrastructure (AMI) and advanced asset management systems, we will enhance service reliability, reduce water loss, and modernize infrastructure. Data will guide us in making informed investment decisions, ensuring resources are allocated effectively for maximum impact. As part of our financial strategy, we are committed to maintaining our Triple-A bond rating by closely monitoring key industry financial indicators tied to utility stability, debt management, and long-term solvency. Through strategic planning and smart investments, we will deliver high-quality water services while maintaining affordability, fiscal strength, and long-term sustainability.

Focus on Stronger **Asset Management** to Support Data Driven Investments. This Includes a New System, New Role, and Formalized Asset Management Plan



Research and Advocate for **External Funding Sources** to Minimize Reliance on Rate Increases

Continue to Enhance and Roll Out Long-Term Financial Plans Utilizing **Water Worth Modeling** to Make Strategic Financial Decisions

Build Additional Transparency and Involvement in the **Budgeting Process**

Conduct a thorough Rate Study and Implement **Rate Changes to Support Affordability and Conservation**

AAA RATING

Infrastructure Strategy and Performance

As a forever business, SPRWS must commit to maintaining a resilient water system. To meet this need we must be focused on strategic infrastructure planning, investment, and performance management. Central to this focus is the 10-Year Capital Improvement Plan (CIP), which serves as a comprehensive roadmap for maintaining, upgrading, and replacing the utility's infrastructure assets.

During this strategic cycle, we will expand the role of the 10-Year Capital Improvement Plan - deepening analysis, refining prioritization processes, and more closely aligning investments with performance outcomes and customer expectations. Future updates will increasingly emphasize lifecycle cost analysis, risk-based decision-making, and the integration of new technologies to improve operational efficiency and service reliability. By proactively investing in data-driven planning and asset management, SPRWS is building a stronger foundation to support a sustainable, adaptive, and high-performing water utility.

Continue to Build Out a Further Informed **10-Year Capital Investment Plan (CIP)**

Align Infrastructure Projects with **Key Performance Indicators (KPIs)**

Clearly Communicate and Gain Support for **Necessary Rate Impacts** to Address Aging Infrastructure

More Information Regarding These Projects Can Be Found in the Key Initiatives Section

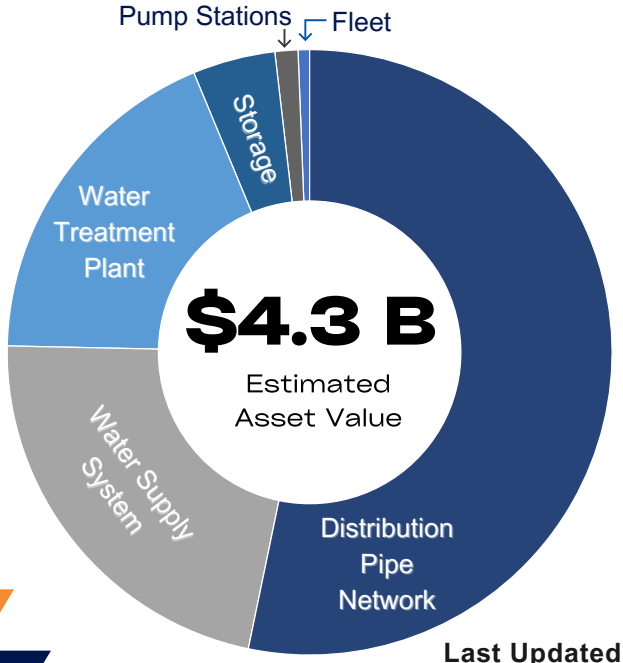
Further Refine Capital Spending **Prioritization Model** to Invest Limited Funding Strategically

Enhance Water Audit Methods to **Identify and Address Increases in Non-Revenue Water (NRW)**

Successfully Increase Capital Spending and Deliver a variety of Projects Including:

McCarrons Treatment Plant Upgrade
Lead Free SPRWS
Meter System Renewal

CAPITAL ASSET SUMMARY



Last Updated: March 2025

Energy and Water Resource Sustainability

At SPRWS, sustainability is more than a goal - it is a guiding principle that shapes every aspect of responsible utility management. As the impacts of climate change intensify, infrastructure ages, and natural resources face increasing pressure, utilities must act with foresight and environmental responsibility. For SPRWS, this means embedding sustainability into every operational and planning decision we make.

From protecting our source water and reducing system losses to improving energy efficiency and exploring renewable energy options, SPRWS is committed to managing resources in a way that safeguards the environment, strengthens system resilience, and ensures long-term reliability. By applying an environmental lens to our daily work and strategic direction, we aim to lead with innovation, protect future water supply needs, and support regional efforts to preserve Minnesota's water resources.

Protect Water Appropriations for Existing and Future SPRWS Customers

Further Expand the Use of **Renewal Energy Sources**

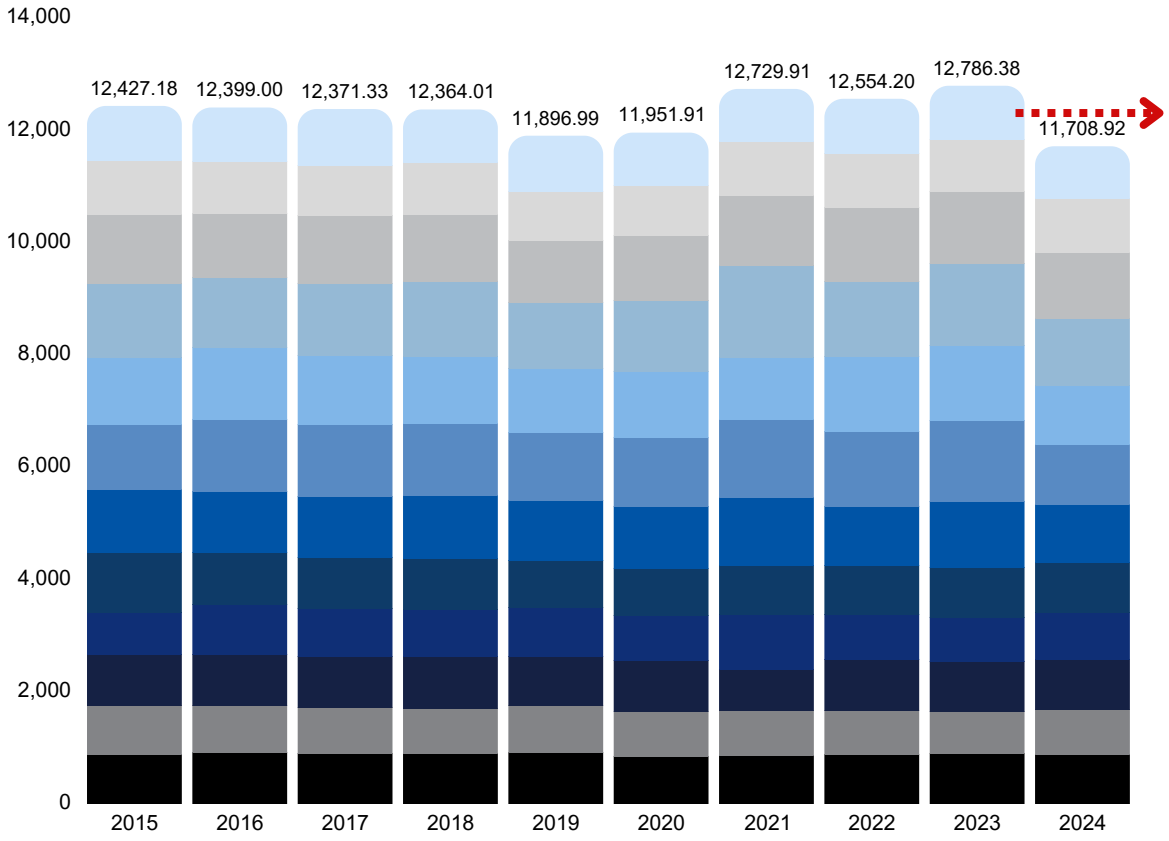
Utilize **Energy Audits and Pump Studies** to Make Informed Operational Decisions Aimed at Greater Efficiency

Build Upon Relationships with Local Organizations to **Enhance Watershed Protection**

Utilize Emerging Technology to **Reduce Water Loss**

SAINT PAUL REGIONAL WATER SERVICES

WATER CONSUMPTION HISTORY



10 YEAR AVERAGES

CONSUMPTION

12,345
MILLION GALLONS PER YEAR

76.3
GALLONS PER CAPITA PER DAY

PUMPING

14,745
MILLION GALLONS PER YEAR

40
MILLION GALLONS PER DAY

16%
NON-REVENUE WATER

INITIAL EXPANSION CONSIDERATIONS

112 PLANT CAPACITY (MGD) → **84** REDUNDANT PLANT CAPACITY (MGD) − **70** PEAK PUMPING DEMAND (MGD) − **7** DEMAND GROWTH AND BUFFER (MGD) = **7** INITIAL EXPANSION CAPACITY (MGD)

As communities in the northeast metro experience growing water demand and face challenges such as PFAS contamination, SPRWS is carefully evaluating the potential to support regional needs through limited service area expansion. While our current system analysis indicates a comfort level of approximately 7 million gallons per day (MGD) that could potentially serve additional communities, utilizing even this amount would require significant investment in distribution infrastructure to extend service beyond our existing boundaries. Any expansion beyond that volume would necessitate an increase in treatment capacity at our new facility. As we explore these possibilities, SPRWS remains committed to protecting the reliability of service for our current customers and making decisions grounded in long-term sustainability. We intend to work closely with the Metropolitan Council, Minnesota Department of Health, Department of Natural Resources, and other local and regional agencies as they assess a range of solutions to meet the area's future water needs.

Stakeholder Engagement and Support

SPRWS is committed to being more than a utility provider - we strive to serve as a pillar of the community, contributing to the social, economic, and environmental health of the region. As we look toward 2030, our ability to deliver safe, reliable water will depend not only on technical skills but also on the strength of our relationships with the public, our partners, and the institutions we work alongside. Building stakeholder understanding and support is critical as we address aging infrastructure, respond to evolving regulatory requirements, and navigate growing public attention on drinking water quality. To earn and sustain trust, SPRWS must be transparent in our decision-making, clear in our communication, and visible in our commitment to community service. We will continue to invest in outreach, education, and engagement - sharing updates on major projects, highlighting the essential work of our employees, and creating meaningful opportunities for feedback. These efforts will help ensure our stakeholders understand the value and necessity of long-term investments, and support the funding required to maintain and modernize our system. By strengthening partnerships, expanding our presence in schools and local organizations, and reinforcing collaboration with the cities we serve and the Board of Water Commissioners, SPRWS will continue to lead with integrity and innovation, earning our place as a trusted public steward in a rapidly changing world.

Continue to **Build Social Media Following and Development of Engaging Content** to Keep Variety of Stakeholders Informed

Strengthen **Collaboration with Peer Utilities** to Share Knowledge and Drive Innovation

Renovate the McCarron's Room in the Treatment Plant to Serve as an **Interactive Learning Space**

Expand **Educational Opportunities** Including School Visits and a Variety of Tour Options

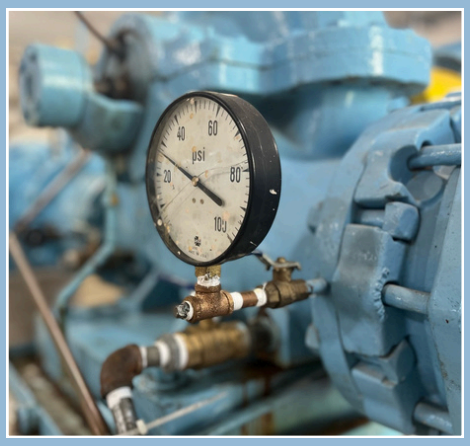
Build Upon Momentum Around **Branding and Engagement Efforts** to Increase Awareness Across All Customer Cities

Partner with Local Agencies and Cities in the North East Metro to **Evaluate Regional Water Needs** and Potential for an Expanded SPRWS Service Area

Increase Involvement in **Political Advocacy** to Ensure Utility Needs Are Clearly Understood By Decision Makers

Regulatory Compliance and Quality Water

Ensuring the delivery of clean, safe drinking water is at the core of our mission. We are dedicated to maintaining the highest standards of water quality while meeting or exceeding all regulatory requirements. Our commitment to regulatory compliance is unwavering, as we continuously monitor and adapt our water quality practices to address emerging challenges. By focusing on reliability, proactive monitoring, and best practices, we aim to provide a consistent and dependable drinking water that serves the various needs of our communities and customers.



Successfully **Transition to the Upgraded Water Treatment Plant** and Ensure Continued Regulatory Compliance

Monitor and Address **Emerging Contaminants** Including PFAs

Achieve and Maintain Full Compliance with the **Lead and Copper Rule** as we Work to Remove Lead Service Lines

Enhance **Emergency Preparedness and Response** to Ensure Resiliency

Achieve and Maintain **Phase IV Partnership for Safe Water** in both the Production and Distribution Divisions

Adopt Advanced Technologies for Enhanced **Water Quality Monitoring** in the Distribution System

KEY INITIATIVES

The following section highlights five of the most significant and influential projects underway during this strategic cycle. These Key Initiatives represent major investments in infrastructure, technology, and service delivery that will shape the future of SPRWS. While each initiative supports multiple Guiding Principles, they are called out separately to emphasize their scale, impact, and strategic importance.

Project Overview
CUSTOMER PORTAL

In January 2025, SPRWS launched a modern, secure online customer payment portal designed to enhance convenience and improve service delivery for our customers. This new platform provides 24/7 access to water billing information, allowing residents to view and pay bills anytime, from any device. With features such as multiple payment methods, email and text reminders, recurring payment options, and paperless billing enrollment, the portal empowers customers to stay current on their accounts and avoid late fees. Beyond convenience, the system improves operational efficiency, reduces manual processing and paper costs, and strengthens data security in line with industry standards. By leveraging real-time processing and advanced analytics, SPRWS is not only streamlining service but also gaining valuable insights to better anticipate customer needs and continue improving the overall experience.

SPRWS is focused on the following areas for growth during this strategic cycle to truly make this project successful:

- **Increase Customer Enrollment on the Portal**
- **Increase Use of Automated Payments**
- **Increase Utilization of Paperless Billing**
- **Further Development of Chatbot Functionality**

These enhancements will help us better engage with our customers, make interactions more efficient, and ensure the portal continues to evolve as a valuable tool for delivering exceptional service.

Project Overview
ENTERPRISE ASSET MANAGEMENT SYSTEM

SPRWS is implementing a new multi-faceted enterprise asset management system (EAMS) to modernize asset and work management and support data-informed decision-making. The project includes three parts:

- Oracle Utilities Work and Asset Cloud Service (WACS)
- Oracle Field Service (OFS)
- Oracle Utilities Analytics Visualization (OUAV)

The project replaces legacy systems with a centralized, cloud-based platform that unifies asset management, work orders, and field operations. This modern system integrates seamlessly with existing GIS, financial, customer information, and timekeeping systems to improve data accuracy, coordination, and operational efficiency. With real-time dashboards and robust analytics, SPRWS will gain enhanced visibility into asset performance, enabling more informed planning, budgeting, and service improvements. By streamlining operations and connecting field and office staff, this platform positions SPRWS to manage resources more proactively and serve the community with greater reliability.

This initiative marks a strategic shift toward a more comprehensive use of asset management. As adoption expands organization-wide, asset data will play a critical role in utilizing KPIs, developing maintenance schedules, conducting risk assessments, analyzing lifecycle costs and shaping the 10-Year Capital Improvement Plan.

Project Overview

MCCARRONS TREATMENT PLANT

ESTIMATED PROJECT COST

$250 MILLION

As part of the 2030 Strategic Plan, successfully completing the McCarrons Water Treatment Plant Improvement Project will be one of SPRWS's most critical early milestones. This once-in-a-generation investment will modernize our core treatment infrastructure, ensure operational excellence for decades to come, and maintain SPRWS's legacy of delivering safe, high-quality drinking water to over 450,000 customers.

McCarrons Plant Project SPRWS

Planning (2018–2021)
Extensive design, testing, and budgeting

Construction (2022–2025)
Construction of new treatment facility

Testing & Transition (Summer 2025)
Commissioning and regulatory validation of all new systems

Final Demolition (Sept 2025–June 2026)
Removal of obsolete structures

Final Construction (Nov 2025–July 2026)
New water quality lab, site restoration, and landscaping

Background & Vision

Originally built in 1920, the McCarrons plant has served the region well for over a century. However, its aging infrastructure, while functional, poses increasing risks to reliability. Recognizing this, SPRWS began a multi-phase modernization effort in 2018. The project includes complete replacement of key treatment components, integration of ozonation, and demolition of obsolete systems, all with a focus on long-term public health, cost-efficiency, and sustainability.

Key Project Features

Ozonation integration to improve taste, odor control, and removal of emerging contaminants

Advanced treatment technology to improve efficiency and allow flexible future upgrades

Infrastructure consolidation to reduce maintenance costs and prepare for future system needs

Historic preservation efforts to honor the facility's history

Upcoming Priorities

Bringing the new facility online mid-2025 following rigorous testing and validation

Training and certifying staff to operate new systems with advanced technologies and safety protocols

Maintaining or improving water quality standards, ensuring a seamless transition for customers

Monitoring emerging contaminants of concern, including PFAS, and planning for future plant updates if needed

Project Overview

LEAD FREE SPRWS

~26,000
LEAD SERVICE LINES

ESTIMATED PROJECT COST
$400
MILLION

Continuing to advance the Lead-Free SPRWS initiative will be one of the most important efforts during this strategic cycle. This commitment to replace all lead service lines represents a major investment in public health, environmental justice, and community trust. By proactively eliminating lead from our system, SPRWS is working to protect future generations, uphold our commitment to water quality, and ensure every customer has safe, lead-free drinking water at the tap.

LEAD FREE SPRWS

PROJECT OVERVIEW:

In most cases, lead is not found in water leaving the treatment plant or in water mains. However, lead was commonly installed up until 1948 for service lines -the small pipes that connect individual homes and buildings to water mains. As these old lead pipes corrode over time, they can allow lead to leach into drinking water - posing serious health risks, especially to infants, young children, and pregnant women.

A service line consists of two parts:

- The public side, which runs from the water main to the property line and is owned by the utility.
- The private side, which runs from the property line into the building and is the homeowner's responsibility.

In March 2022, in response to revisions to the EPA's Lead and Copper Rule and the potential for expanded funding opportunities, the SPRWS Board of Water Commissioners authorized the development of Lead Free SPRWS. The project was designed to eliminate the estimated 26,000 lead service lines within the SPRWS system.

PROJECT GOALS:

Voluntary and FREE for Customers
Completion within 10 Years (2023-2032)
At least 85% Participation

PROJECT FUNDING

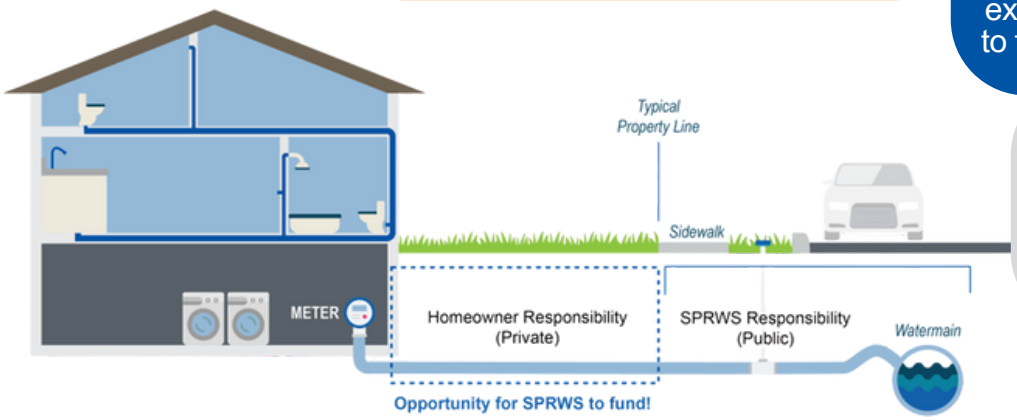
In 2022, the City of Saint Paul supported the pilot of this initiative by contributing $16M of its American Rescue Plan allocation.

After a successful pilot, SPRWS partnered with state agencies to secure additional lead funding from the Drinking Water State Revolving Fund (DWSRF), which is jointly administered by the Minnesota Department of Health (MDH) and the Minnesota Public Facilities Authority (PFA). Lead funding was initially provided through this program from:
Federal Infrastructure Investment and Jobs Act (IIJA) - $300M Allocation to MN
MN Legislature - Additional $240 Allocation

These combined funds will be distributed as grants and forgivable loans. SPRWS will apply annually for the funding necessary to meet replacement targets.

FUNDING GAPS

Current funding available within the DWSRF does not meet the statewide need for lead replacements. SPRWS will continue to explore and advocate for additional funding to fully support the removal of lead by 2032.



PROJECT PARTNER

We have partnered with CDM Smith to help meet Lead Free SPRWS project demands.

CDM Smith

Lead Replacement Prioritization

The most common questions we get about Lead Free SPRWS is:
"When is my service line going to be replaced?"
With an estimated 26,000 lead and unknown service lines in the system, this is a big job - and many residents are eager to see it happen in their neighborhoods. To manage this work effectively and fairly, we've developed a two-step approach to determine which lines are replaced each year.

Step 1: Focus on Construction Efficiency
The first priority is to coordinate with City Departments and other local agencies to replace any lead lines located in areas where road reconstruction is already planned. This coordination helps us:

- Avoid reopening newly paved roads
- Minimize neighborhood disruption
- Lower costs by taking advantage of shared construction efforts

Step 2: Apply Developed Prioritization Model
In partnership with CDM Smith, we developed a prioritization model focused on public health and equity. It uses two key factors:

- Children under age 5 - Young children are especially vulnerable to lead exposure. Areas with more young children are given higher priority.
- Environmental Justice (EJ) - This considers communities with higher percentages of low-income and minority residents, ensuring we serve the most disadvantaged neighborhoods first when possible.

By combining construction efficiency with public health-focused prioritization, SPRWS is working to remove lead service lines in a way that is both cost-effective and equitable - with the goal of replacing all lead lines by 2032.

Investing in the Local Workforce

It is important to our team that Lead Free SPRWS is not just about replacing pipes. We want to ensure that this significant financial investment also benefits the community more broadly. To maximize local impact and build long-term capacity, SPRWS is committed to performing part of the work in-house with the creation of over 30 new jobs. SPRWS employees support contracting, outreach, inspection and construction efforts. Internal crews will conduct up to 400 lead service line replacements each year while the remaining work will be contracted to qualified partners. To meet this demand for additional staff, an emphasis has been placed on local, diverse hiring to fill these spots either directly or indirectly. Part of this commitment was the launch of the Utility Trainee program, which provides individuals interested in the industry the chance to develop the skills needed for a successful water career. This workforce commitment assists in circulating public investment within the local economy and building a stronger, more responsive utility workforce for the future.

Lead Free SPRWS

REPLACEMENT TIMELINE

2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
300	600	1,200	2,500	3,000	3,500	3,500	3,500	3,500	2,500	2,000

Project Overview

METER SYSTEM RENEWAL

Saint Paul Regional Water Services is conducting a strategic initiative aimed at modernizing our water metering infrastructure through the installation of Advanced Metering Infrastructure (AMI) collectors and the phased replacement of aging meter registers. The existing meter registers are reaching the end of their operational life and will be systematically replaced over seven years - some proactively, others as they naturally fail. At the same time, we are deploying a network of AMI data collectors designed to capture meter readings transmitted from the upgraded registers. This project not only ensures continued accuracy and reliability in water usage measurement but also enhances operational efficiency and supports more informed, data-driven decision-making.

Register Replacements

We plan to replace all outdated registers across our service area between 2024-2031. The new R900 Neptune registers will provide stronger, more reliable signals to collectors.

Workforce Strategy:

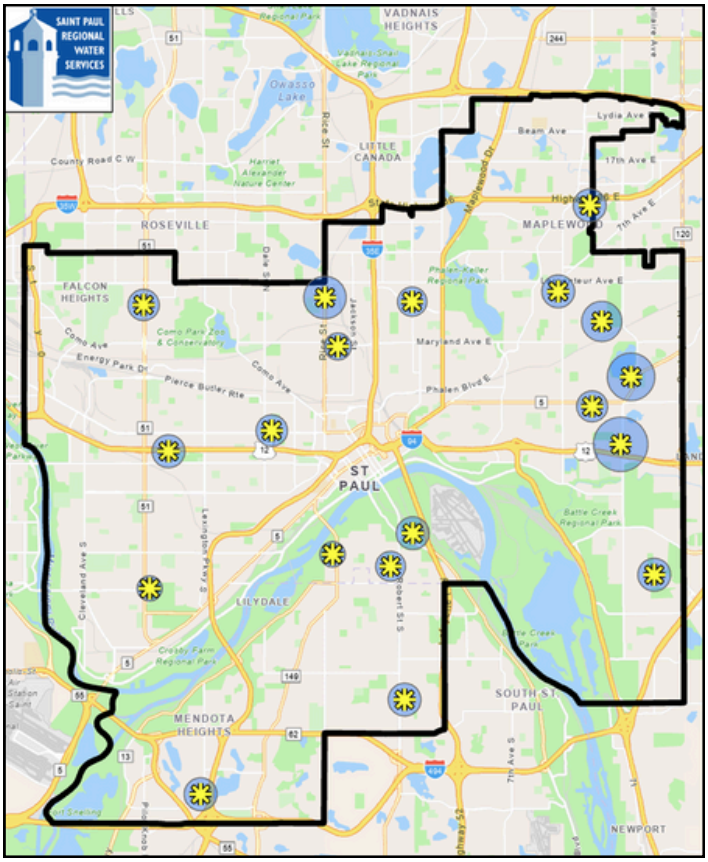
Unlike the previous replacement cycle in 2010 which replaced the entire system in two years, we are intentionally phasing replacements over 7 years. This avoids a future scenario where all equipment fails in a short timeframe and allows for a manageable annual workload. The work is being performed by internal SPRWS staff with a combination of year-round Meter Technicians and additional winter help. During winter months - when construction work typically slows, distribution employees are reassigned to the register replacement project, avoiding seasonal layoffs and ensuring steady, meaningful work.

Collector Installations

To fully transition to an AMI system, our service area will require ~65 strategically placed collectors. SPRWS is prioritizing high elevation locations like water towers and supplementing with tall buildings and siren poles.

SPRWS received a $150k conservation grant from the Metropolitan Council in 2024 to begin the rollout of collectors in the system.

TOTAL ESTIMATED PROJECT COST **$23.5 MILLION**



By the end of 2024, about 10k registers had been replaced (mostly due to previous failures) and 22 collectors had been installed. About 25k accounts were being captured on AMI.

2025	2026	2027	2028	2029	2030	2031
+ 6 Collectors	+ 12 Collectors	+ 12 Collectors	+ 12 Collectors			
~10,000 Register Replacements	~10,000 Register Replacements	~10,000 Register Replacements	~11,000 Register Replacements	~11,000 Register Replacements	~11,000 Register Replacements	~11,000 Register Replacements
~35,000 AMI Accounts	~45,000 AMI Accounts	~60,000 AMI Accounts	~75,000 AMI Accounts	~90,000 AMI Accounts	~90,000 AMI Accounts	~96,000 AMI Accounts

Meter System Overview

Meter Body

A meter is a mechanical device installed in a customer's home that measures how much water is used.

Meter Register

Sitting on top of the meter is the register, which records the usage and transmits the information. The register contains a battery and a radio transmitter.

Collector + Antenae

A collector is a receiver that gathers the register data.

Prior to this project, the collectors have been in vehicles. A Meter Reader drives the full system each quarter, collecting data as they drive by each location.

With this upgrade, collector technology is now installed on high elevation locations (such as water towers) and can pick up data from many nearby registers and send it back to SPRWS. This information is collected as frequently as every few minutes opposed to the 90-day intervals the collections had been occurring with drive-bys.

NEPTUNE TECHNOLOGY GROUP

Why is this project happening now?

From 2010 to 2012, SPRWS replaced all ~100k meters and registers. **These Neptune registers, powered by batteries expected to last ~15 years, are now reaching end of life.** The meter body has an expected useful life closer to 30 years. Therefore, during this cycle, SPRWS will just be replacing the register portion of the device**.** With this major infrastructure replacement, SPRWS will upgrade registers to Neptune's next-generation R900 technology and Automated Meter Infrastructure (AMI).

Why is SPRWS transitioning to automated metering?

The move to AMI is not just about upgrading hardware - it's about transforming how we deliver and manage water service.

- **Data-Driven System Management:** AMI usage data allows for better visibility into system performance, enabling faster response to both household and system-level issues.
- **Leak Detection:** With AMI, we can detect household leaks within days - rather than months - helping customers avoid costly bills and reducing unnecessary water loss.
- **Affordability and Equity:** SPRWS currently bills customers quarterly. With more frequent and automated meter reads, we are laying the groundwork to move to monthly billing by 2030. Monthly billing helps customers manage expenses more predictably and supports overall affordability.

Transparency Accountability

As stewards of public resources and providers of an essential service, SPRWS is committed to maintaining transparency in our operations. With a variety of challenges facing the water industry, we recognize the need to balance sometimes competing priorities, such as meeting affordability expectations for our customers while addressing the growing needs of aging infrastructure and evolving water quality regulations. In our approach to responsible management, we prioritize open, clear communication to ensure that our strategies and decision-making processes are transparent. This openness builds trust with the community, helping others understand how we prioritize investments, navigate fiscal challenges, and meet regulatory standards. By upholding the highest levels of accountability, we ensure that our decisions are guided by the principles of ethical stewardship, balancing long-term infrastructure needs, regulatory compliance, and the immediate needs of our customers. This transparency holds us accountable to make necessary adjustments as conditions change and as new strategies may be required to meet emerging challenges.

AMERICAN WATER WORKS ASSOCICATION

UTILITY BENCHMARKING PROGRAM

To support this commitment and embrace continuous growth, SPRWS began participating in the AWWA Benchmarking Program in 2025. This program allows the utility to track and share performance in a variety of areas, compare results to peers, and identify areas that could be strengthened. This initiative will hopefully help create greater accountability, more specific goal setting, and continuous improvement.

American Water Works Association

LOOKING AHEAD

The 2030 SPRWS Strategic Plan sets the foundation for where we are headed—but the real work begins now. SPRWS staff will translate these strategic goals into detailed action plans, identifying responsible parties, timelines, and performance measures to ensure we are making meaningful progress. As conditions evolve, we will remain flexible and responsive, continuously evaluating and refining our strategies to meet the needs of our customers and the community. With a clear vision and shared commitment, SPRWS will continue to provide safe, reliable, and sustainable water services for generations to come.