






# SPRWS CAPITAL PLAN

**Fiscal Years: 2025-2034**

“Providing reliable, quality water & services at a reasonable cost”

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# WHAT IS A CAPITAL IMPROVEMENT PLAN?

Saint Paul Regional Water Services (SPRWS) updates the Capital Improvement Plan (CIP) each year to provide a long-term financial planning document and 10-year roadmap for maintaining, upgrading, and replacing capital infrastructure. The CIP guides the continuation of major capital asset investments in projects that will upgrade water supply, treatment, distribution, and technology systems. The plan also supports compliance with federal and state regulatory requirements and improves the efficiency of operations. This CIP is integrated into the utility's financial planning process and is the primary driver of projected rate adjustments over the ten-year planning period.



## CIP GOALS

The goals of this CIP are to ensure the utility adheres to an informed, fair, open and objective process, maintains a standard of delivering affordable service to customers, continues to optimize lowest total life-cycle costs, enhances the link between capital and operations budgets, emphasizes long-term planning needs, and secures financial stability and predictable rate adjustments.

## OUR VISION

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

## OUR MISSION

Our mission at Saint Paul Regional Water Services is to relentlessly provide reliable, quality water & services at a reasonable cost.



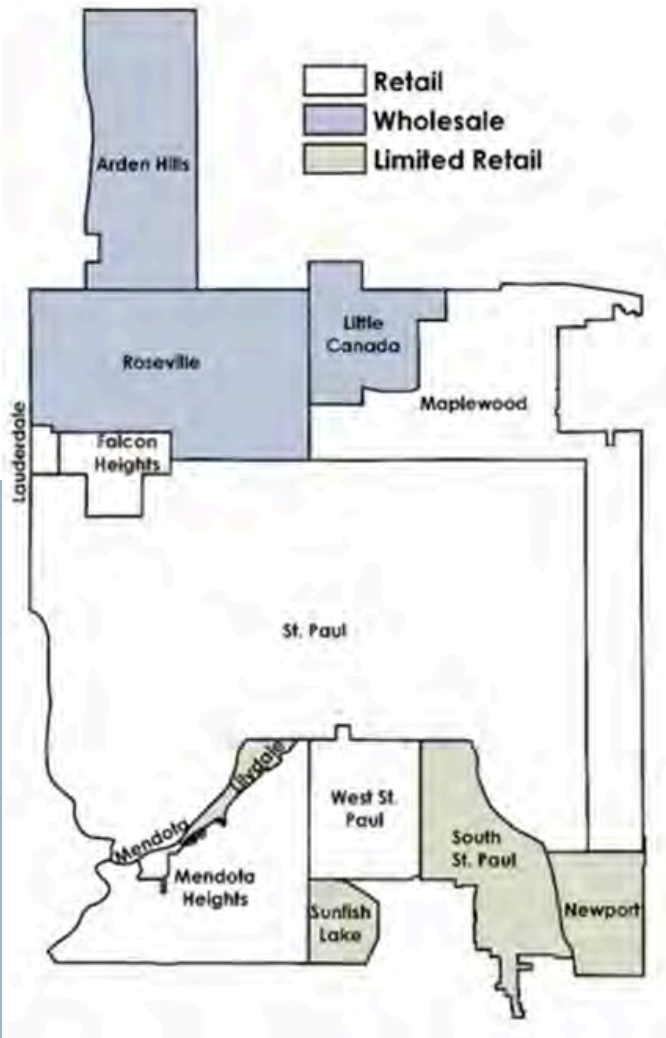
# INTRODUCTION

## ABOUT US

Saint Paul Regional Water Services (SPRWS) was created in 1882, with origins tracing back to a private company formed in 1869. Today, the utility serves approximately 450,000 customers with an average of over 40 million gallons of water each day.

SPRWS provides full retail water distribution services within the cities of Saint Paul, Maplewood, Mendota Heights, Mendota, West Saint Paul, Falcon Heights, & Lauderdale. Retail services are provided to a limited number of customers in Lilydale, Sunfish Lake, South Saint Paul, & Newport.

SPRWS sells wholesale drinking water to the cities of Little Canada and Roseville, who subsequently provides water to Arden Hills.




## OPERATIONS

SPRWS operates & maintains a 112 million gallon per day (MGD) water treatment plant located in Maplewood. Major assets include 1,185 miles of water mains, 25,200 valves, 10,000 hydrants, one raw water pump station, ten finished water pump stations, six finished water reservoirs, and 12 finished water storages tanks.

SPRWS is governed by a seven-member Board of Water Commissioners, consisting of three members of the Saint Paul City Council, two Saint Paul citizens, and two members of the suburban communities served by SPRWS.

SPRWS does not receive funding from city taxes to support the utility. Instead, SPRWS is a self-supporting enterprise with revenue obtained through the sale of water & payment for services by customers.

 <p><b>CUSTOMER INDEX</b></p>	<p><b>440,000+</b> POPULATION</p>	<p><b>96,961</b> ACTIVE ACCOUNTS</p>	<p><b>\$74,831</b> MEDIAN HOUSEHOLD INCOME</p>
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# CIP TERMS AND DEFINITIONS

Defining terms in the Capital Investment Plan is crucial for ensuring clarity and consistency across all stakeholders. It helps eliminate misunderstandings, aligns everyone on SPRWS project's objectives and processes, and facilitates informed decision-making. Clear definitions also ensure that all parties interpret the plan's content uniformly, leading to more effective communication and smoother project execution.

## CAPITAL ASSET POLICY

Our **Capital Asset Policy** defines how expenditures will be recognized and accounted for between capital, operating expenses, & the standards for capitalization of fixed assets for the utility. The policy therefore determines the projects that are included in the Capital Investment Plan.

## CAPITAL ASSETS

**Capital Assets** include land, buildings, building improvements, water supply and treatment equipment, distribution mains, pumps, storage tanks, service connections, equipment, vehicles, technology systems, and other assets. Direct purchases or construction of assets in the amount of \$5,000 or more, while having a useful life in excess of one year, must be capitalized.

## CAPITAL COST

The **Capital Cost** of projects may include labor, equipment, materials, supplies, and overhead expenses.

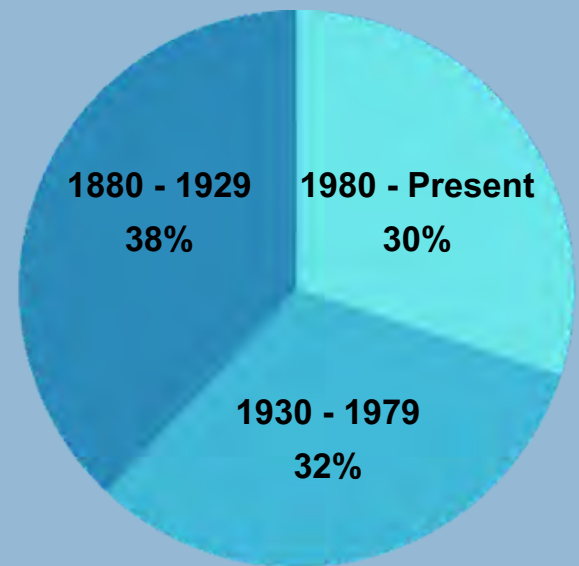
The cost of capital equipment purchases that are part of a clearly identified capital program can be aggregated, such as replacement of water meters and registers.



# LIFE CYCLE OF FIXED ASSETS

A central objective of this CIP is to minimize the overall life cycle costs for utility assets, considering all expenses associated with acquisition, operations, and maintenance. The service age of assets is one factor that can significantly impact long term repair costs and service reliability for customers. The figure to the right illustrates the age of the water distribution system, the largest asset category for SPRWS.

## INSTALLATION YEAR OF DISTRIBUTION SYSTEM



Asset	Estimated Life Cycle
Supply Mains	100 years
Reservoirs	60 years
Clarifiers	50 years
Hydrants	50 years
Water Meters	25 years
Meter Registers	15 years

## EXAMPLES OF ESTIMATED ASSET REPLACEMENT CYCLE

The figure on the left provides insights into the lifespan of key water infrastructure components. This information helps SPRWS understand how long these assets typically last and when they should be scheduled for replacement. It ensures proactive planning and maintenance, helping to avoid unexpected failures and maintain reliable service.

# PROJECT PRIORITIZATION

## ABOUT OUR PROCESS

Capital planning involves a comprehensive and systematic effort to develop and prioritize immediate and long-term needs. The prioritization process is intended to guide funding and resource allocations across all SPRWS divisions. This objective evaluation and prioritization of projects is needed when numerous projects compete for limited resources.



## PRIORITIZATION CRITERIA

PRWS uses the following prioritization criteria to evaluate projects due to overall funding limitations and the need to renew/replace a significant amount of aging infrastructure.



### Regulatory Compliance

- Ranks a project's relative importance for maintaining current compliance levels or mitigating future compliance impacts.

### Water Quality and Level of Service

- Ranks a project's role in maintaining or improving current quality of services, water quality, and service reliability.

### Safety & Security

- Ranks a project's relative importance in maintaining or improving employee or public health and safety.

### Risk of Failure

- Ranks the project's probability of failing if not replaced or improved

### Return on Investment and Efficiency

- Evaluates a project's potential to deliver financial benefits and operational efficiencies, maximizing value for customers

### Social & Environmental Benefits

- Considers the positive impacts a project may have on the community and the environment, promoting sustainable practices and social well-being

### Funding Opportunities

- Takes into account the availability of external funding sources, such as grants or partnerships, to support the project

# PROJECT CATEGORIES



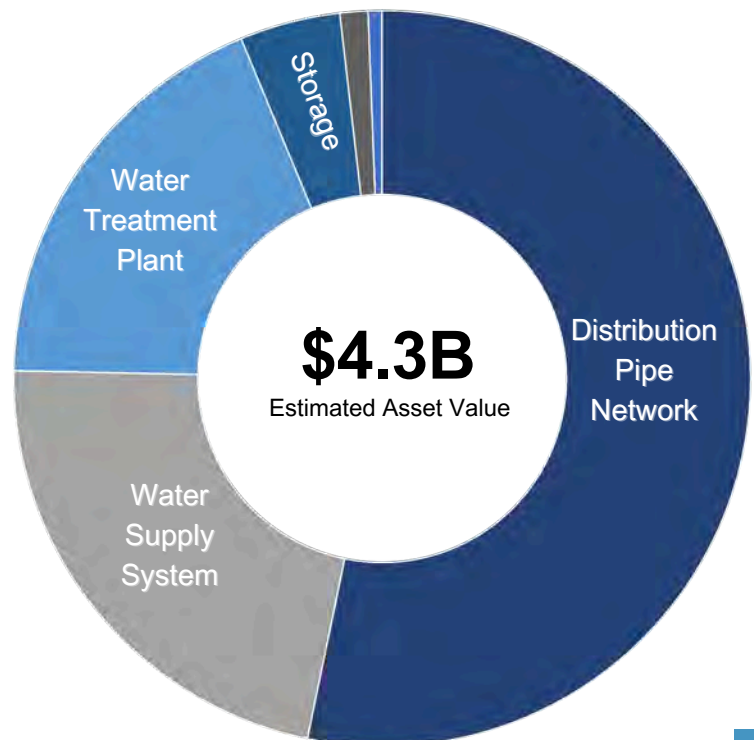
SPRWS capital projects are organized into 11 categories outlined below based on service delivery function. This process assists the utility in monitoring investment rates in individual categories to provide a balance in life cycle asset replacement across the organization.

- |                                |                                |                                     |
|--------------------------------|--------------------------------|-------------------------------------|
| <b>1. Water Supply</b>         | <b>5. Water Storage</b>        | <b>9. Building and Grounds</b>      |
| <b>2. Water Treatment</b>      | <b>6. Distributions System</b> | <b>10. Safety and Security</b>      |
| <b>3. Electrical and SCADA</b> | <b>7. Technology</b>           | <b>11. Vehicles &amp; Equipment</b> |
| <b>4. Pump Stations</b>        | <b>8. Meters and Registers</b> |                                     |

## Estimated Asset Replacement Value

Excludes Land, Easements, Office Equipment, IT Equipment

■ Vehicles & Equipment	\$25M
■ Water Supply	\$900M
■ Water Treatment	\$750M
■ Distributuion System	\$2,443M
■ Pump Stations	\$50M
■ Water Facilities	\$180M



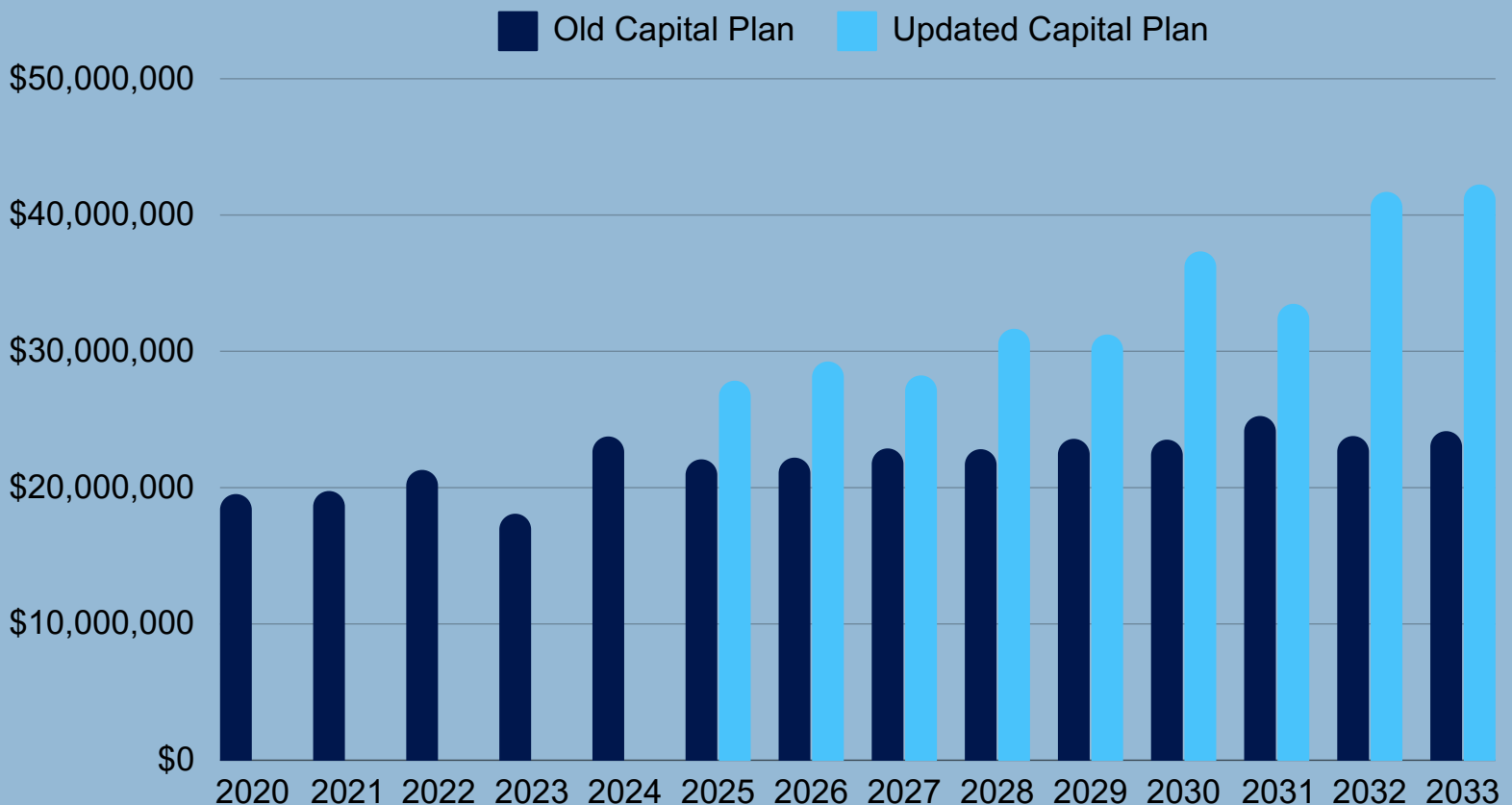


# TEN YEAR CAPITAL INVESTMENT PLAN

SPRWS has historically budgeted a relatively consistent amount of capital expenditures each year within general capital asset categories, with annual funding amounts adjusted for inflationary cost increases. The overall volume of projects undertaken each year were then scaled to the amount of funding allocated within the annual budget.

While this approach to capital planning allowed the annual budget to easily reconcile with available revenue, it did not fully consider long-term capital needs or the aging of utility assets, risking a backlog of deferred replacements and financial liabilities. For the 2025 budget, SPRWS has updated its capital planning to itemize specific project needs and begin to align annual capital investments with asset replacement cycles. Specific asset replacement goals were considered while identifying individual projects for each year of the plan.

The 10-year capital plan was adjusted to maintain a stable cash position, prioritizing projects to avoid depleting cash reserves below targeted levels, based on future rate adjustments. This planning effort resulted in a revenue funding capital improvement spending plan as illustrated below.



# CAPITAL INVESTMENT SUMMARY

The 2025 Budget includes \$27.8 million in revenue funded capital projects as summarized below. Additional grant funded work will continue for the lead water service line replacement program and debt funded improvements for the final stages of the water treatment plant project.

Key projects for 2025 include expansion of the water meter register replacement program, rehabilitation of Highland Park Storage Tank #2, improvements to the treatment plant filter gallery, and the first phase of transitioning to a 1% replacement rate for water distribution mains.

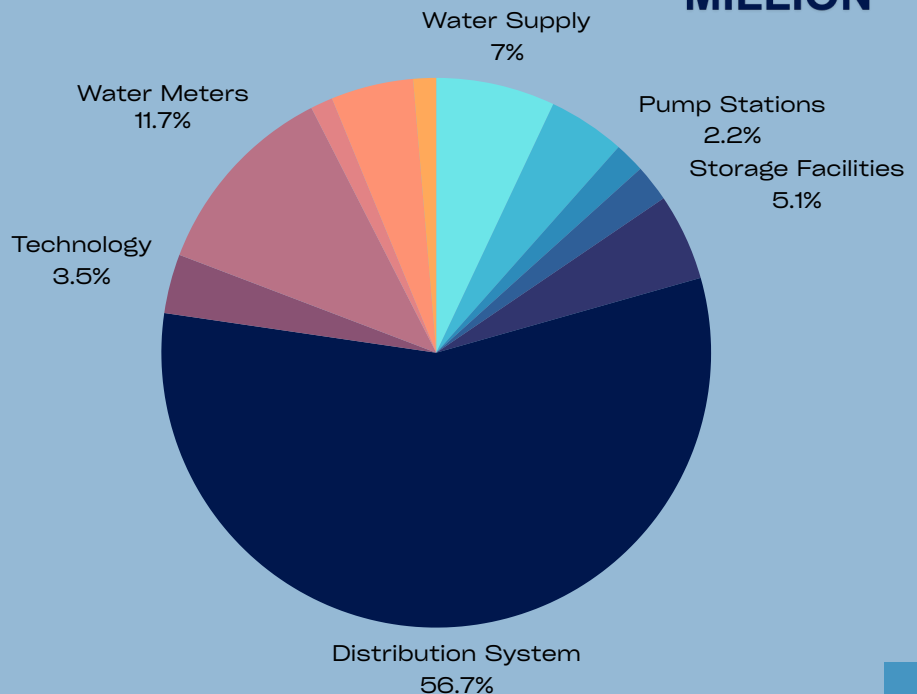
A full list of projects within the 10-year CIP, including projects within the 2025 budget, is provided in Appendix A. A one-page summary for each project is provided in Appendix B.

**The projected volume of water to be sold in 2025 remains unchanged at: 1.65 billion cubic feet (BCF). Actual consumption in 2018-2023 has remained very consistent.**

## 2025 CAPITAL INVESTMENTS

**\$27.8  
MILLION**

Asset Type	Capital Expenditure
Water Supply	\$1,950,000
Water Treatment	\$1,264,000
Electrical & SCADA	\$497,000
Pump Stations	\$605,540
Storage Facilities	\$1,421,580
Distribution System	\$15,788,000
Technology	\$970,000
Water Meters	\$3,258,000
Buildings, Grounds, Safety	\$365,000
Vehicles & Equipment	\$1,350,000
Water Service Connections	\$375,000



# FUTURE ANNUAL UPDATES

SPRWS updates the CIP annually during the early phases of the budget process. CIP projects can add long-term operating expenses due to new equipment or processes. Future CIP updates will include analysis to identify financial impacts on the operating budget and align projects with key performance indicators. It is vital to note that the 10-Year Capital Plan is a fluid document, with proposed amendments presented annually to the Board of Water Commissioners. Annual changes should be expected to the plan and may result from funding reductions, grant opportunities, emergency needs, or regulatory changes.



## CASH RESERVE FUND

SPRWS estimates a use of \$7.8 million from cash reserves in the 2025 budget. The Board maintains a fund balance that includes the cash amounts we are legally required to maintain due to bond covenants, a reserve to cover tort and claim liabilities, funds for capital projects budgeted and approved in previous years. This account fluctuates with added savings and expenses and can be used to provide stabilization during times of extreme variation. In planning for the plant project, SPRWS built up the cash balance and will utilize this account for stabilization.



# SPRWS CAPITAL INVESTMENT PLAN

**Racquel Vaske**

General Manager

**Todd Blomstrom**

Assistant General Manager

**Graeme Chaple**

Distribution Division Manager

**Che Fei Chen**

Production Division Manager

**Richard Hibbard**

Engineering Division Manager

**Richard Rowland**

Business Division Manager



**Call Us**

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# 10-Year Capital Improvement Plan Summary

Saint Paul Regional Water Services  
August 29, 2024

	Project Year										
	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	Total 10 Year
Total Revenue Funded (from Below)	\$ 27,794,120.38	\$ 29,204,209.91	\$ 28,181,718.20	\$ 31,655,302.26	\$ 31,234,071.31	\$ 37,332,910.37	\$ 33,484,659.73	\$ 41,697,904.83	\$ 42,238,686.50	\$ 43,059,939.86	\$ 345,883,523.35
Total Debt, Grant, & Revenue Funded (from Below)	\$ 39,844,120.38	\$ 29,254,209.91	\$ 28,231,718.20	\$ 31,655,302.26	\$ 38,734,071.31	\$ 44,832,910.37	\$ 33,484,659.73	\$ 41,697,904.83	\$ 42,238,686.50	\$ 61,059,939.86	\$391,033,523

Admin. Division												
Admin Total	\$ 320,000.00	\$ 360,000.00	\$ 435,000.00	\$ 315,000.00	\$ 235,000.00	\$ 150,000.00	\$ 150,000.00	\$ 150,000.00	\$ 150,000.00	\$ 150,000.00	\$ 150,000.00	\$ 2,415,000.00
Anticipated Debt/Grant Funding	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total Revenue Funded</b>	<b>\$ 320,000.00</b>	<b>\$ 360,000.00</b>	<b>\$ 435,000.00</b>	<b>\$ 315,000.00</b>	<b>\$ 235,000.00</b>	<b>\$ 150,000.00</b>	<b>\$ 150,000.00</b>	<b>\$ 150,000.00</b>	<b>\$ 150,000.00</b>	<b>\$ 150,000.00</b>	<b>\$ 150,000.00</b>	<b>\$ 2,415,000.00</b>
Security Projects	\$ 70,000.00	\$ 110,000.00	\$ 185,000.00	\$ 10,000.00	\$ 10,000.00	-	-	-	-	-	-	\$ 385,000.00
Building Updates	\$ 150,000.00	\$ 150,000.00	\$ 150,000.00	\$ 150,000.00	\$ 50,000.00	\$ 50,000.00	\$ 50,000.00	\$ 50,000.00	\$ 50,000.00	\$ 50,000.00	\$ 50,000.00	\$ 900,000.00
Small Caps < \$100,000	\$ 100,000.00	\$ 100,000.00	\$ 100,000.00	\$ 100,000.00	\$ 100,000.00	\$ 100,000.00	\$ 100,000.00	\$ 100,000.00	\$ 100,000.00	\$ 100,000.00	\$ 100,000.00	\$ 1,000,000.00
Vehicles < \$100,000	-	-	-	\$ 55,000.00	\$ 75,000.00							\$ 130,000.00
Business Division												
Business Total	\$ 4,223,000.00	\$ 4,071,900.00	\$ 3,864,249.50	\$ 5,198,429.49	\$ 4,926,926.62	\$ 8,365,012.38	\$ 1,858,709.11	\$ 1,977,040.06	\$ 2,146,029.43	\$ 1,873,939.86	\$ 38,505,236.45	
Anticipated Debt/Grant Funding	\$ 50,000.00	\$ 50,000.00	\$ 50,000.00								\$ 150,000.00	
<b>Total Revenue Funded</b>	<b>\$ 4,173,000.00</b>	<b>\$ 4,021,900.00</b>	<b>\$ 3,814,249.50</b>	<b>\$ 5,198,429.49</b>	<b>\$ 4,926,926.62</b>	<b>\$ 8,365,012.38</b>	<b>\$ 1,858,709.11</b>	<b>\$ 1,977,040.06</b>	<b>\$ 2,146,029.43</b>	<b>\$ 1,873,939.86</b>	<b>\$ 38,355,236.45</b>	
Register Replacement	\$ 2,800,000.00	\$ 2,940,000.00	\$ 3,087,000.00	\$ 3,241,000.00	\$ 3,403,000.00	\$ 3,574,000.00	\$ 150,000.00	\$ 150,000.00	\$ 150,000.00	\$ 150,000.00	\$ 19,645,000.00	
Meter Replacements	\$ 308,000.00	\$ 316,000.00	\$ 323,900.00	\$ 333,617.00	\$ 343,625.51	\$ 353,934.28	\$ 364,552.30	\$ 375,488.87	\$ 386,753.54	\$ 398,356.15	\$ 3,504,227.65	
Advanced Metering Infrastructure	\$ 150,000.00	\$ 150,000.00	\$ 150,000.00								\$ 450,000.00	
Technology	\$ 910,000.00	\$ 609,250.00	\$ 245,000.00	\$ 1,563,712.50	\$ 1,118,398.13	\$ 4,373,318.03	\$ 1,278,483.93	\$ 1,383,908.13	\$ 1,539,603.54	\$ 1,325,583.71	\$ 14,347,257.97	
Server Replacement	\$ 30,000.00	\$ 31,500.00		\$ 33,075.00	\$ 34,728.75	\$ 36,465.19	\$ 38,288.45	\$ 40,202.87	\$ 42,213.01	\$ 44,323.66	\$ 330,796.93	
VDI Host Replacement	\$ 55,000.00	\$ 57,750.00	\$ 25,000.00	\$ 60,637.50	\$ 63,669.38	\$ 66,852.84	\$ 70,195.49	\$ 73,705.26	\$ 77,390.52	\$ 81,260.05	\$ 631,461.04	
Cyber Security - SIEM	\$ 200,000.00										\$ 200,000.00	
EAMS Extensions	\$ 500,000.00										\$ 500,000.00	
Cyber Security - Virus Protection Upgrade	\$ 60,000.00										\$ 60,000.00	
Server Switches Replacement	\$ 20,000.00										\$ 20,000.00	
Hardware Replacement	\$ 20,000.00	\$ 20,000.00	\$ 20,000.00	\$ 20,000.00	\$ 20,000.00	\$ 20,000.00	\$ 20,000.00	\$ 20,000.00	\$ 20,000.00	\$ 200,000.00	\$ 380,000.00	
CIS Upgrade						\$ 3,000,000.00					\$ 3,000,000.00	
EDMS - Document/Management System Upgrade		\$ 300,000.00									\$ 300,000.00	
GIS Utility Network				\$ 250,000.00							\$ 250,000.00	
Customer Relations Management				\$ 200,000.00							\$ 200,000.00	
Monthly Billing - CIS				\$ 1,000,000.00							\$ 1,000,000.00	
AI Solutions			\$ 200,000.00								\$ 200,000.00	
Agnostic Mobile Workforce System		\$ 200,000.00									\$ 200,000.00	
GIS Enhancements						\$ 250,000.00	\$ 150,000.00				\$ 400,000.00	
Hydraulic Model Enhancements	\$ 25,000.00										\$ 25,000.00	
Asset Criticality Software									\$ 150,000.00		\$ 150,000.00	
Building Information Modeling								\$ 250,000.00			\$ 250,000.00	
Digital Twin									\$ 250,000.00		\$ 250,000.00	
Future IT Projects					\$ 1,000,000.00	\$ 1,000,000.00	\$ 1,000,000.00	\$ 1,000,000.00	\$ 1,000,000.00	\$ 1,000,000.00	\$ 6,000,000.00	
											-	
Vehicles	\$ 55,000.00	\$ 56,650.00	\$ 58,349.50	\$ 60,099.99	\$ 61,902.98	\$ 63,760.07	\$ 65,672.88	\$ 67,643.06	\$ 69,672.35		\$ 558,750.84	

## 10-Year Capital Improvement Plan Summary

Saint Paul Regional Water Services  
August 29, 2024

	Project Year										
	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	Total 10 Year
<b>Engineering Division</b>											
Engineering Total	\$ 230,000.00	\$ 241,000.00	\$ 253,000.00	\$ 265,000.00	\$ 278,000.00	\$ 292,000.00	\$ 306,000.00	\$ 322,000.00	\$ 339,000.00	\$ 347,000.00	\$ 2,873,000.00
Anticipated Debt/Grant Funding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<b>Total Revenue Funded</b>	<b>\$ 230,000.00</b>	<b>\$ 241,000.00</b>	<b>\$ 253,000.00</b>	<b>\$ 265,000.00</b>	<b>\$ 278,000.00</b>	<b>\$ 292,000.00</b>	<b>\$ 306,000.00</b>	<b>\$ 322,000.00</b>	<b>\$ 339,000.00</b>	<b>\$ 347,000.00</b>	<b>\$ 2,873,000.00</b>
Leak Detection, Locating, & GPS Equipment	\$ 60,000.00	\$ 66,000.00	\$ 73,000.00	\$ 80,000.00	\$ 88,000.00	\$ 97,000.00	\$ 106,000.00	\$ 117,000.00	\$ 129,000.00	\$ 132,000.00	\$ 948,000.00
Small Caps < \$100,000	\$ 20,000.00	\$ 20,000.00	\$ 20,000.00	\$ 20,000.00	\$ 20,000.00	\$ 20,000.00	\$ 20,000.00	\$ 20,000.00	\$ 20,000.00	\$ 20,000.00	\$ 200,000.00
Vehicles < \$100,000	\$ 150,000.00	\$ 155,000.00	\$ 160,000.00	\$ 165,000.00	\$ 170,000.00	\$ 175,000.00	\$ 180,000.00	\$ 185,000.00	\$ 190,000.00	\$ 195,000.00	\$ 1,725,000.00

# 10-Year Capital Improvement Plan Summary

Saint Paul Regional Water Services

August 29, 2024

	Project Year										Total 10 Year
	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	
<b>Distribution Division</b>											
Distribution Total	\$ 19,035,120.38	\$ 19,626,309.91	\$ 20,909,468.70	\$ 20,765,872.77	\$ 22,528,144.69	\$ 25,241,897.99	\$ 27,161,950.62	\$ 34,096,864.76	\$ 35,415,657.07	\$ 35,974,000.00	\$ 260,755,286.90
Anticipated Debt/Grant Funding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<b>Total Revenue Funded</b>	<b>\$ 19,035,120.38</b>	<b>\$ 19,626,309.91</b>	<b>\$ 20,909,468.70</b>	<b>\$ 20,765,872.77</b>	<b>\$ 22,528,144.69</b>	<b>\$ 25,241,897.99</b>	<b>\$ 27,161,950.62</b>	<b>\$ 34,096,864.76</b>	<b>\$ 35,415,657.07</b>	<b>\$ 35,974,000.00</b>	<b>\$ 260,755,286.90</b>
Valve Replacement	\$ 775,000.00	\$ 800,000.00	\$ 825,000.00	\$ 850,000.00	\$ 875,000.00	\$ 900,000.00	\$ 925,000.00	\$ 950,000.00	\$ 980,000.00	\$ 1,009,000.00	\$ 8,889,000.00
New Water Service Connections (Rev/Exp Item)	\$ 175,000.00	\$ 175,000.00	\$ 175,000.00	\$ 175,000.00	\$ 175,000.00	\$ 175,000.00	\$ 175,000.00	\$ 175,000.00	\$ 175,000.00	\$ 175,000.00	\$ 1,750,000.00
Hydrant Replacement	\$ 999,000.00	\$ 1,024,000.00	\$ 1,050,000.00	\$ 1,050,000.00	\$ 1,050,000.00	\$ 1,076,000.00	\$ 1,100,000.00	\$ 1,100,000.00	\$ 1,100,000.00	\$ 1,167,000.00	\$ 10,716,000.00
Pump Stations - Tier 1 Priority	\$ 512,275.84	\$ 1,089,936.77	\$ 1,061,290.89	\$ 647,130.36	\$ 730,435.25	\$ 736,913.68	\$ 224,062.00	\$ 665,000.00	\$ 75,000.00	\$ 845,000.00	\$ 6,587,044.80
Hazel Park	\$ 308,256.00	\$ -	\$ 11,698.59	\$ -	\$ 604,822.49	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 924,777.08
Recoat Piping and Valves	\$ 54,080.00										\$ 54,080.00
New Standby Generator	\$ 237,952.00										\$ 237,952.00
Replace Pressure and Flow Instrumentation	\$ 16,224.00										\$ 16,224.00
Caulk Brick Cracks			\$ 5,849.29								\$ 5,849.29
Concrete Foundation Repair			\$ 5,849.29								\$ 5,849.29
Replace Roof Facia					\$ 25,306.38						\$ 25,306.38
Patch Glazed Tile					\$ 6,326.60						\$ 6,326.60
Caulk Seam Sidewalk and Foundation					\$ 3,795.96						\$ 3,795.96
Replace Pumps and Valves					\$ 569,393.56						\$ 569,393.56
Roselawn	\$ 10,816.00	\$ 16,872.96	\$ 107,986.94	\$ -	\$ -	\$ 661,913.68	\$ -	\$ -	\$ -	\$ -	\$ 797,589.59
Replace Electrical Box Covers	\$ 3,244.80										\$ 3,244.80
Add Dehumidifiers		\$ 16,872.96									\$ 16,872.96
Replace Pressure and Flow Instrumentation	\$ 7,571.20										\$ 7,571.20
Caulk Corner Cracks in Brick			\$ 5,624.32								\$ 5,624.32
Caulk Gap at Retaining Wall			\$ 5,624.32								\$ 5,624.32
Patch Wood Trim			\$ 5,624.32								\$ 5,624.32
Repaint Wood Trim			\$ 3,374.59								\$ 3,374.59
Repaint Railings and Floor Plates			\$ 3,374.59								\$ 3,374.59
Replace MCC			\$ 50,618.88								\$ 50,618.88
Replace MTS and STS			\$ 6,749.18								\$ 6,749.18
Replace Lighting transformer and panelboard			\$ 26,996.74								\$ 26,996.74
Repaint Interior CMU wall						\$ 13,159.32					\$ 13,159.32
Replace Floor Paint						\$ 13,159.32					\$ 13,159.32
Replace Double Leaf Doors						\$ 9,211.52					\$ 9,211.52
Replace Window Lintel						\$ 26,318.64					\$ 26,318.64
Caulk Crack at Concrete Stairs						\$ 3,947.80					\$ 3,947.80
Caulk Concrete Apron at Retaining Wall						\$ 3,947.80					\$ 3,947.80
Pump and Valve Replacement						\$ 592,169.30					\$ 592,169.30
West St. Paul	\$ 16,224.00	\$ -	\$ 26,321.82	\$ -	\$ -	\$ -	\$ 6,842.85	\$ -	\$ -	\$ -	\$ 49,388.66
Asbestos Testing	\$ 10,816.00										\$ 10,816.00
Replace Pressure Instrumentation	\$ 5,408.00										\$ 5,408.00
Caulk Mortar Joints around Windows			\$ 8,773.94								\$ 8,773.94
Repair Rusty Lintel at Windows			\$ 17,547.88								\$ 17,547.88
Repair Cracked Quarry Tile on Floor							\$ 6,842.85				\$ 6,842.85
Replace Pumps, Valves and Motors										\$ 770,000.00	\$ 770,000.00
Beebe	\$ 16,224.00	\$ 1,011,815.17	\$ -	\$ -	\$ 50,612.76	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,078,651.93
Replace Damaged Stucco		\$ 56,243.20									\$ 56,243.20
Replace Pressure and Flow Instrumentation	\$ 16,224.00										\$ 16,224.00
Repair Interior CMU Cracks		\$ 5,624.32									\$ 5,624.32
Caulk Concrete Foundation Wall Cracks		\$ 5,624.32									\$ 5,624.32
Extend Roof Drain Outlets from Bldg		\$ 5,624.32									\$ 5,624.32
Repair Stair, Platform, Railings		\$ 8,436.48									\$ 8,436.48
Discharge Valve Actuators		\$ 168,729.60									\$ 168,729.60
Replace TiaStar VFD		\$ 56,243.20									\$ 56,243.20
Replace Pumps and Valves		\$ 506,188.80									\$ 506,188.80

# 10-Year Capital Improvement Plan Summary

Saint Paul Regional Water Services

August 29, 2024

	Project Year										Total 10 Year
	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	
Replace Arrow Hart Switchboard		\$ 49,494.02									\$ 49,494.02
Install Automatic Transfer Switch		\$ 8,998.91									\$ 8,998.91
Install Permanent Generator		\$ 112,486.40									\$ 112,486.40
Replace Lighting Transformer and Panelboard		\$ 28,121.60									\$ 28,121.60
Repaint CMU Interior Walls					\$ 18,979.79						\$ 18,979.79
Replace Floor Paint					\$ 18,979.79						\$ 18,979.79
Xcel to Replace Transformer					\$ 8,857.23						\$ 8,857.23
Caulk CMU Apron					\$ 3,795.96						\$ 3,795.96
<b>St. Anthony</b>	\$ 32,880.64	\$ -	\$ 865,283.54	\$ -	\$ -	\$ -	\$ 5,474.28	\$ -	\$ -	\$ -	\$ 903,638.46
Culk Windows	\$ 3,028.48										\$ 3,028.48
Replace Steel Lintel	\$ 12,113.92										\$ 12,113.92
Add Exit Sign	\$ 1,514.24										\$ 1,514.24
Replace Pressure and Flow Instrumentation	\$ 16,224.00										\$ 16,224.00
Caulk Cracks in bricks			\$ 3,406.63								\$ 3,406.63
Repair Exterior Metal Trim			\$ 3,406.63								\$ 3,406.63
Replace Exterior Doors			\$ 6,813.26								\$ 6,813.26
Replace MCC, Lighting Transformer			\$ 121,665.29								\$ 121,665.29
Repair Cracked Interior Tile							\$ 5,474.28				\$ 5,474.28
Replace Pumps and Valves			\$ 729,991.74								\$ 729,991.74
<b>Highland #1</b>	\$ 21,632.00	\$ -	\$ -	\$ 27,983.02	\$ -	\$ -	\$ 40,945.05	\$ -	\$ -	\$ -	\$ 90,560.07
Replace Plywood Covers on Windows	\$ 5,408.00										\$ 5,408.00
Replace Pressure and Flow Instrumentation	\$ 16,224.00										\$ 16,224.00
Install New Panelboard				\$ 21,899.75							\$ 21,899.75
Caulk Corner Cracks				\$ 6,083.26							\$ 6,083.26
Repaint Concrete Walls							\$ 29,246.46				\$ 29,246.46
Replace Floor Paint							\$ 11,698.59				\$ 11,698.59
<b>Highland #2</b>	\$ 37,856.00	\$ 11,248.64	\$ -	\$ 459,589.97	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 508,694.61
Intumescent Paint on Foam Insulation	\$ 21,632.00										\$ 21,632.00
Moisture Leak - Entry Tunnel		\$ 11,248.64									\$ 11,248.64
Pressure and Flow Instrumentation	\$ 16,224.00										\$ 16,224.00
Roof Repair at Entry				\$ 18,979.79							\$ 18,979.79
Paving Upper Level				\$ 50,612.76							\$ 50,612.76
Replace Pump 5				\$ 189,797.85							\$ 189,797.85
Replace Double Leaf Doors				\$ 18,979.79							\$ 18,979.79
Replace Floor Paint				\$ 18,979.79							\$ 18,979.79
Replace Pump 4				\$ 162,240.00							\$ 162,240.00
<b>West Side</b>	\$ 18,387.20	\$ -	\$ -	\$ 18,249.79	\$ -	\$ -	\$ 95,799.83	\$ -	\$ -	\$ -	\$ 132,436.83
Replace Bituminous Driveway and Walk											\$ -
Add Exit Signs	\$ 2,163.20										\$ 2,163.20
Replace Pressure and Flow Instrumentation	\$ 16,224.00										\$ 16,224.00
Chain Link Fence Repair				\$ 6,083.26							\$ 6,083.26
Replace Wood Retaining Wall				\$ 12,166.53							\$ 12,166.53
Repaint Metal Doors and Frames							\$ 13,685.69				\$ 13,685.69
Replace Floor Paint							\$ 20,528.54				\$ 20,528.54
Replace Steel Lintel							\$ 20,528.54				\$ 20,528.54
Repair Glazed Wall Tile							\$ 6,842.85				\$ 6,842.85
Ratch and Repair Damaged CMU							\$ 6,842.85				\$ 6,842.85
Replace Asbestos Pipe Insulation							\$ 27,371.38				\$ 27,371.38
<b>Mailand</b>	\$ -	\$ -	\$ -	\$ 66,307.58	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 66,307.58
Repair Interior CMU Cracks				\$ 6,083.26							\$ 6,083.26
Repair Exterior Wood Planks				\$ 9,124.90							\$ 9,124.90
Level Transformer Pad				\$ 2,433.31							\$ 2,433.31
Repair Loading Dock Concrete				\$ 6,083.26							\$ 6,083.26
Repaint Exterior Railings				\$ 6,083.26							\$ 6,083.26
Repaint CMU Walls				\$ 18,249.79							\$ 18,249.79
Replace Floor Paint				\$ 18,249.79							\$ 18,249.79
<b>PRV Replacement</b>	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 590,000.00	\$ -	\$ -	\$ 590,000.00



# 10-Year Capital Improvement Plan Summary

Saint Paul Regional Water Services

August 29, 2024

	Project Year											
	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	Total 10 Year	
General Contingency	\$ 50,000.00	\$ 50,000.00	\$ 50,000.00	\$ 75,000.00	\$ 75,000.00	\$ 75,000.00	\$ 75,000.00	\$ 75,000.00	\$ 75,000.00	\$ 75,000.00	\$ 75,000.00	\$ 675,000.00
Water Main Replacement - Tier 1 (~180 year Replace Cycle, 6.59 mi/yr) Capital and Surcharge	\$ 12,200,000.00	\$ 12,690,000.00	\$ 13,200,000.00	\$ 13,700,000.00	\$ 14,200,000.00	\$ 14,800,000.00	\$ 15,400,000.00	\$ 16,000,000.00	\$ 16,600,000.00	\$ 17,300,000.00	\$ 17,300,000.00	\$ 146,090,000.00
Prestressed Concrete Pipe - Tier 1	\$ 135,000.00	\$ 140,000.00	\$ 145,000.00	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 420,000.00
West Side & Hillcrest Overflow Reg. Compliance	\$ -	\$ 75,000.00	\$ 250,000.00	\$ 250,000.00	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 575,000.00
Storage Improvements	\$ 1,421,580.54	\$ 1,317,373.14	\$ 1,285,319.02	\$ 60,490.21	\$ 1,117,385.88	\$ 1,241,026.78	\$ 1,303,827.25	\$ 48,864.76	\$ 84,657.07	\$ -	\$ -	\$ 7,880,524.66
Cope Ave. Tank	\$ -	\$ -	\$ -	\$ 9,489.89	\$ -	\$ -	\$ -	\$ -	\$ 15,394.54	\$ -	\$ -	\$ 24,884.43
Interior Tank Inspection (Alt 5-year cycle)	\$ -	\$ -	\$ -	\$ 9,489.89	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 9,489.89
Full Tank Inspection (10-year Cycle)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 15,394.54	\$ -	\$ -	\$ 15,394.54
Cottage Tank	\$ 11,248.64	\$ 1,236,540.50	\$ -	\$ 8,857.23	\$ -	\$ -	\$ 10,674.84	\$ -	\$ -	\$ -	\$ -	\$ 1,267,321.21
Interior Tank Inspection (Alt 5-year cycle)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 10,674.84	\$ -	\$ -	\$ -	\$ -	\$ 10,674.84
Full Tank Inspection (10-year Cycle)	\$ 11,248.64	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 11,248.64
2-year Warranty Inspection - 2021 Paint (Warranty)	\$ -	\$ -	\$ -	\$ 8,857.23	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 8,857.23
Inter/Exterior Paint Coating (20 years)	\$ -	\$ 1,169,858.56	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,169,858.56
Instrumentation, Comms Upgrades (10-year Cycle)	\$ -	\$ 8,189.01	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 8,189.01
Repair Concrete Footing (2020 Report)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Interior Structural Grinding and Caulking (2020 Report)	\$ -	\$ 8,189.01	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 8,189.01
Replace Handrail System OSHA Compl (2020 Report)	\$ -	\$ 29,246.46	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 29,246.46
Replace Roof Vent Frost Free AWWA (2020 Report)	\$ -	\$ 14,038.30	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 14,038.30
Replace Manway Bolts (2020 Report)	\$ -	\$ 1,169.86	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,169.86
Modify Cover overlap on Top MHs (2020 Report)	\$ -	\$ 5,849.29	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,849.29
Dale Street Reservoir												\$ -
Ferndale Tank	\$ -	\$ -	\$ -	\$ 9,489.89	\$ -	\$ -	\$ -	\$ -	\$ 15,394.54	\$ -	\$ -	\$ 24,884.43
Interior Tank Inspection (Alt 5-year cycle)	\$ -	\$ -	\$ -	\$ 9,489.89	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 9,489.89
Full Tank Inspection (10-year Cycle)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 15,394.54	\$ -	\$ -	\$ 15,394.54
Highland #2 Tank	\$ -	\$ 8,189.01	\$ -	\$ -	\$ -	\$ -	\$ 10,674.84	\$ -	\$ -	\$ -	\$ -	\$ 18,863.85
Interior Tank Inspection (Alt 5/10-year cycle)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 10,674.84	\$ -	\$ -	\$ -	\$ -	\$ 10,674.84
2-year Warranty Inspection - 2021 Paint (Warranty)	\$ -	\$ 8,189.01	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 8,189.01
Highland #3 Tank	\$ 1,317,215.74	\$ -	\$ 9,124.90	\$ -	\$ -	\$ -	\$ -	\$ 11,101.83	\$ -	\$ -	\$ -	\$ 1,337,442.47
Interior Tank Inspection (Alt 5/10-year cycle)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 11,101.83	\$ -	\$ -	\$ -	\$ 11,101.83
2-year Warranty Inspection - 2021 Paint (Warranty)	\$ -	\$ -	\$ 9,124.90	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 9,124.90
Instrumentation, Comms Upgrades (10-year Cycle)	\$ 7,874.05	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 7,874.05
Interior Grinding and Caulking (2020 Report)	\$ 16,872.96	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 16,872.96
Alum Jacket Fill Pipe (2020 Report)	\$ 5,624.32	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,624.32
Repair/Mod Interior Lighting (2020 Report)	\$ 2,249.73	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,249.73
Replace Handrail System (2020 Report)	\$ 33,745.92	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 33,745.92
Replace Manway Bolts (2020 Report)	\$ 1,124.86	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,124.86
Replace Overflow Screen (2020 Report)	\$ 1,124.86	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,124.86
Interior and Ext Full Paint (2020 Report)	\$ 1,237,350.40	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,237,350.40
Misc Repair Items (2020 Report)	\$ 11,248.64	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 11,248.64
McKnight Tank	\$ 8,436.48	\$ -	\$ -	\$ -	\$ 1,088,174.36	\$ 9,579.98	\$ -	\$ 17,762.93	\$ 11,545.91	\$ -	\$ -	\$ 1,135,499.66
Interior Tank Inspection (Alt 5/10-year cycle)	\$ 8,436.48	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 11,545.91	\$ -	\$ -	\$ 19,982.39
Full Tank Inspection (10-year Cycle)	\$ -	\$ -	\$ -	\$ -	\$ 12,653.19	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 12,653.19
2-year Warranty Inspection - 2021 Paint (Warranty)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 9,579.98	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 9,579.98
Inter/Exterior Paint Coating (20 years)	\$ -	\$ -	\$ -	\$ -	\$ 1,043,888.19	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,043,888.19
Instrumentation, Comms Upgrades (10-year Cycle)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 17,762.93	\$ -	\$ -	\$ -	\$ 17,762.93
Interior Structural Grinding and Caulking (2020 Report)	\$ -	\$ -	\$ -	\$ -	\$ 6,326.60	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 6,326.60
Repair Damaged Roof Panel & Fasteners (2020 Report)	\$ -	\$ -	\$ -	\$ -	\$ 10,122.55	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 10,122.55
Replace Roof Vent Frost Free AWWA (2020 Report)	\$ -	\$ -	\$ -	\$ -	\$ 12,653.19	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 12,653.19
Replace Manway Bolts (2020 Report)	\$ -	\$ -	\$ -	\$ -	\$ 1,265.32	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,265.32
Replace Overflow Screen (2020 Report)	\$ -	\$ -	\$ -	\$ -	\$ 1,265.32	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,265.32
Mendota Heights Tank	\$ 19,685.12	\$ 8,189.01	\$ -	\$ -	\$ -	\$ 13,685.69	\$ 1,241,839.56	\$ -	\$ 10,776.18	\$ -	\$ -	\$ 1,294,175.56











# **Water Supply Projects**

**2025 – 2034 Capital Improvement Plan**

**Saint Paul Regional Water Services**











<b>Project Name</b>	Vadnais Ferric Chloride Tank Replacement					<b>Infrastructure Category</b>	Supply system				
<b>Division</b>	Production					<b>Work type</b>	Replacement				
<b>Project Description</b>											
Replace the storage tank for Ferric Chloride at the Vadnais Campus											
<b>Background</b>											
The Ferric Chloride tank for the Vadnais Campus appears to be reaching the end of its useful life and has had issues with leaks in the past. Ferric chloride addition in Vadnais Lake effectively serves as a form of pre-treatment for water before it reaches the McCarron's WTP. As such, it's important for us to maintain this chemical feed system, which requires the use of a reliable storage tank.											
<b>Strategic Plan Goal</b>						<b>Schedule</b>					
Infrastructure strategy and performance Quality water						Planning	2027				
						Design					
						Construction	2028				
						Completion	2028				
<b>Operational Implications</b>						<b>Project References</b>					
No meaningful changes expected											
<b>NOTES</b>											
<i>Note: Revenue and Expenses Below are in Thousands</i>											
<b>REVENUE</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>2030</b>	<b>2031</b>	<b>2032</b>	<b>2033</b>	<b>2034</b>	<b>Total</b>
Capital				75k							75k
Bond											0k
Grant											0k
<b>Total</b>	0k	0k	0k	75k	0k	0k	0k	0k	0k	0k	<b>75k</b>
<b>EXPENSE</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>2030</b>	<b>2031</b>	<b>2032</b>	<b>2033</b>	<b>2034</b>	<b>Total</b>
Distribution				75k							75k
<b>Total</b>	0k	0k	0k	75k	0k	0k	0k	0k	0k	0k	<b>75k</b>



<b>Project Name</b>	Pleasant Lake Gatehouse Improvements	<b>Infrastructure Category</b>	Supply system
<b>Division</b>	Production	<b>Work type</b>	Rehabilitation

**Project Description**  
Extensively rehabilitate or reconstruct both of the Pleasant Lake gatehouse as part of a coordinated, multiyear effort.

**Background**  
Two gatehouses located at Pleasant lake play a vital role in supplying water to the SPRWS system. These gatehouses contain screening infrastructure, and, more essentially, gates and other water stopping devices that allow us to drain raw water conduits for maintenance activities.

These gatehouses are very old and are in need of improvements. Water stopping infrastructure no longer complies with OSHA standards for entry into the gatehouse facility since there is only a single gate/valve holding back the water. Ultimately, the gate houses do not present our team with safe and straightforward ways to maintain essential infrastructure.

This project will aim to improve both gatehouses on site via reconstruction or extensive rehabilitation of the gatehouses.



**Strategic Plan Goal**  
Infrastructure strategy and performance  
High performing workforce

<b>Schedule</b>	
Planning	2027
Design	2028
Construction	2028-2029
Completion	2029

**Operational Implications**  
Reduction in maintenance needs and reliability concerns with the pump station network.

**Project References**

**NOTES**

<i>Note: Revenue and Expenses Below are in Thousands</i>											
REVENUE	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	Total
Capital				200k	1,200k						1,400k
Bond											0k
Grant											0k
<b>Total</b>	0k	0k	0k	200k	1200k	0k	0k	0k	0k	0k	<b>1400k</b>
EXPENSE	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	Total
Distribution				200k	1200k						1400k
<b>Total</b>	0k	0k	0k	200k	1200k	0k	0k	0k	0k	0k	<b>1400k</b>

<b>Project Name</b>	Vadnais Campus Air Conditioning	<b>Infrastructure Category</b>	Building and grounds
<b>Division</b>	Production	<b>Work type</b>	Expansion

**Project Description**  
 Add an air conditioning unit (or a ductless minisplit unit) to the Vadnais office/cafe area.



**Background**  
 The Vadnais station is home to a significant portion of the Production division workforce. The workers who are based in this area are typically out in the summer heat throughout the day but spend a meaningful amount of time working, eating, meeting, etc. on the Vadnais campus. Additionally, some of the managers at the Vadnais campus spend a substantial amount of their time working indoors on the campus. Currently the main building doesn't have any air conditioning. As a result, the Vadnais team ends up using window air conditioning units throughout the summer months, but finds that it's fairly ineffective and inefficient.

This project would target portions of the Vadnais facility that are utilized during the summer months so that we can keep those spaces comfortable for staff.

**Strategic Plan Goal**  
 High performing workforce

<b>Schedule</b>	
Planning	2028
Design	
Construction	2029
Completion	2029

**Operational Implications**

**Project References**

**NOTES**

<i>Note: Revenue and Expenses Below are in Thousands</i>											
REVENUE	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	Total
Capital					25k						25k
Bond											0k
Grant											0k
<b>Total</b>	0k	0k	0k	0k	25k	0k	0k	0k	0k	0k	<b>25k</b>
EXPENSE	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	Total
Distribution					25k						25k
<b>Total</b>	0k	0k	0k	0k	25k	0k	0k	0k	0k	0k	<b>25k</b>

<b>Project Name</b>	Obtain Water Supply to Vadnais Campus	<b>Infrastructure Category</b>	Watermain
<b>Division</b>	Production	<b>Work type</b>	Expansion

**Project Description**  
 Install a service line to supply the Vadnais campus with water. Coordinate with Vadnais Heights to make this happen.



**Background**  
 The Vadnais campus does not have a city water supply. As a result, they are forced to utilize untreated well water for most purposes and to purchase bottled water for consumption. Several discussions with Vadnais Heights have been unfruitful in the past.  
  
 Money budgeted as a placeholder under the assumption that we may need to cover some of the costs of supplying water to campus.

**Strategic Plan Goal**  
 Infrastructure strategy and performance

<b>Schedule</b>	
Planning	2028
Design	
Construction	2029
Completion	2029

**Operational Implications**

**Project References**

**NOTES**

<i>Note: Revenue and Expenses Below are in Thousands</i>											
REVENUE	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	Total
Capital					200k						200k
Bond											0k
Grant											0k
<b>Total</b>	0k	0k	0k	0k	200k	0k	0k	0k	0k	0k	<b>200k</b>
EXPENSE	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	Total
Distribution					200k						200k
<b>Total</b>	0k	0k	0k	0k	200k	0k	0k	0k	0k	0k	<b>200k</b>

<b>Project Name</b>	Replace Two Chemical Feed Pumps at Fridley	<b>Infrastructure Category</b>	Supply system
<b>Division</b>	Production	<b>Work type</b>	Replacement

**Project Description**  
 Replace two pumps used for dosing ferric chloride at Fridley

**Background**  
 SPRWS operates 14 liquid chemical feed pumps. They are utilized for dosing precise amounts of water treatment chemicals, and they play a vital role in our operations.

The existing pumps are old, are becoming more maintenance intensive, and are experiencing more down time due to failures. In short, reliability is growing to be more of an issue. Further, older pumps have less ability to precisely meter and monitor chemical feed rates, and state reporting is requiring more detailed chemical feed rate reporting.

Replacing chemical feed pumps over the course of the coming years will improve redundancy and reliability and will improve our ability to monitor chemical use.



**Strategic Plan Goal**  
 Infrastructure strategy and performance

<b>Schedule</b>	
Planning	2028
Design	
Construction	2029
Completion	

**Operational Implications**

**Project References**

**NOTES**

<i>Note: Revenue and Expenses Below are in Thousands</i>											
REVENUE	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	Total
Capital					45k						45k
Bond											0k
Grant											0k
<b>Total</b>	0k	0k	0k	0k	45k	0k	0k	0k	0k	0k	<b>45k</b>
EXPENSE	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	Total
Distribution					45k						45k
<b>Total</b>	0k	0k	0k	0k	45k	0k	0k	0k	0k	0k	<b>45k</b>



<b>Project Name</b>	Vadnais Copper Sulfate Tank Replacement					<b>Infrastructure Category</b>	Supply system				
<b>Division</b>	Production					<b>Work type</b>	Replacement				
<b>Project Description</b>											
Replace the copper sulfate tank at the Vadnais Campus											
<b>Background</b>											
SPRWS feeds copper sulfate at the Vadnais campus for zebra mussel control. This chemical cuts down on the need for regular maintenance on raw water infrastructure and maintains full flow capacities in the raw water system. The storage tank for this chemical is located outdoors and is subject to sunshine and UV exposure. As such, we anticipate that we may need to replace this tank in this timeframe.											
<b>Strategic Plan Goal</b>						<b>Schedule</b>					
Quality water Infrastructure strategy and performance						Planning		2030			
						Design					
						Construction		2031			
						Completion		2031			
<b>Operational Implications</b>						<b>Project References</b>					
<b>NOTES</b>											
<b>Note: Revenue and Expenses Below are in Thousands</b>											
<b>REVENUE</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>2030</b>	<b>2031</b>	<b>2032</b>	<b>2033</b>	<b>2034</b>	<b>Total</b>
Capital							65k				65k
Bond											0k
Grant											0k
<b>Total</b>	0k	0k	0k	0k	0k	0k	65k	0k	0k	0k	<b>65k</b>
<b>EXPENSE</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>2030</b>	<b>2031</b>	<b>2032</b>	<b>2033</b>	<b>2034</b>	<b>Total</b>
Distribution							65k				65k
<b>Total</b>	0k	0k	0k	0k	0k	0k	65k	0k	0k	0k	<b>65k</b>

<b>Project Name</b>	Capital Investments in Raw Water Supply Wells	<b>Infrastructure Category</b>	Supply system
<b>Division</b>	Production	<b>Work type</b>	Rehabilitation

**Project Description**  
 Rehabilitate raw water supply wells to ensure that they are in good condition for continued use as an emergency backup system.

**Background**  
 Our raw water supply roles play a vital role in providing redundancy to our supply system. While they are used infrequently, they remain a highly valuable asset and need to be maintained wisely.



**Strategic Plan Goal**  
 Infrastructure strategy and performance


<b>Schedule</b>	
Planning	2031
Design	
Construction	2032
Completion	2032

**Operational Implications**

**Project References**

**NOTES**

<i>Note: Revenue and Expenses Below are in Thousands</i>											
REVENUE	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	Total
Capital								700k			700k
Bond											0k
Grant											0k
<b>Total</b>	0k	0k	0k	0k	0k	0k	0k	700k	0k	0k	<b>700k</b>
EXPENSE	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	Total
Distribution								700k			700k
<b>Total</b>	0k	0k	0k	0k	0k	0k	0k	700k	0k	0k	<b>700k</b>

<b>Project Name</b> Fridley Intake and Pump Station Improvements <b>Division</b> Production	<b>Infrastructure Category</b> Supply system <b>Work type</b> Rehabilitation										
<b>Project Description</b> The Fridley Intake and Pump Station is a critical component of the raw water supply system for SPRWS. Various aspects of the station are in need of improvement. Improvement needs include: replacement of electrical gear, flood protection, correcting erosion around the foundation, fixing leaks in walls and roof, and more.											
<b>Background</b> Needs related to the Fridley Pump Station have been identified in reports by HR Green (2023) and GEI Consultants (2016). Needs have also been identified by SPRWS staff members. Production and Engineering Division management and field staff began meeting on site to quantify all needs in Q4 of 2023 and will be working to prioritize needs and develop a robust project scope in Q4 of 2024.											
<b>Strategic Plan Goal</b> Infrastructure strategy and performance			<b>Schedule</b> <table border="1" data-bbox="803 1060 1524 1207"> <tr> <td>Planning</td> <td>Q4 2023 to Q2 2024</td> </tr> <tr> <td>Design</td> <td>Q4 2024 to Q3 2025</td> </tr> <tr> <td>Construction</td> <td>Q3 2025 to Q3 2026</td> </tr> <tr> <td>Completion</td> <td>Q3 2026</td> </tr> </table>		Planning	Q4 2023 to Q2 2024	Design	Q4 2024 to Q3 2025	Construction	Q3 2025 to Q3 2026	Completion
Planning	Q4 2023 to Q2 2024										
Design	Q4 2024 to Q3 2025										
Construction	Q3 2025 to Q3 2026										
Completion	Q3 2026										
<b>NOTES</b> \$1.9 Million has been budgeted for 2024. It's unlikely that 2024 expenditures will be nearly that high as 2024 is expected to be primarily a year devoted to internal project scoping, procurement, and design work. Expenses are expected to be considerably higher in 2025 and 2026.  TOTAL PROJECT BUDGET (INCLUDING 2024 FUNDS) IS \$3.4 MILLION	<b>Project References</b> V:\Engineering\Engineering Projects\N7388 - Fridley Intake and Pump Station Improvements\Reports\Pre-Existing Reports "2016 GEI Structural Assessment of Fridley Pump Station.pdf" "2023 Pump Station Master Plan from HR Green.pdf" V:\Engineering\Engineering Projects\N7388 - Fridley Intake and Pump Station Improvements\Project Management "Fridley Pump Station Issues Log.docx" Condition assessment report Feasibility report Cost estimates										
<b>Note: Revenue and Expenses Below are in Thousands</b>											
<b>REVENUE</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>2030</b>	<b>2031</b>	<b>2032</b>	<b>2033</b>	<b>2034</b>	<b>Total</b>
Capital	1500k										1500k
Bond											0k
Grant											0k
<b>Total</b>	1500k	0k	0k	0k	0k	0k	0k	0k	0k	0k	<b>1500k</b>
<b>EXPENSE</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>2030</b>	<b>2031</b>	<b>2032</b>	<b>2033</b>	<b>2034</b>	<b>Total</b>
Distribution	1500k										1500k
<b>Total</b>	1500k	0k	0k	0k	0k	0k	0k	0k	0k	0k	<b>1500k</b>



# **Water Treatment Projects**

**2025 – 2034 Capital Improvement Plan**

**Saint Paul Regional Water Services**



















<b>Project Name</b>	WTP Water Quality Instruments Replacement/Upgrades	<b>Infrastructure Category</b>	Plant & treatment
<b>Division</b>	Production	<b>Work type</b>	Replacement

**Project Description**  
Purchase and install new water quality probes/meters/instruments as needed to keep all WTP water quality monitoring infrastructure in excellent shape.

**Background**  
Throughout the treatment process, SPRWS utilizes dozens and dozens of water quality probes to measure water quality/chemistry. Examples include turbidimeters and pH probes.  
  
Ensuring that these probes are reliable and accurate is important for helping to keep us in compliance with regulations and for optimizing treatment processes.  
  
This annual allowance is reserved for the purpose of purchasing new water quality probes/meters/instruments to replace older, outdated models.



**Strategic Plan Goal**  
Quality water

<b>Schedule</b>	
Planning	2024
Design	
Construction	2025-2033
Completion	2033

**Operational Implications**

**Project References**

**NOTES**

<i>Note: Revenue and Expenses Below are in Thousands</i>											
REVENUE	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	Total
Capital	35k	36k	37k	38k	39k	40k	41k	42k	43k		351k
Bond											0k
Grant											0k
<b>Total</b>	35k	36k	37k	38k	39k	40k	41k	42k	43k	0k	<b>351k</b>
EXPENSE	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	Total
Distribution	35k	36k	37k	38k	39k	40k	41k	42k	43k		351k
<b>Total</b>	35k	36k	37k	38k	39k	40k	41k	42k	43k	0k	<b>351k</b>

<b>Project Name</b>	Piping Evaluation and Improvements (Sub-floor, Pump Room)	<b>Infrastructure Category</b>	Plant & treatment
<b>Division</b>	Production	<b>Work type</b>	Rehabilitation

**Project Description**

Conduct an engineering study of the pipes and valves beneath the floor of the pump room. Determine likelihood and consequence of failure and develop plans for any necessary improvements, replacements, rehabilitations, etc.

**Background**

There is a substantial amount of sub-floor piping beneath the pump room. The pipes in these areas have a high consequence of failure since they are influent/effluent lines for pumps that serve all 450,000 SPRWS customers. A visual inspection of the pipes shows that some corrosion is present. The condition of the pipes has not been studied in detail in recent history.

Due to the strategic importance of the pipes, the age of the pipes, and the unknown condition, an engineering study of the pipes is merited.



**Strategic Plan Goal**

Infrastructure strategy and performance

**Schedule**

Planning	Q1 2025
Design	2026
Construction	2026-2031
Completion	2031

**Operational Implications**

**Project References**

**NOTES**

*Known issues include:*

*Pump 9 discharge valve that must be manually operated and functions poorly. (Ideally we would copy the discharge valve setup for Pump 8 here)*

*Discharge valve for pump #6 is beneath the floor slab in a confined space. It's difficult to access and may need to be raised.*

**Note: Revenue and Expenses Below are in Thousands**

REVENUE	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	Total
Capital	85k	290k					300k				675k
Bond											0k
Grant											0k
<b>Total</b>	85k	290k	0k	0k	0k	0k	300k	0k	0k	0k	<b>675k</b>
EXPENSE	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	Total
Distribution	85k	290k					300k				675k
<b>Total</b>	85k	290k	0k	0k	0k	0k	300k	0k	0k	0k	<b>675k</b>

























<b>Project Name</b>	Ferric Chloride Tank Replacement (if needed)	<b>Infrastructure Category</b>	Plant & treatment
<b>Division</b>	Production	<b>Work type</b>	Replacement

**Project Description**  
Replace Ferric Chloride Tanks

**Background**  
Ferric Chloride has typically been used as a secondary coagulant at the McCarron's Water Treatment Plant. The tanks for this chemical are approaching the end of their useful life and are in need of replacement.

That said, when the new softening processes are fully constructed and operational (expected in 2025), SPRWS may opt to switch coagulant regimes. If coagulant regimes are switched, then no capital expenditures in this area should be necessary.

For capital planning purposes, it is assumed that Ferric Chloride will continue to play a role in the treatment process and that these tanks will require replacement.



**Strategic Plan Goal**

<b>Schedule</b>	
Planning	2026 and 2027
Design	2028
Construction	2029
Completion	2029

**Operational Implications**

**Project References**

**NOTES**

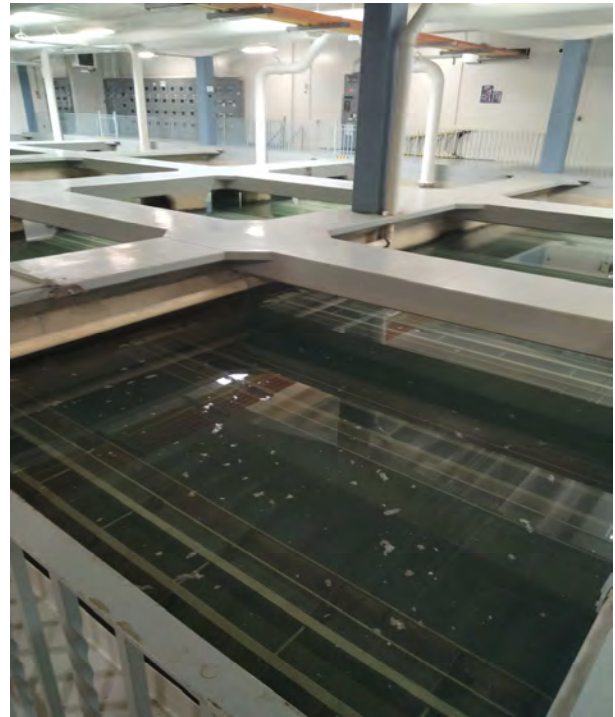
<i>Note: Revenue and Expenses Below are in Thousands</i>											
REVENUE	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	Total
Capital					176k						176k
Bond											0k
Grant											0k
<b>Total</b>	0k	0k	0k	0k	176k	0k	0k	0k	0k	0k	<b>176k</b>
EXPENSE	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	Total
Distribution					176k						176k
<b>Total</b>	0k	0k	0k	0k	176k	0k	0k	0k	0k	0k	<b>176k</b>

<b>Project Name</b>	GAC Filter Media Replacement	<b>Infrastructure Category</b>	Plant & treatment
<b>Division</b>	Production	<b>Work type</b>	Replacement

**Project Description**  
 Multi-Year effort to replace media in filters. Preliminary expectations would be to replace media in approximately 4 filters per year for a six-year period, resulting in the eventual replacement of media for all 24 filters.

**Background**  
 Granular Activated Carbon plays an essential role in the treatment process for SPRWS. It removes a host of contaminants from water and ensures that effluent turbidities from the plant remain low. GAC filter media was originally installed in the mid-2000s, and, at the time, SPRWS expected that regular replacement of the media would be necessary.

Media has continued to perform well, though pilot studies have shown that the media leeches some chemicals into water as the water flows through the media. The amount of chemical leeching is insignificant but it does indicate that the replacement of media may be merited in the medium-term future.



**Strategic Plan Goal**  
 Quality water

<b>Schedule</b>	
Planning	2029
Design	2030
Construction	2031-2036
Completion	2036

**Operational Implications**  
 Reduction in maintenance needs and reliability concerns with the pump station network.

**Project References**

**NOTES**  
*The underdrain system should be evaluated at this time as well to ensure that it is in good condition. Media replacement would allow for an optimal timeframe for making repairs to the underdrain system as needed.*

<b>Note: Revenue and Expenses Below are in Thousands</b>											
REVENUE	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	Total
Capital							600k	1,200k	600k	2,400k	4,800k
Bond											0k
Grant											0k
<b>Total</b>	0k	0k	0k	0k	0k	0k	600k	1200k	600k	2400k	<b>4800k</b>
EXPENSE	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	Total
Distribution							600k	1,200k	600k	2,400k	4800k
<b>Total</b>	0k	0k	0k	0k	0k	0k	600k	1200k	600k	2400k	<b>4800k</b>

<b>Project Name</b>	Sludge Press Replacement #3	<b>Infrastructure Category</b>	Plant & treatment
<b>Division</b>	Production	<b>Work type</b>	Replacement

**Project Description**  
 This project would aim to replace the last of the older existing sludge presses in the dewatering building for the purpose of improving redundancy and reliability in the system.



**Background**

SPRWS owns and operates four sludge presses for handling lime solids removed during treatment. In summer, we use all four presses. We can operate with three presses functional, but we'd need operators to regularly work overtime due to the longer amount of time that it would take to press sludge. We cannot manage to operate in the summer time with only two presses active.

Three of the four filter presses that we own are believed to have exceed their useful life. The fourth is the newest but also the slowest and the least utilized. This project is aimed at attempting to address reliability concerns. With 3/4 of our presses vulnerable to failure and a system that already has fairly minimal redundancy, the current operating situation is uncomfortable.

**Strategic Plan Goal**  
 Infrastructure strategy and performance

<b>Schedule</b>	
Planning	Q3 & Q4 2032
Design	Q1 to Q3 2033
Construction	Q3 2033 to Q2 2034
Completion	


**Operational Implications**  
 Reduction in maintenance needs and reliability concerns with the pump station network.


**Project References**

**NOTES**

<i>Note: Revenue and Expenses Below are in Thousands</i>											
REVENUE	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	Total
Capital									1,350k		1,350k
Bond											0k
Grant											0k
<b>Total</b>	0k	0k	0k	0k	0k	0k	0k	0k	1350k	0k	<b>1350k</b>
EXPENSE	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	Total
Distribution									1350k		1350k
<b>Total</b>	0k	0k	0k	0k	0k	0k	0k	0k	1350k	0k	<b>1350k</b>

<b>Project Name</b> On Site Chlorine Generation		<b>Infrastructure Category</b> Plant & treatment									
<b>Division</b> Production		<b>Work type</b> Expansion									
<b>Project Description</b> Add on-site chlorine generation capability and move away from rail car deliveries of chlorine											
<b>Background</b> SPRWS currently supplies chlorine for treatment purposes via rail cars. This means that there is a very large volume of chlorine gas stored on site at any time. While SPRWS staff is very familiar with the maintenance processes required to ensure that the chlorine can be safely handled, it represents a meaningful safety risk. Additionally, gaseous chlorine supply chains are vulnerable to railroad employee strikes and other disruptions. Moving to on-site generation should ensure that we have a more reliable source of chlorine for treatment purposes.											
<b>Strategic Plan Goal</b> Quality water		<b>Schedule</b>									
		Planning									
		Design									
		Construction									
		Completion									
<b>Operational Implications</b>		<b>Project References</b>									
<b>NOTES</b>											
<b>Note: Revenue and Expenses Below are in Thousands</b>											
<b>REVENUE</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>2030</b>	<b>2031</b>	<b>2032</b>	<b>2033</b>	<b>2034</b>	<b>Total</b>
Capital											0k
Bond										18,000k	18,000k
Grant											0k
<b>Total</b>	0k	0k	0k	0k	0k	0k	0k	0k	0k	18000k	<b>18000k</b>
<b>EXPENSE</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>2030</b>	<b>2031</b>	<b>2032</b>	<b>2033</b>	<b>2034</b>	<b>Total</b>
Distribution										18,000k	18000k
<b>Total</b>	0k	0k	0k	0k	0k	0k	0k	0k	0k	18000k	<b>18000k</b>

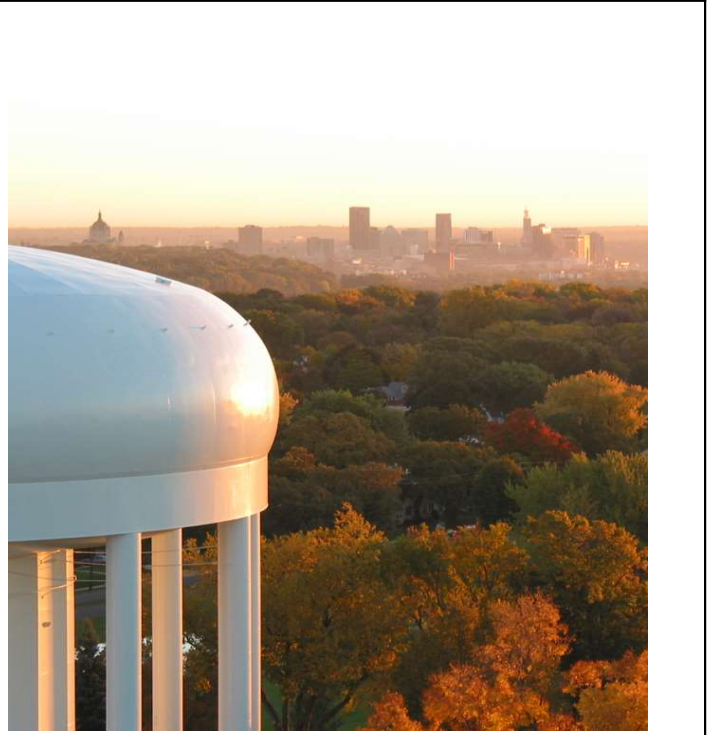
<b>Project Name</b> Replacement of Metrohm Lab Equipment <b>Division</b> Production	<b>Infrastructure Category</b> Plant & treatment <b>Work type</b> Replacement										
<b>Project Description</b> Purchase a new Metrohm unit for use by SPRWS lab staff. An auto-sampler should be included along with this purchase as well.											
<b>Background</b> <p>The Lab relies on the Metrohm auto titrator as the primary instrument for fluoride, hardness, alkalinity, and chloride analysis. It provides quick reliable results for parameters that are regulatory, indicative of proper treatment, or used to determine if water samples are our water. SPRWS is required by the MDH to analyze fluoride concentrations daily. We also use the Metrohm to check our online alkalinity meter which is used to set proper lime dosing.</p> <p>This project has been included in the 2025 capital plan because the new Metrohm will be useful in analyzing samples associated with the startup of the new McCarron's Water Treatment Plant.</p>											
<b>Strategic Plan Goal</b> Quality water			<b>Schedule</b> <table border="1" data-bbox="803 1060 1521 1207"> <tr> <td>Planning</td> <td>2025</td> </tr> <tr> <td>Design</td> <td>2025</td> </tr> <tr> <td>Construction</td> <td>2025</td> </tr> <tr> <td>Completion</td> <td>2025</td> </tr> </table>		Planning	2025	Design	2025	Construction	2025	Completion
Planning	2025										
Design	2025										
Construction	2025										
Completion	2025										
<b>Operational Implications</b> If this lab equipment breaks down, SPRWS will be forced to rely upon outside labs to process samples and to provide information. This would lead to higher operational expenses due to the need to pay an outside lab for extensive testing.	<b>Project References</b>										
<b>NOTES</b> <i>The Metrohm was purchased in 2013. SPRWS IS has struggled with updating the lab computer connected to the Metrohm because of software upgrade limitations. In addition to the instrument software being outdated, the Metrohm has a significant number of mechanical components that provide proper titrant dosing during titrations. Over time, these components wear from regular use and will need to be replaced.</i>											
<b>Note: Revenue and Expenses Below are in Thousands</b>											
<b>REVENUE</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>2030</b>	<b>2031</b>	<b>2032</b>	<b>2033</b>	<b>2034</b>	<b>Total</b>
Capital	80k										80k
Bond											0k
Grant											0k
<b>Total</b>	80k	0k	0k	0k	0k	0k	0k	0k	0k	0k	<b>80k</b>
<b>EXPENSE</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>2030</b>	<b>2031</b>	<b>2032</b>	<b>2033</b>	<b>2034</b>	<b>Total</b>
Distribution	80k										80k
<b>Total</b>	80k	0k	0k	0k	0k	0k	0k	0k	0k	0k	<b>80k</b>

<b>Project Name</b> Microwave Digester Replacement <b>Division</b> Production	<b>Infrastructure Category</b> Plant & treatment <b>Work type</b> Replacement										
<b>Project Description</b>  Purchase a new microwave digester unit for use by SPRWS lab staff.											
<b>Background</b>  The microwave digester is an integral piece of equipment utilized in the analysis of metals and nutrients. The microwave breaks down or “digests” all forms of an element in a sample to a form that can be accurately measured by lab equipment such as the discrete analyzer or the ICP-MS.  The lab is accredited in lead analysis, which requires water samples to be digested prior to lead analysis if the turbidity is over 1 NTU. With the current changes to the lead and copper rule, the lead service line removal program, the updated corrosion control program, and the continued consumer interest in lead testing, it is imperative that we can accurately analyze all lead samples that are received by the lab.											
<b>Strategic Plan Goal</b>  Quality water	<b>Schedule</b> <table border="1" data-bbox="803 1058 1524 1199"> <tr> <td>Planning</td> <td>2025</td> </tr> <tr> <td>Design</td> <td>2025</td> </tr> <tr> <td>Construction</td> <td>2026</td> </tr> <tr> <td>Completion</td> <td>2026</td> </tr> </table>		Planning	2025	Design	2025	Construction	2026	Completion	2026	
Planning	2025										
Design	2025										
Construction	2026										
Completion	2026										
<b>Operational Implications</b>  No meaningful impacts to operating expenses are expected to result from this project.  The project does reduce our risk profile.	<b>Project References</b>										
<b>NOTES</b> <i>With the addition of ortho-phosphate to our corrosion control program, there will be continued interest in both ortho-phosphate and total phosphorous levels in our source water and drinking water. Also, with the transition from the Teledyne Torch to the Teledyne Fusion TOC analyzer the total nitrogen analyzer was discontinued. In order to analyze total nitrogen in the future we will have to revert to digesting samples before analysis.</i> <i>The microwave digester is over 15 years old (in 2024). The supporting hardware and software are considered obsolete.</i>											
<b>Note: Revenue and Expenses Below are in Thousands</b>											
<b>REVENUE</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>2030</b>	<b>2031</b>	<b>2032</b>	<b>2033</b>	<b>2034</b>	<b>Total</b>
Capital		50k									50k
Bond											0k
Grant											0k
<b>Total</b>	0k	50k	0k	0k	0k	0k	0k	0k	0k	0k	<b>50k</b>
<b>EXPENSE</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>2030</b>	<b>2031</b>	<b>2032</b>	<b>2033</b>	<b>2034</b>	<b>Total</b>
Distribution		50k									50k
<b>Total</b>	0k	50k	0k	0k	0k	0k	0k	0k	0k	0k	<b>50k</b>

<b>Project Name</b>	Purchase of Water Quality Monitoring Devices for Distribution System	<b>Infrastructure Category</b>	Supply system
<b>Division</b>	Production	<b>Work type</b>	Expansion

**Project Description**  
 Identify water quality parameters that we'd like to monitor in real time, locations where we'd like to gather information, and appropriate instruments to monitor those parameters. Purchase and install instruments. Program SCADA to make realtime data visible and to log historical trends.

**Background**  
 Obtaining real-time water quality data from the distribution system is increasingly possible with modern technology. This project is a placeholder, with further definition needed. In general, however, these funds are being reserved for purchasing, installing, and programming field sensors so that we can actively monitor water quality in real time and can show water quality trends throughout our distribution system.



**Strategic Plan Goal**

<b>Schedule</b>	
Planning	2025
Design	
Construction	2026-2034
Completion	2034

**Operational Implications**  
 Reduction in maintenance needs and reliability concerns with the pump station network.

**Project References**

**NOTES**

*Unclear whether this should be included in Production or Distribution Division budget. To discuss further.*

<b>Note: Revenue and Expenses Below are in Thousands</b>											
REVENUE	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	Total
Capital		18k	18k	18k	18k	18k	18k	30k	30k	30k	198k
Bond											0k
Grant											0k
<b>Total</b>	0k	18k	18k	18k	18k	18k	18k	30k	30k	30k	<b>198k</b>
EXPENSE	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	Total
Distribution		18k	18k	18k	18k	18k	18k	30k	30k	30k	198k
<b>Total</b>	0k	18k	18k	18k	18k	18k	18k	30k	30k	30k	<b>198k</b>

<b>Project Name</b> ICPMS Machine with Autosampler		<b>Infrastructure Category</b> Plant & treatment									
<b>Division</b> Production		<b>Work type</b> Replacement									
<b>Project Description</b> Purchase a new ICPMS Machine with an Autosampler											
<b>Background</b> More information to come. This need was reported by lab staff during standard quarterly discussions of the capital plan.											
<b>Strategic Plan Goal</b>		<b>Schedule</b>									
		Planning									
		Design									
		Construction									
		Completion									
<b>Operational Implications</b>		<b>Project References</b>									
<b>NOTES</b>											
<b>Note: Revenue and Expenses Below are in Thousands</b>											
<b>REVENUE</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>2030</b>	<b>2031</b>	<b>2032</b>	<b>2033</b>	<b>2034</b>	<b>Total</b>
Capital								400k			400k
Bond											0k
Grant											0k
<b>Total</b>	0k	0k	0k	0k	0k	0k	0k	400k	0k	0k	<b>400k</b>
<b>EXPENSE</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>2030</b>	<b>2031</b>	<b>2032</b>	<b>2033</b>	<b>2034</b>	<b>Total</b>
Distribution								400k			400k
<b>Total</b>	0k	0k	0k	0k	0k	0k	0k	400k	0k	0k	<b>400k</b>









# **Electrical and SCADA Projects**

**2025 – 2034 Capital Improvement Plan**

**Saint Paul Regional Water Services**

















<b>Project Name</b>	Replacement of SCADA Infrastructure	<b>Infrastructure Category</b>	Electrical & SCADA
<b>Division</b>	Production	<b>Work type</b>	Replacement

**Project Description**  
Purchase and install new SCADA hardware to proactively replace aging infrastructure that is reaching the end of its useful life

**Background**  
SCADA infrastructure is truly the backbone of our operation. Without functional SCADA systems, operators are left mostly blind to what is happening throughout the plant and the distribution system and operations become extremely difficult.

This SCADA system depends on hardware installed around the McCarron's Campus and at Remote Stations. Most of this hardware has a lifespan on the order of 10-15 years before it becomes obsolete and represents a security/reliability risk.

With these funds, we will place all SCADA infrastructure on a replacement cycle to ensure that we proactively replace equipment that is reaching the end of its useful life.

## CompactLogix



## ControlLogix



**Strategic Plan Goal**  
Infrastructure strategy and performance

<b>Schedule</b>	
Planning	2025
Design	
Construction	2026-2033
Completion	2033

**Operational Implications**  
No meaningful impacts to operating expenses are expected to result from this project.

The project does reduce our risk profile.

**Project References**

**NOTES**

*Note: Revenue and Expenses Below are in Thousands*

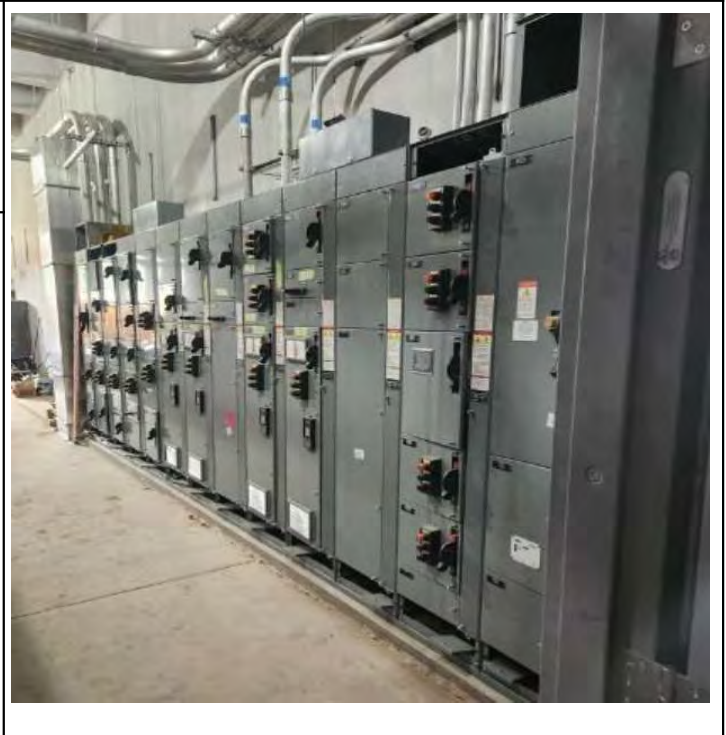
REVENUE	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	Total
Capital		45k	45k	45k	45k	45k	45k	85k	85k	85k	525k
Bond											0k
Grant											0k
<b>Total</b>	0k	45k	45k	45k	45k	45k	45k	85k	85k	85k	<b>525k</b>
EXPENSE	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	Total
Distribution		45k	45k	45k	45k	45k	45k	85k	85k	85k	525k
<b>Total</b>	0k	45k	45k	45k	45k	45k	45k	85k	85k	85k	<b>525k</b>



<b>Project Name</b>	Switchgear H Replacement					<b>Infrastructure Category</b>	Electrical & SCADA				
<b>Division</b>	Production					<b>Work type</b>	Replacement				
<b>Project Description</b>											
Replace Switchgear H with new, comparable infrastructure											
<b>Background</b>											
Switchgear H provides power to the administration building, the warehouse, and the garage. Per discussions with our electrical team, I understand that this equipment is very old and that replacement should be considered.											
<b>Strategic Plan Goal</b>						<b>Schedule</b>					
						Planning	2028				
						Design					
						Construction	2029				
						Completion	2029				
<b>Operational Implications</b>						<b>Project References</b>					
Reduction in maintenance needs and reliability concerns with the pump station network.											
<b>NOTES</b>											
<b>Note: Revenue and Expenses Below are in Thousands</b>											
<b>REVENUE</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>2030</b>	<b>2031</b>	<b>2032</b>	<b>2033</b>	<b>2034</b>	<b>Total</b>
Capital					650k						650k
Bond											0k
Grant											0k
<b>Total</b>	0k	0k	0k	0k	650k	0k	0k	0k	0k	0k	<b>650k</b>
<b>EXPENSE</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>2030</b>	<b>2031</b>	<b>2032</b>	<b>2033</b>	<b>2034</b>	<b>Total</b>
Distribution					650k						650k
<b>Total</b>	0k	0k	0k	0k	650k	0k	0k	0k	0k	0k	<b>650k</b>

<b>Project Name</b>	Electrical Improvements on McCarron's Campus	<b>Infrastructure Category</b>	Electrical & SCADA
<b>Division</b>	Production	<b>Work type</b>	Rehabilitation

**Project Description**  
Make improvements to electrical infrastructure on campus



**Background**  
SPRWS recently secured Master Contracts with several electrical engineering firms. These contracts will play a vital role in helping to identify long-term electrical capital needs, which are currently not well understood. These funds are reserved in anticipation of finding that capital spending to improve electrical infrastructure on campus is necessary.

**Strategic Plan Goal**  
Infrastructure strategy and performance  
Energy and water resource sustainability

<b>Schedule</b>	
Planning	2029
Design	
Construction	2030
Completion	2030

**Operational Implications**  
Reduction in maintenance needs and reliability concerns with the pump station network.

**Project References**

**NOTES**

<i>Note: Revenue and Expenses Below are in Thousands</i>											
REVENUE	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	Total
Capital						800k	1,400k			350k	2,550k
Bond											0k
Grant											0k
<b>Total</b>	0k	0k	0k	0k	0k	800k	1400k	0k	0k	350k	<b>2550k</b>
EXPENSE	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	Total
Distribution						800k	1,400k			350k	2550k
<b>Total</b>	0k	0k	0k	0k	0k	800k	1400k	0k	0k	350k	<b>2550k</b>

<b>Project Name</b>	W64 and W72 Power Feed - Remote Monitoring	<b>Infrastructure Category</b>	Electrical & SCADA
<b>Division</b>	Production	<b>Work type</b>	Expansion
<b>Project Description</b> Add remote monitoring to the W64 and W72 stations			
<b>Background</b> The W64 and W72 stations are two of the most vital pieces of equipment that SPRWS owns since they are the power supplies to the entirety of the McCarron's Campus. These stations were constructed with gauges that monitor temperature, pressure, and other relevant variables that indicate the health of the equipment but the gauges are not connected to SCADA.  It would be far better to be able to monitor this data via SCADA. First off, doing so would allow us to write code to actively monitor the health of the equipment for us (for example: provide a notification to SPRWS staff when/if temperature exceeds ____ degrees.) Secondly, logging historical data would help with troubleshooting as it could help us spot the emergence of troubling trends.			
<b>Strategic Plan Goal</b> Energy and water resource sustainability Infrastructure strategy and performance		<b>Schedule</b>	
		Planning	2030
		Design	
		Construction	2031
		Completion	2031
<b>Operational Implications</b> No meaningful change in operational costs anticipated		<b>Project References</b>	

**NOTES**

<i>Note: Revenue and Expenses Below are in Thousands</i>											
REVENUE	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	Total
Capital							70k				70k
Bond											0k
Grant											0k
<b>Total</b>	0k	0k	0k	0k	0k	0k	70k	0k	0k	0k	<b>70k</b>
EXPENSE	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	Total
Distribution							70k				70k
<b>Total</b>	0k	0k	0k	0k	0k	0k	70k	0k	0k	0k	<b>70k</b>

<b>Project Name</b>	Add Thickener Building to 480 V Electrical Loop	<b>Infrastructure Category</b>	Electrical & SCADA
<b>Division</b>	Production	<b>Work type</b>	Expansion

**Project Description**  
Add Thickener Building to 480 V Electrical Loop

**Background**  
Discussions with Production Division Management have suggested that adding the sludge thickener building to a looped 480 volt system of power distribution is advisable. These funds are reserved for that purpose, though the project is vaguely defined at this point.



**Strategic Plan Goal**  
Infrastructure strategy and performance

<b>Schedule</b>	
Planning	2031
Design	
Construction	2032
Completion	2032

**Operational Implications**  
This will improve redundancy to the thickener building

**Project References**

**NOTES**

<i>Note: Revenue and Expenses Below are in Thousands</i>											
REVENUE	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	Total
Capital								400k			400k
Bond											0k
Grant											0k
<b>Total</b>	0k	0k	0k	0k	0k	0k	0k	400k	0k	0k	<b>400k</b>
EXPENSE	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	Total
Distribution								400k			400k
<b>Total</b>	0k	0k	0k	0k	0k	0k	0k	400k	0k	0k	<b>400k</b>

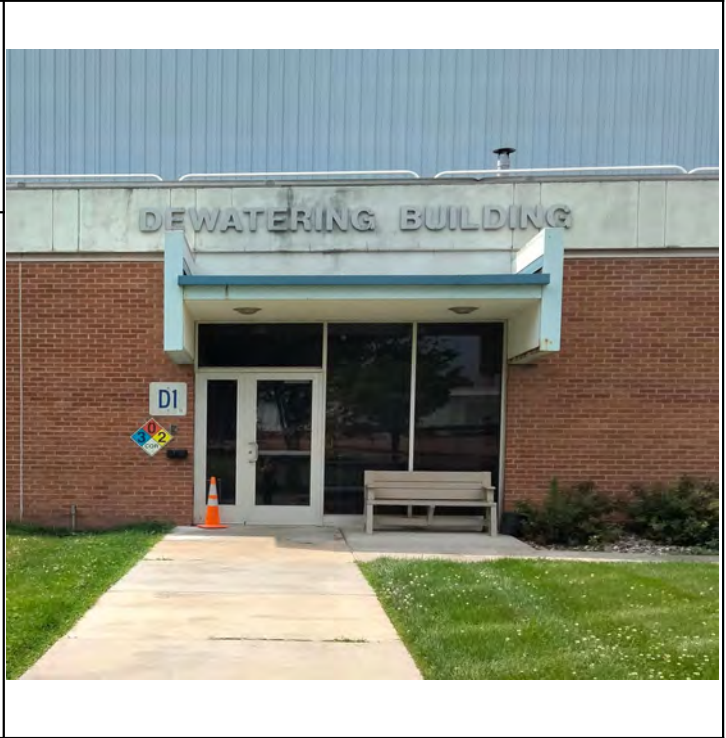


<b>Project Name</b>	SCADA Redundancy in Communications to Dewatering	<b>Infrastructure Category</b>	Electrical & SCADA
<b>Division</b>	Production	<b>Work type</b>	Expansion

**Project Description**  
 1. Add a second, redundant fiberoptic line so that the risk of failure is reduced or 2. move essential SCADA infrastructure from the dewatering building into the water treatment plant so that there is no longer a single point of failure for the entire system.

**Background**  
 The dewatering building holds some SCADA infrastructure that is vital to the operations of our entire SCADA system. A single fiberoptic cable carries SCADA communications between the water treatment plant and the dewatering building. In the event that this single line failed, the SCADA system would go down.

This project is expected to achieve one of the following goals: 1. add a second, redundant fiberoptic line so that the risk of failure is reduced or 2. move essential SCADA infrastructure from the dewatering building into the water treatment plant so that there is no longer a single point of failure for the entire system.



**Strategic Plan Goal**  
 Infrastructure strategy and performance

<b>Schedule</b>	
Planning	2031
Design	
Construction	2032
Completion	2032

**Operational Implications**

**Project References**

**NOTES**

<i>Note: Revenue and Expenses Below are in Thousands</i>											
REVENUE	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	Total
Capital								200k			200k
Bond											0k
Grant											0k
<b>Total</b>	0k	0k	0k	0k	0k	0k	0k	200k	0k	0k	<b>200k</b>
EXPENSE	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	Total
Distribution								200k			200k
<b>Total</b>	0k	0k	0k	0k	0k	0k	0k	200k	0k	0k	<b>200k</b>

<b>Project Name</b>	Chemical Delivery Panel for Central Chemical Areas					<b>Infrastructure Category</b>	Plant & treatment				
<b>Division</b>	Production					<b>Work type</b>	Rehabilitation				
<b>Project Description</b>											
Create and install a panel that can be utilized to monitor deliveries of ferric chloride, sodium hydroxide, phosphoric acid, and fluoride.											
<b>Background</b>											
At present, the delivery panels for deliveries to the central chemical area are non-functional and are disregarded during chemical deliveries. As a workaround, our team visually monitors chemical deliveries into the tanks.  Create a chemical tank level monitoring station for delivery drivers to monitor tank levels during delivery to prevent chemical spills without need to enter chemical storage rooms.											
<b>Strategic Plan Goal</b>						<b>Schedule</b>					
Infrastructure strategy and performance						Planning	2032				
						Design					
						Construction	2033				
						Completion	2033				
<b>Operational Implications</b>						<b>Project References</b>					
<b>NOTES</b>											
<i>We may be able to do this via mobile application/tablet in the future, reducing the need for this capital expense.</i>											
<b>Note: Revenue and Expenses Below are in Thousands</b>											
<b>REVENUE</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>2030</b>	<b>2031</b>	<b>2032</b>	<b>2033</b>	<b>2034</b>	<b>Total</b>
Capital									45k		45k
Bond											0k
Grant											0k
<b>Total</b>	0k	0k	0k	0k	0k	0k	0k	0k	45k	0k	<b>45k</b>
<b>EXPENSE</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>2030</b>	<b>2031</b>	<b>2032</b>	<b>2033</b>	<b>2034</b>	<b>Total</b>
Distribution									45k		45k
<b>Total</b>	0k	0k	0k	0k	0k	0k	0k	0k	45k	0k	<b>45k</b>

<b>Project Name</b>	SCADA System Refresh					<b>Infrastructure Category</b>	Electrical & SCADA				
<b>Division</b>	Production					<b>Work type</b>	Rehabilitation				
<b>Project Description</b>											
Placeholder for anticipated SCADA work											
<b>Background</b>											
<p>SPRWS recently secured Master Contracts with several electrical engineering firms. These contracts will play a vital role in helping to identify long-term SCADA capital needs, which are currently not well understood. These funds are reserved in anticipation of finding that capital spending to improve SCADA infrastructure on campus is necessary.</p>											
<b>Strategic Plan Goal</b>						<b>Schedule</b>					
<p>Infrastructure strategy and performance</p> <p>Quality water</p> <p>High performing workforce</p>						Planning					
						Design					
						Construction					
						Completion					
<b>Operational Implications</b>						<b>Project References</b>					
<b>NOTES</b>											
<b>Note: Revenue and Expenses Below are in Thousands</b>											
<b>REVENUE</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>2030</b>	<b>2031</b>	<b>2032</b>	<b>2033</b>	<b>2034</b>	<b>Total</b>
Capital										450k	450k
Bond											0k
Grant											0k
<b>Total</b>	0k	0k	0k	0k	0k	0k	0k	0k	0k	450k	<b>450k</b>
<b>EXPENSE</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>2030</b>	<b>2031</b>	<b>2032</b>	<b>2033</b>	<b>2034</b>	<b>Total</b>
Distribution										450k	450k
<b>Total</b>	0k	0k	0k	0k	0k	0k	0k	0k	0k	450k	<b>450k</b>





# **Pump Station Projects**

**2025 – 2034 Capital Improvement Plan**

**Saint Paul Regional Water Services**



<b>Project Name</b>	Beebe	<b>Infrastructure Category</b>	Pumps
<b>Division</b>	Distribution	<b>Work type</b>	Rehabilitation

**Project Description**  
 Addition of a permanent generator.  
 Instrumentation and communication upgrades.  
 Building Rehabilitation and Generator Installation.  
 Replacement of pumps and valves.



**Background**  
 In November 2023 the Pump Station Master Plan was finalized. The intent of this report was to assist with identifying and evaluating pump stations assets. The asset improvements identified in the report are based on visual inspections completed as part of the field investigations by a consultant and discussions with SPRWS staff. The report summarizes the assets at each pump station, identifies improvements, and provides budgetary costs for improvements. Staff used the recommendations outline in this report to inform the proposed infrastructure investments outline for this asset.

**Strategic Plan Goal**  
 Financial stability  
 Infrastructure strategy and performance

<b>Schedule</b>	
Instrument and comms upgrade	2025
Generator	2026
Building and Site Rehabilitation	2026 & 2029
Replace pumps and valves	2026

**Operational Implications**  
 Reduction in maintenance needs and reliability concerns with the pump station network.

**Project References**  
 Pump station master plan

**NOTES**

REVENUE	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	Total
Capital	16,200	1,011,800	0	0	87,800	0	0	0	0	0	1,115,800
Bond											
Grant											
<b>Total</b>	16,200	1,011,800	0	0	87,800	0	0	0	0	0	<b>1,115,800</b>
EXPENSE	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	Total
Distribution	16,200	1,011,800	0	0	87,800	0	0	0	0	0	1,115,800
<b>Total</b>	16,200	1,011,800	0	0	87,800	0	0	0	0	0	<b>1,115,800</b>



<b>Project Name</b>	Hazel Park	<b>Infrastructure Category</b>	Pumps
<b>Division</b>	Distribution	<b>Work type</b>	Rehabilitation

**Project Description**  
 Addition of a permanent generator.  
 Instrumentation and communication upgrades.  
 Building Rehabilitation and Generator Installation.  
 Replacement of pumps and valves.



**Background**  
 In November 2023 the Pump Station Master Plan was finalized. The intent of this report was to assist with identifying and evaluating pump stations assets. The asset improvements identified in the report are based on visual inspections completed as part of the field investigations by a consultant and discussions with SPRWS staff. The report summarizes the assets at each pump station, identifies improvements, and provides budgetary costs for improvements. Staff used the recommendations outline in this report to inform the proposed infrastructure investments outline for this asset.

**Strategic Plan Goal**  
 Financial stability  
 Infrastructure strategy and performance

<b>Schedule</b>	
Generator	2025
Instrument and comms upgrade	2025
Exterior Site Rehabilitation	2027
Building Rehabilitation	2029
Replace pumps and valves	2029

**Operational Implications**  
 Reduction in maintenance needs and reliability concerns with the pump station network.

**Project References**  
 Pump station master plan

**NOTES**

REVENUE	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	Total
Capital	308,300	0	76,000	0	676,900	0	0	0	0	0	1,061,200
Bond											
Grant											
<b>Total</b>	308,300	0	76,000	0	676,900	0	0	0	0	0	<b>1,061,200</b>
EXPENSE	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	Total
Distribution	308,300	0	76,000	0	676,900	0	0	0	0	0	1,061,200
<b>Total</b>	308,300	0	76,000	0	676,900	0	0	0	0	0	<b>1,061,200</b>



<b>Project Name</b>	Highland #1	<b>Infrastructure Category</b>	Pumps
<b>Division</b>	Distribution	<b>Work type</b>	Rehabilitation

**Project Description**  
 Instrumentation and communication upgrades.  
 Building Rehabilitation and Security improvements.  
 Replacement of pumps and valves.



**Background**  
 In November 2023 the Pump Station Master Plan was finalized. The intent of this report was to assist with identifying and evaluating pump stations assets. The asset improvements identified in the report are based on visual inspections completed as part of the field investigations by a consultant and discussions with SPRWS staff. The report summarizes the assets at each pump station, identifies improvements, and provides budgetary costs for improvements. Staff used the recommendations outline in this report to inform the proposed infrastructure investments outline for this asset.

**Strategic Plan Goal**  
 Financial stability  
 Infrastructure strategy and performance

<b>Schedule</b>	
Building Rehabilitation	2025/2030/2031
Instrument and comms upgrade	2025
Security improvements	2030
Replace pumps and valves	2031

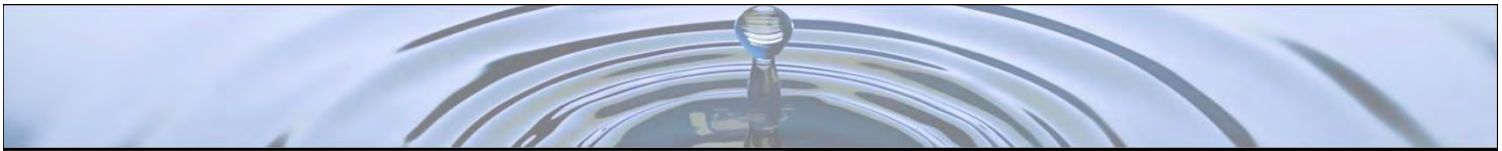
**Operational Implications**  
 Reduction in maintenance needs and reliability concerns with the pump station network.

**Project References**  
 Pump station master plan

**NOTES**

REVENUE	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	Total
Capital	21,600	0	0	28,000	0	27,600	573,200	0	0	0	650,400
Bond											
Grant											
<b>Total</b>	21,600	0	0	28,000	0	27,600	573,200	0	0	0	<b>650,400</b>
EXPENSE	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	Total
Distribution	21,600	0	0	28,000	0	27,600	573,200	0	0	0	650,400
<b>Total</b>	21,600	0	0	28,000	0	27,600	573,200	0	0	0	<b>650,400</b>





<b>Project Name</b>	Highland #2	<b>Infrastructure Category</b>	Pumps
<b>Division</b>	Distribution	<b>Work type</b>	Rehabilitation

**Project Description**  
 Structure Rehabilitation and communication upgrades.  
 Safety and security improvements.  
 Replacement of pumps and valves



**Background**  
 In November 2023 the Pump Station Master Plan was finalized. The intent of this report was to assist with identifying and evaluating pump stations assets. The asset improvements identified in the report are based on visual inspections completed as part of the field investigations by a consultant and discussions with SPRWS staff. The report summarizes the assets at each pump station, identifies improvements, and provides budgetary costs for improvements. Staff used the recommendations outline in this report to inform the proposed infrastructure investments outline for this asset.

**Strategic Plan Goal**  
 Financial stability  
 Infrastructure strategy and performance

<b>Schedule</b>	
Structure Rehabilitation	2025/2026/2028
Instrument and comms upgrade	2025
Replace pump	2028
Security improvements	2030

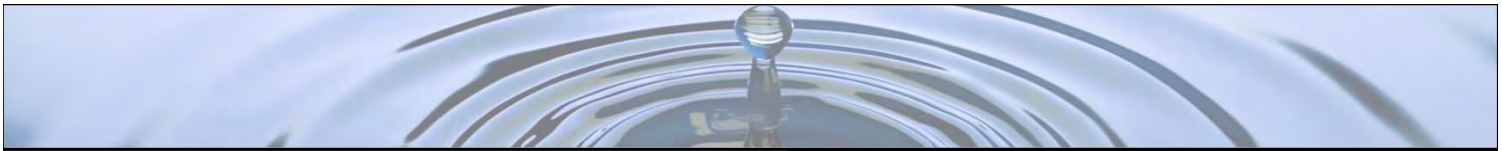
**Operational Implications**  
 Reduction in maintenance needs and reliability concerns with the pump station network.

**Project References**  
 Pump station master plan

**NOTES**

REVENUE	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	Total
Capital	37,900	11,200	0	459,600	0	27,600	0	0	0	0	536,300
Bond											
Grant											
<b>Total</b>	37,900	11,200	0	459,600	0	27,600	0	0	0	0	<b>536,300</b>
EXPENSE	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	Total
Distribution	37,900	11,200	0	459,600	0	27,600	0	0	0	0	536,300
<b>Total</b>	37,900	11,200	0	459,600	0	27,600	0	0	0	0	<b>536,300</b>





<b>Project Name</b>	Roselawn	<b>Infrastructure Category</b>	Pumps
<b>Division</b>	Distribution	<b>Work type</b>	Rehabilitation

**Project Description**  
 Instrumentation and communication upgrades.  
 Security improvements.  
 Pump and Valve Replacement.  
 Add Dehumidification  
 Building and Site Rehabilitation.



**Background**  
 In November 2023 the Pump Station Master Plan was finalized. The intent of this report was to assist with identifying and evaluating pump stations assets. The asset improvements identified in the report are based on visual inspections completed as part of the field investigations by a consultant and discussions with SPRWS staff. The report summarizes the assets at each pump station, identifies improvements, and provides budgetary costs for improvements. Staff used the recommendations outline in this report to inform the proposed infrastructure investments outline for this asset.

**Strategic Plan Goal**  
 Financial stability  
 Infrastructure strategy and performance

<b>Schedule</b>	
Instrument and comms upgrade	2025
Building and Site Rehabilitation	2026/2027/2030
Replace pumps and valves	2030
Security improvements	2030

**Operational Implications**  
 Reduction in maintenance needs and reliability concerns with the pump station network.

**Project References**  
 Pump station master plan

**NOTES**

REVENUE	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	Total
Capital	10,800	16,900	108,000	0	0	700,600	0	0	0	0	836,300
Bond											
Grant											
<b>Total</b>	10,800	16,900	108,000	0	0	700,600	0	0	0	0	<b>836,300</b>
EXPENSE	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	Total
Distribution	10,800	16,900	108,000	0	0	700,600	0	0	0	0	836,300
<b>Total</b>	10,800	16,900	108,000	0	0	700,600	0	0	0	0	<b>836,300</b>



<b>Project Name</b>	St Anthony	<b>Infrastructure Category</b>	Pumps
<b>Division</b>	Distribution	<b>Work type</b>	Rehabilitation

**Project Description**  
 Instrumentation and communication upgrades.  
 Security improvements.  
 Replace Motor Control Center and Lighting Transformer.  
 Replacement of pumps and valves.  
 Building and Exterior Rehabilitation



**Background**  
 In November 2023 the Pump Station Master Plan was finalized. The intent of this report was to assist with identifying and evaluating pump stations assets. The asset improvements identified in the report are based on visual inspections completed as part of the field investigations by a consultant and discussions with SPRWS staff. The report summarizes the assets at each pump station, identifies improvements, and provides budgetary costs for improvements. Staff used the recommendations outline in this report to inform the proposed infrastructure investments outline for this asset.

**Strategic Plan Goal**  
 Financial stability  
 Infrastructure strategy and performance

<b>Schedule</b>	
Instrument and comms upgrade	2025
Building and Site Rehabilitation	2025, 2027, 2031
Replace pumps and valves	2027
Security improvements	2031

**Operational Implications**  
 Reduction in maintenance needs and reliability concerns with the pump station network.

**Project References**  
 Pump station master plan

**NOTES**

REVENUE	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	Total
Capital	32,900	0	873,800	0	0	0	72,500	0	0	0	979,200
Bond											
Grant											
<b>Total</b>	32,900	0	873,800	0	0	0	72,500	0	0	0	<b>979,200</b>
EXPENSE	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	Total
Distribution	32,900	0	873,800	0	0	0	72,500	0	0	0	979,200
<b>Total</b>	32,900	0	873,800	0	0	0	72,500	0	0	0	<b>979,200</b>



<b>Project Name</b>	West Side	<b>Infrastructure Category</b>	Pumps
<b>Division</b>	Distribution	<b>Work type</b>	Rehabilitation

**Project Description**  
 Instrumentation and communication upgrades.  
 Security improvements.  
 Building and Site Rehabilitation.  
 Replacement of pumps and valves.



**Background**  
 In November 2023 the Pump Station Master Plan was finalized. The intent of this report was to assist with identifying and evaluating pump stations assets. The asset improvements identified in the report are based on visual inspections completed as part of the field investigations by a consultant and discussions with SPRWS staff. The report summarizes the assets at each pump station, identifies improvements, and provides budgetary costs for improvements. Staff used the recommendations outline in this report to inform the proposed infrastructure investments outline for this asset.

**Strategic Plan Goal**  
 Financial stability  
 Infrastructure strategy and performance

**Schedule**

Instrument and comms upgrade	2025
Safety improvements	2025, 2028, 2031
Security improvements	2031

**Operational Implications**  
 Reduction in maintenance needs and reliability concerns with the pump station network.

**Project References**  
 Pump station master plan

**NOTES**

REVENUE	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	Total
Capital	61,700	0	0	48,700	0	0	153,300	0	0	0	263,700
Bond											
Grant											
<b>Total</b>	61,700	0	0	48,700	0	0	153,300	0	0	0	<b>263,700</b>
EXPENSE	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	Total
Distribution	61,700	0	0	48,700	0	0	153,300	0	0	0	263,700
<b>Total</b>	61,700	0	0	48,700	0	0	153,300	0	0	0	<b>263,700</b>



<b>Project Name</b>	West St Paul	<b>Infrastructure Category</b>	Pumps
<b>Division</b>	Distribution	<b>Work type</b>	Rehabilitation

**Project Description**  
 Instrumentation and communication upgrades.  
 Security improvements.  
 Building Rehabilitation.



**Background**  
 In November 2023 the Pump Station Master Plan was finalized. The intent of this report was to assist with identifying and evaluating pump stations assets. The asset improvements identified in the report are based on visual inspections completed as part of the field investigations by a consultant and discussions with SPRWS staff. The report summarizes the assets at each pump station, identifies improvements, and provides budgetary costs for improvements. Staff used the recommendations outline in this report to inform the proposed infrastructure investments outline for this asset.

**Strategic Plan Goal**  
 Financial stability  
 Infrastructure strategy and performance

<b>Schedule</b>	
Instrument and comms upgrade	2025
Building Rehabilitation	2027 & 2031
Security improvements	2031

**Operational Implications**  
 Reduction in maintenance needs and reliability concerns with the pump station network.

**Project References**  
 Pump station master plan

**NOTES**

REVENUE	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	Total
Capital	16,200	0	26,300	0	0	0	47,100	0	0	0	89,600
Bond											
Grant											
<b>Total</b>	16,200	0	26,300	0	0	0	47,100	0	0	0	<b>89,600</b>
EXPENSE	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	Total
Distribution	16,200	0	26,300	0	0	0	47,100	0	0	0	89,600
<b>Total</b>	16,200	0	26,300	0	0	0	47,100	0	0	0	<b>89,600</b>



<b>Project Name</b>	High Service Pump Replacement	<b>Infrastructure Category</b>	Pumps
<b>Division</b>	Production	<b>Work type</b>	Replacement

**Project Description**  
 Replace a high service pump



**Background**  
 Several pumps serve the high service system, and they have each been in service for an extended period of time. This project anticipates replacing one of these pumps and potentially including a VFD as well.

**Strategic Plan Goal**  
 Infrastructure strategy and performance

<b>Schedule</b>	
Planning	2031
Design	
Construction	2032
Completion	2032

**Operational Implications**

**Project References**

**NOTES**

<i>Note: Revenue and Expenses Below are in Thousands</i>											
REVENUE	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	Total
Capital								1,300k			1,300k
Bond											0k
Grant											0k
<b>Total</b>	0k	0k	0k	0k	0k	0k	0k	1300k	0k	0k	<b>1300k</b>
EXPENSE	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	Total
Distribution								1300k			1300k
<b>Total</b>	0k	0k	0k	0k	0k	0k	0k	1300k	0k	0k	<b>1300k</b>





# **Water Storage Projects**

**2025 – 2034 Capital Improvement Plan**

**Saint Paul Regional Water Services**



<b>Project Name</b>	Low Service Reservoir Replacement	<b>Infrastructure Category</b>	Storage
<b>Division</b>	Production	<b>Work type</b>	Replacement

**Project Description**  
 Anticipated work scope includes demolition of the existing low service reservoir and construction of a new reservoir on the McCarron's Campus.  
 Further inspection of the reservoir is desirable to determine whether replacement is necessary or if rehabilitation may be possible.

**Background**  
 The Low Service Reservoir was originally constructed in the 1920s. In past years, we've experienced issues with leaking from this reservoir. At times, the source of the leakage is impossible to identify/locate. One such leak that could not be located and fixed has limited our ability to operate the reservoir.  
  
 Ongoing construction at the McCarron's Water Treatment Plant has revealed elevated water tables. These elevated water tables may be due to leakage in the low service reservoir. Various tests have been inconclusive.  
  
 We anticipate that this project will follow the construction of a surge/pressure tank. The surge/pressure tank construction has its own CIP sheet in this Capital Improvement Plan.



**Strategic Plan Goal**  
 Excellent customer service  
 Infrastructure strategy and performance  
 Financial stability

<b>Schedule</b>	
Planning	2027
Design	2028
Construction	2029-2030
Completion	2030

**Operational Implications**  
 Because the existing reservoir appears to be leaking, this project should lead to a reduction in non-revenue water loss. Maintenance of the new reservoir should be similar

**Project References**

**NOTES**

<i>Note: Revenue and Expenses Below are in Thousands</i>											
REVENUE	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	Total
Capital											0k
Bond					7500k	7500k					15000k
Grant											0k
<b>Total</b>	0k	0k	0k	0k	7500k	7500k	0k	0k	0k	0k	<b>15000k</b>
EXPENSE	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	Total
Distribution					7500k	7500k					15000k
<b>Total</b>	0k	0k	0k	0k	7500k	7500k	0k	0k	0k	0k	<b>15000k</b>



<b>Project Name</b>	Cottage Tank	<b>Infrastructure Category</b>	Storage
<b>Division</b>	Distribution	<b>Work type</b>	Rehabilitation

**Project Description**  
 Interior, full tank and warranty inspection.  
 Full paint and safety improvements.



**Background**  
 The Cottage Tank is a standpipe style storage facility and is susceptible to occasional decline of chlorine residual during summer months, partly due to its location within the distribution system. The tank is tentatively scheduled for painting and structural improvements in 2026. During the interim period, an analysis of the water distribution system will be conducted to determine how to maximize the water storage value of the tank and provide greater tank turnover or cycling within the system. Repairs to the concrete base slab are being conducted in 2024 by distribution staff.

**Strategic Plan Goal**  
 Financial stability  
 Infrastructure strategy and performance

<b>Schedule</b>	
Full tank inspection	2025
Painting and structural repairs	2026
Safety improvements	2026
Interior inspection	2031

**Operational Implications**  
 Reduction in maintenance needs and reliability concerns with the storage system.

**Project References**  
 Water Tower Assessments Report

**NOTES**

REVENUE	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	Total
Capital	11,300	1,236,500	0	8,900	0	0	10,700	0	0	0	1,267,400
Bond											
Grant											
<b>Total</b>	11,300	1,236,500	0	8,900	0	0	10,700	0	0	0	<b>1,267,400</b>
EXPENSE	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	Total
Distribution	11,300	1,236,500	0	8,900	0	0	10,700	0	0	0	1,267,400
<b>Total</b>	11,300	1,236,500	0	8,900	0	0	10,700	0	0	0	<b>1,267,400</b>



<b>Project Name</b>	Ferndale Tank	<b>Infrastructure Category</b>	Storage
<b>Division</b>	Distribution	<b>Work type</b>	Rehabilitation

**Project Description**  
Interior tank and warranty inspection at Ferndale tank.



**Background**  
Water storage tanks are inspected on a 5-year rotating cycle to evaluate physical condition and identify deficiencies needing rehabilitation. The Ferndale tank was last reconditioned in 2022, including repair of minor physical deficiencies identified prior to painting. The five year inspection cycle will begin in 2028 following the post construction warranty inspection in 2023. Pressure transmitter equipment is scheduled for replacement in 2024.

**Strategic Plan Goal**  
Financial stability  
Infrastructure strategy and performance

<b>Schedule</b>	
Pressure Transmitter	2024
Tank Inspection	2028

**Operational Implications**  
Reduction in maintenance needs and reliability concerns with the storage system.

**Project References**  
Water Tower Assessments Report

**NOTES**

REVENUE	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	Total
Capital	0	0	0	9,500	0	0	0	0	15,400	0	24,900
Bond											
Grant											
<b>Total</b>	0	0	0	9,500	0	0	0	0	15,400	0	<b>24,900</b>
EXPENSE	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	Total
Distribution	0	0	0	9,500	0	0	0	0	15,400	0	24,900
<b>Total</b>	0	0	0	9,500	0	0	0	0	15,400	0	<b>24,900</b>



<b>Project Name</b>	Highland #2 Tank	<b>Infrastructure Category</b>	Storage
<b>Division</b>	Distribution	<b>Work type</b>	Rehabilitation

**Project Description**  
 Interior tank and warranty inspection.  
 Full paint and safety improvements.



**Background**  
 Water storage tanks are inspected on a 5-year rotating cycle to evaluate physical condition and identify deficiencies needing rehabilitation. The Highland No. 2 tank was last reconditioned in 2024, including replacement of paint coating and significant structural repairs of all roof rafters and replacement of handrails, roof vent, lighting, manway and overflow components.

**Strategic Plan Goal**  
 Financial stability  
 Infrastructure strategy and performance

<b>Schedule</b>	
Painting	2024
Structural Rehabilitation	2024
Warranty inspection	2026
Interior tank inspection	2031

**Operational Implications**  
 Reduction in maintenance needs and reliability concerns with the storage system.

**Project References**  
 Water Tower Assessments Report

**NOTES**

REVENUE	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	Total
Capital	0	8,200	0	0	0	0	10,700	0	0	0	18,900
Bond											
Grant											
<b>Total</b>	0	8,200	0	0	0	0	10,700	0	0	0	<b>18,900</b>
EXPENSE	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	Total
Distribution	0	8,200	0	0	0	0	10,700	0	0	0	18,900
<b>Total</b>	0	8,200	0	0	0	0	10,700	0	0	0	<b>18,900</b>



<b>Project Name</b>	Highland #3 Tank	<b>Infrastructure Category</b>	Storage
<b>Division</b>	Distribution	<b>Work type</b>	Rehabilitation

**Project Description**  
 Warranty inspection.  
 Full paint and safety improvements.



**Background**  
 Water storage tanks are inspected on a 5-year rotating cycle to evaluate physical condition and identify deficiencies needing rehabilitation. The Highland No. 3 tank was last reconditioned in 2003. A condition assessment in 2020 identified the eventual need to replace the paint coating and perform minor structural repairs or replacement of handrails, lighting, manway and overflow components. The interior and exterior surfaces are scheduled for painting in 2025.

**Strategic Plan Goal**  
 Financial stability  
 Infrastructure strategy and performance

<b>Schedule</b>	
Painting	2025
Structural Rehabilitation	2025
Warranty inspection	2027

**Operational Implications**  
 Reduction in maintenance needs and reliability concerns with the storage system.

**Project References**  
 Water Tower Assessments Report

**NOTES**

REVENUE	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	Total
Capital	1,317,200	0	9,100		0	0	0	11,100	0	0	1,337,400
Bond											
Grant											
<b>Total</b>	1,317,200	0	9,100	0	0	0	0	11,100	0	0	<b>1,337,400</b>
EXPENSE	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	Total
Distribution	1,317,200	0	9,100	0	0	0	0	11,100	0	0	1,337,400
<b>Total</b>	1,317,200	0	9,100	0	0	0	0	11,100	0	0	<b>1,337,400</b>



<b>Project Name</b>	McKnight Tank	<b>Infrastructure Category</b>	Storage
<b>Division</b>	Distribution	<b>Work type</b>	Rehabilitation

**Project Description**  
 Full tank and warranty inspection.  
 Full paint and safety improvements.



**Background**  
 Water storage tanks are inspected on a 5-year rotating cycle to evaluate physical condition and identify deficiencies needing rehabilitation. The McKnight tank was last reconditioned in 2008. A condition assessment in 2020 identified the eventual need to perform minor structural repairs and replacement of roof vent, manway and overflow components. The interior and exterior surfaces are scheduled for painting in 2029.

**Strategic Plan Goal**  
 Financial stability  
 Infrastructure strategy and performance

<b>Schedule</b>	
Interior tank inspection	2025
Full tank inspection	2028
Painting	2028
Structural Repairs	2028
Warranty inspection	2030

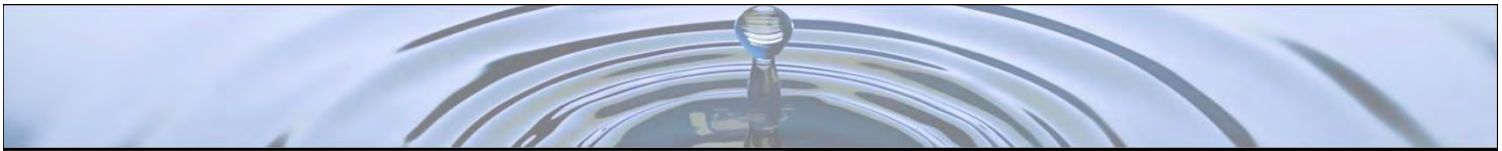
**Operational Implications**  
 Reduction in maintenance needs and reliability concerns with the storage system.

**Project References**  
 Water Tower Assessments Report

**NOTES**

REVENUE	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	Total
Capital	8,400	0	0	0	1,088,200	9,600	0	17,800	11,500	0	1,135,500
Bond											
Grant											
<b>Total</b>	8,400	0	0	0	1,088,200	9,600	0	17,800	11,500	0	<b>1,135,500</b>
EXPENSE	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	Total
Distribution	8,400	0	0	0	1,088,200	9,600	0	17,800	11,500	0	1,135,500
<b>Total</b>	8,400	0	0	0	1,088,200	9,600	0	17,800	11,500	0	<b>1,135,500</b>





<b>Project Name</b>	Mendota Heights Tank	<b>Infrastructure Category</b>	Storage
<b>Division</b>	Distribution	<b>Work type</b>	Rehabilitation

**Project Description**  
 Full tank and warranty inspection.  
 Full paint and safety improvements.  
 Pressure washing and cleaning.



**Background**  
 Water storage tanks are inspected on a 5-year rotating cycle to evaluate physical condition and identify deficiencies needing rehabilitation. The Mendota Heights tank was last reconditioned in 2011. A condition assessment in 2020 identified the eventual need to replace the paint coating and perform minor structural repairs or replacement of handrails, lighting, manway and overflow components. This tank is scheduled for interior and exterior painting and structural repairs in 2031

**Strategic Plan Goal**  
 Financial stability  
 Infrastructure strategy and performance

<b>Schedule</b>	
Cleaning	2025
Interior tank inspection	2025
Full tank inspection	2030
Pressure Transmitter	2026
Painting and structural repairs	2031

**Operational Implications**  
 Reduction in maintenance needs and reliability concerns with the storage system.

**Project References**  
 Water Tower Assessments Report

**NOTES**

REVENUE	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	Total
Capital	19,700	8,200	0	0	0	13,700	1,241,800	0	10,800	0	1,294,200
Bond											
Grant											
<b>Total</b>	19,700	8,200	0	0	0	13,700	1,241,800	0	10,800	0	<b>1,294,200</b>
EXPENSE	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	Total
Distribution	19,700	8,200	0	0	0	13,700	1,241,800	0	10,800	0	1,294,200
<b>Total</b>	19,700	8,200	0	0	0	13,700	1,241,800	0	10,800	0	<b>1,294,200</b>



<b>Project Name</b>	St Anthony Tank	<b>Infrastructure Category</b>	Storage
<b>Division</b>	Distribution	<b>Work type</b>	Rehabilitation

**Project Description**  
 Interior and full tank inspection.  
 Instrumentation and communication upgrades.



**Background**  
 Water storage tanks are inspected on a 5-year rotating cycle to evaluate physical condition and identify deficiencies needing rehabilitation. The St Anthony tank was last reconditioned in 2019, including repair of minor physical deficiencies identified prior to painting. This tank is currently not scheduled for repainting until 2040. Pressure transmitter equipment is scheduled for replacement in 2026 or before.

**Strategic Plan Goal**  
 Financial stability  
 Infrastructure strategy and performance

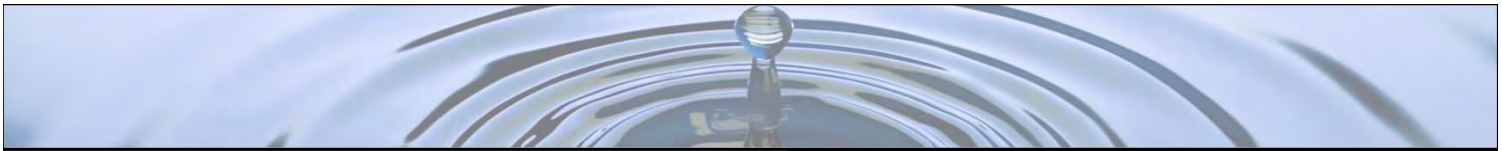
<b>Schedule</b>	
Interior tank inspection	2025
Full tank inspection	2030
Instrument and comm upgrades	2026

**Operational Implications**  
 Reduction in maintenance needs and reliability concerns with the storage system.

**Project References**  
 Water Tower Assessments Report

**NOTES**  
 2025 and Future expenses are professional services for condition assessments. While directly contributing to extending the service life of the tank, these expenses may not qualify as capital expenditures.

REVENUE	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	Total
Capital	8,400	8,200	0	0	0	13,700	0	0	0	0	30,300
Bond											
Grant											
<b>Total</b>	8,400	8,200	0	0	0	13,700	0	0	0	0	<b>30,300</b>
EXPENSE	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	Total
Distribution	8,400	8,200	0	0	0	13,700	0	0	0	0	30,300
<b>Total</b>	8,400	8,200	0	0	0	13,700	0	0	0	0	<b>30,300</b>



<b>Project Name</b>	State Fairgrounds Tank	<b>Infrastructure Category</b>	Storage
<b>Division</b>	Distribution	<b>Work type</b>	Rehabilitation

**Project Description**  
 Interior, full tank and warranty inspection.  
 Full paint and safety improvements.  
 Pressure washing and cleaning.



**Background**  
 Water storage tanks are inspected on a 5-year rotating cycle to evaluate physical condition and identify deficiencies needing rehabilitation. The State Fairgrounds tank was last reconditioned with a partial spot repair to paint coatings in 2013. A condition assessment in 2020 identified the eventual need to replace the paint coating and perform minor structural repairs or replacement of handrails, lighting, manway and overflow components. The tank is scheduled for reconditioning in 2030. Pressure transmitter equipment is also scheduled for replacement.

**Strategic Plan Goal**  
 Financial stability  
 Infrastructure strategy and performance

<b>Schedule</b>	
Cleaning	2025
Interior tank inspection	2025
Full tank inspection	2028
Pressure Transmitter	2026
Interior and Exterior Painting and Structural Repairs	2030

**Operational Implications**  
 Reduction in maintenance needs and reliability concerns with the storage system.

**Project References**  
 Water Tower Assessments Report

**NOTES**

REVENUE	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	Total
Capital	19,700	8,200	0	12,700	0	1,156,700	9,900	0	0	11,500	1,218,700
Bond											
Grant											
<b>Total</b>	19,700	8,200	0	12,700	0	1,156,700	9,900	0	0	11,500	<b>1,218,700</b>
EXPENSE	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	Total
Distribution	19,700	8,200	0	12,700	0	1,156,700	9,900	0	0	0	1,207,200
<b>Total</b>	19,700	8,200	0	12,700	0	1,156,700	9,900	0	0	0	<b>1,207,200</b>



<b>Project Name</b>	Sterling Tank	<b>Infrastructure Category</b>	Storage
<b>Division</b>	Distribution	<b>Work type</b>	Rehabilitation

**Project Description**  
 Interior and full tank inspection.  
 Instrumentation and communication upgrades.



**Background**  
 Water storage tanks are inspected on a 5-year rotating cycle to evaluate physical condition and identify deficiencies needing rehabilitation. The Sterling tank was last reconditioned in 2019, including repair of minor physical deficiencies identified prior to painting. The five year inspection cycle will begin in 2025 based on the past warranty inspection. This tank is currently scheduled for painting in 2039 or beyond.

**Strategic Plan Goal**  
 Financial stability  
 Infrastructure strategy and performance

<b>Schedule</b>	
Interior tank inspection	2025
Full tank inspection	2030
Pres Transmitter Replacement	2026

**Operational Implications**  
 Reduction in maintenance needs and reliability concerns with the storage system.

**Project References**  
 Water Tower Assessments Report

**NOTES**  
 2025 and Future expenses include professional services for condition assessments. While directly contributing to extending the service life of the tank, these expenses may not qualify as capital expenditures.

REVENUE	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	Total
Capital	8,400	8,200	0	0	0	13,700	0	0	0	0	30,300
Bond											
Grant											
<b>Total</b>	8,400	8,200	0	0	0	13,700	0	0	0	0	<b>30,300</b>
EXPENSE	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	Total
Distribution	8,400	8,200	0	0	0	13,700	0	0	0	0	30,300
<b>Total</b>	8,400	8,200	0	0	0	13,700	0	0	0	0	<b>30,300</b>



<b>Project Name</b>	Stillwater Tank	<b>Infrastructure Category</b>	Storage
<b>Division</b>	Distribution	<b>Work type</b>	Rehabilitation

**Project Description**  
 Full tank and warranty inspection.  
 Full paint and safety improvements.

**Background**  
 Water storage tanks are inspected on a 5-year rotating cycle to evaluate physical condition and identify deficiencies needing rehabilitation. The Stillwater tank was constructed in 1958 and last reconditioned in 2011. A condition assessment in 2020 identified the eventual need to replace the paint coating and perform minor structural repairs or replacement of handrails, lighting, manway and overflow components. The interior and exterior surfaces have experienced accelerated weathering and are scheduled for painting in 2027. The proposed facility improvements are outlined in a facility inspection conducted in 2020.



**Strategic Plan Goal**  
 Financial stability  
 Infrastructure strategy and performance

<b>Schedule</b>	
Full tank inspection	2026
Painting	2027
Structural Repairs	2027
Warranty inspection	2029

**Operational Implications**  
 Reduction in maintenance needs and reliability concerns with the storage system.

**Project References**  
 Water Tower Assessments Report

**NOTES**

REVENUE	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	Total
Capital	0	11,700	1,256,200	0	9,200	0	10,700	0	0	0	1,287,800
Bond											
Grant											
<b>Total</b>	0	11,700	1,256,200	0	9,200	0	10,700	0	0	0	<b>1,287,800</b>
EXPENSE	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	Total
Distribution	0	11,700	1,256,200	0	9,200	0	10,700	0	0	0	1,287,800
<b>Total</b>	0	11,700	1,256,200	0	9,200	0	10,700	0	0	0	<b>1,287,800</b>



<b>Project Name</b>	West St Paul Tank	<b>Infrastructure Category</b>	Storage
<b>Division</b>	Distribution	<b>Work type</b>	Rehabilitation

**Project Description**  
 Interior and full tank inspection.  
 Instrumentation and communication upgrades.



**Background**  
 Most storage facilities receive interior and full tank inspections on a reoccurring basis. Any findings from the inspections can also initiate other safety improvements at the facility as well as the need for other maintenance activates, such as pressure washing. Pressure transmitter equipment has reached the end of service life, is no longer supported by the supplier, and is scheduled for replacement.

**Strategic Plan Goal**  
 Financial stability  
 Infrastructure strategy and performance

**Schedule**

Interior tank inspection	2025
Full tank inspection	2030
Instrument and comm upgrades	2026

**Operational Implications**  
 Reduction in maintenance needs and reliability concerns with the storage system.

**Project References**  
 Water Tower Assessments Report

**NOTES**

REVENUE	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	Total
Capital	8,400	8,200	0	0	0	13,700	0	0	0	0	30,300
Bond											
Grant											
<b>Total</b>	8,400	8,200	0	0	0	13,700	0	0	0	0	<b>30,300</b>
EXPENSE	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	Total
Distribution	8,400	8,200	0	0	0	13,700	0	0	0	0	30,300
<b>Total</b>	8,400	8,200	0	0	0	13,700	0	0	0	0	<b>30,300</b>



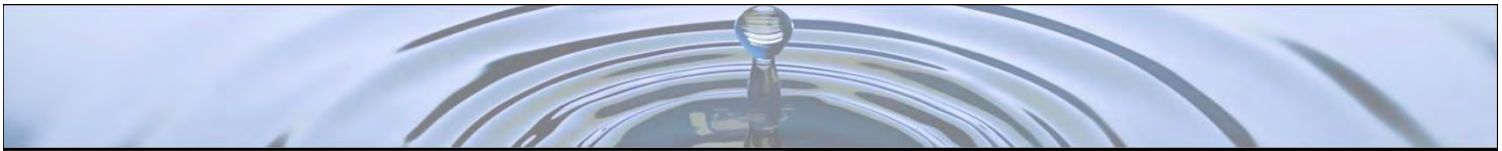


# **Distribution Water Mains, Hydrants, and Valves**

**2025 – 2034 Capital Improvement Plan**

**Saint Paul Regional Water Services**





<b>Project Name</b>	Water Main Replacement	<b>Infrastructure Category</b>	Watermain
<b>Division</b>	Distribution	<b>Work type</b>	Replacement

**Project Description**  
Annual budget for watermain replacement and rehabilitation.



**Background**  
The watermain system is evaluated every fall to identify replacement needs. Replacement is based on age, break history, criticality, and roadway projects identified by cities, counties, and MnDOT. Individual candidate projects are listed on the Water Main Replacement Planning spreadsheet. The average annual capital expense needed to achieve a one percent replacement rate (100-year service life) is estimated to be approximately \$21 million per year (in 2024 dollars). The proposed expenditures below are recommended to provide a steady increase in capital investment toward the \$21 million target, adjusted for the anticipated construction inflation rate in future years.

**Strategic Plan Goal**  
Financial stability  
Infrastructure strategy and performance

<b>Schedule</b>	
Planning	Q3-Q4
Design	Q4-Q1
Construction	Q2-Q3
Completion	Q3

**Operational Implications**  
Reduction in maintenance needs and reliability concerns with watermain in the system.

**Project References**  
Hydraulic model  
Water Main Prioritization Revised Methodology  
Water Main Prioritization Study  
PCCP Condition & Risk Assessment  
PCCP Prioritization Tech Memo

**NOTES**  
Funding amounts shown below include Capital and Surcharge funding sources.

REVENUE	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	Total
Capital	13,200,000	13,690,000	14,700,000	15,700,000	16,200,000	18,770,000	20,480,000	28,830,000	29,940,000	31,074,000	202,584,000
Bond											
Grant											
<b>Total</b>	13,200,000	13,690,000	14,700,000	15,700,000	16,200,000	18,770,000	20,480,000	28,830,000	29,940,000	31,074,000	<b>202,584,000</b>
EXPENSE	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	Total
Distribution	13,200,000	13,690,000	14,700,000	15,700,000	16,200,000	18,770,000	20,480,000	28,830,000	29,940,000	31,074,000	202,584,000
<b>Total</b>	13,200,000	13,690,000	14,700,000	15,700,000	16,200,000	18,770,000	20,480,000	28,830,000	29,940,000	31,074,000	<b>202,584,000</b>



<b>Project Name</b>	Hydrant Replacements	<b>Infrastructure Category</b>	Valves and hydrants
<b>Division</b>	Distribution	<b>Work type</b>	Replacement

**Project Description**  
Annual budget for hydrant replacement.



**Background**  
The water distribution system contains 10,300 hydrants to provide fire protection for communities and allow flushing of the distribution system. The oldest in-service hydrants date back to 1883. The proposed capital expenditures below are based on the average annual costs to repair or replace hydrants that are damaged or found to be inoperable during the annual inspection of all hydrants. Hydrants included within project areas are also inspected and replaced with corresponding watermain projects.

**Strategic Plan Goal**  
Financial stability  
Infrastructure strategy and performance

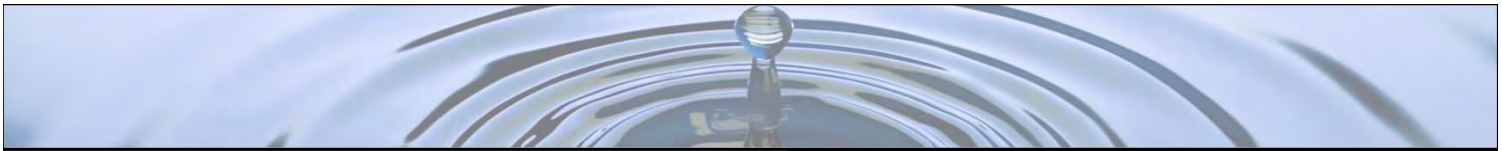
<b>Schedule</b>	
Planning	Q3-Q4
Design	Q4-Q1
Construction	Q2-Q3
Completion	Q3

**Operational Implications**  
Reduction in maintenance needs and reliability concerns with hydrants in the system.

**Project References**  
Hydraulic model  
Water Main Prioritization Revised Methodology  
Water Main Prioritization Study

**NOTES**

REVENUE	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	Total
Capital	999,000	1,024,000	1,050,000	1,050,000	1,050,000	1,076,000	1,100,000	1,100,000	1,100,000	1,167,000	10,716,000
Bond											
Grant											
<b>Total</b>	999,000	1,024,000	1,050,000	1,050,000	1,050,000	1,076,000	1,100,000	1,100,000	1,100,000	1,167,000	<b>10,716,000</b>
EXPENSE	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	Total
Distribution	999,000	1,024,000	1,050,000	1,050,000	1,050,000	1,076,000	1,100,000	1,100,000	1,100,000	1,167,000	10,716,000
<b>Total</b>	999,000	1,024,000	1,050,000	1,050,000	1,050,000	1,076,000	1,100,000	1,100,000	1,100,000	1,167,000	<b>10,716,000</b>



<b>Project Name</b>	Large Valve Replacements	<b>Infrastructure Category</b>	Valves and hydrants
<b>Division</b>	Distribution	<b>Work type</b>	Replacement

**Project Description**  
Annual budget for replacement of large diameter valves.



**Background**  
In addition to typical annual valve replacement work, SPRWS has a growing backlog of large diameter system valves, with a portion of the inventory exceeding 100 years in service. In 2025, additional capital investment is proposed to begin a systematic process for strategic replacement large diameter valves (16-inches and larger).

**Strategic Plan Goal**  
Financial stability  
Infrastructure strategy and performance

<b>Schedule</b>	
Planning	Q3-Q4
Design	Q4-Q1
Construction	Q2-Q3
Completion	Q3

**Operational Implications**  
Reduction in maintenance needs and reliability concerns with valves in the system.

**Project References**  
Hydraulic model  
Water Main Prioritization Revised Methodology  
Water Main Prioritization Study

**NOTES**

REVENUE	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	Total
Capital	190,000	195,000	200,000	205,000	210,000	215,000	220,000	225,000	230,000	237,000	2,127,000
Bond											
Grant											
<b>Total</b>	190,000	195,000	200,000	205,000	210,000	215,000	220,000	225,000	230,000	237,000	<b>2,127,000</b>
EXPENSE	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	Total
Distribution	190,000	195,000	200,000	205,000	210,000	215,000	220,000	225,000	230,000	237,000	2,127,000
<b>Total</b>	190,000	195,000	200,000	205,000	210,000	215,000	220,000	225,000	230,000	237,000	<b>2,127,000</b>



<b>Project Name</b>	Valve Replacements	<b>Infrastructure Category</b>	Valves and hydrants
<b>Division</b>	Distribution	<b>Work type</b>	Replacement

**Project Description**  
Annual budget for valve replacement and rehabilitation.

**Background**  
The water distribution system includes 25,000 system and control valves with original installation dating back to 1887, or up to 135+ years. Each year, the Distribution division responds to multiple valve failures ranging from leaks to operational failure. In addition, valves included within water main project areas are also inspected and replaced. The funding levels proposed below correspond to the average annual expenditures to replace failing valves within the system, adjusted for the estimated annual rate of inflation.



**Strategic Plan Goal**  
Financial stability  
Infrastructure strategy and performance

<b>Schedule</b>	
Planning	Q3-Q4
Design	Q4-Q1
Construction	Q2-Q3
Completion	Q3

**Operational Implications**  
Reduction in maintenance needs and reliability concerns with valves in the system.

**Project References**  
Hydraulic model  
Water Main Prioritization Revised Methodology  
Water Main Prioritization Study

**NOTES**

REVENUE	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	Total
Capital	775,000	800,000	825,000	850,000	875,000	900,000	925,000	950,000	980,000	1,009,000	8,889,000
Bond											
Grant											
<b>Total</b>	<b>775,000</b>	<b>800,000</b>	<b>825,000</b>	<b>850,000</b>	<b>875,000</b>	<b>900,000</b>	<b>925,000</b>	<b>950,000</b>	<b>980,000</b>	<b>1,009,000</b>	<b>8,889,000</b>
EXPENSE	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	Total
Distribution	775,000	800,000	825,000	850,000	875,000	900,000	925,000	950,000	980,000	1,009,000	8,889,000
<b>Total</b>	<b>775,000</b>	<b>800,000</b>	<b>825,000</b>	<b>850,000</b>	<b>875,000</b>	<b>900,000</b>	<b>925,000</b>	<b>950,000</b>	<b>980,000</b>	<b>1,009,000</b>	<b>8,889,000</b>



<b>Project Name</b>	Prestressed Concrete Pipe	<b>Infrastructure Category</b>	Watermain
<b>Division</b>	Distribution	<b>Work type</b>	Replacement

**Project Description**  
Annual budget for prestressed concrete pipe assesment, replacement and rehabilitation.



**Background**  
The water distribution system includes approximately 48 miles of Prestressed Concrete Cylinder Pipe (PCCP). Water mains construction of PCCP material range is size from 16-inches to 42-inches in diameter and generally have higher probability of catastrophic failure, or large ruptures, when damaged. In 2022, SPRWS completed a high level assessment process for evaluating the condition of these important pipe segments. The expenditures below are recommended to perform a program of systematic condition evaluations of PCCP pipe segments using video, acustical, and electromagnetic technology to identify pipe deficiencies and prioritize future replacements.

**Strategic Plan Goal**  
Financial stability  
Infrastructure strategy and performance

<b>Schedule</b>	
Planning	Q3-Q4
Design	Q4-Q1
Construction	Q2-Q3
Completion	Q3

**Operational Implications**  
Reduction in maintenance needs and reliability concerns with watermain in the system.

**Project References**  
Hydraulic model  
Water Main Prioritization Revised Methodology  
Water Main Prioritization Study  
PCCP Condition & Risk Assessment  
PCCP Prioritization Tech Memo

**NOTES**

REVENUE	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	Total
Capital	135,000	140,000	145,000	150,000	155,000	160,000	165,000	170,000	175,000	180,000	1,575,000
Bond											
Grant											
<b>Total</b>	135,000	140,000	145,000	150,000	155,000	160,000	165,000	170,000	175,000	180,000	<b>1,575,000</b>
EXPENSE	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	Total
Distribution	135,000	140,000	145,000	150,000	155,000	160,000	165,000	170,000	175,000	180,000	1,575,000
<b>Total</b>	135,000	140,000	145,000	150,000	155,000	160,000	165,000	170,000	175,000	180,000	<b>1,575,000</b>



<b>Project Name</b>	New Water Service Connections	<b>Infrastructure Category</b>	Services
<b>Division</b>	Distribution	<b>Work type</b>	Replacement

**Project Description**  
Annual budget for new water service connections



**Background**  
This line item provides funding for the expenses associated in installation of new water service connections associated with land development and redevelopment activities within the SPRWS service area. Portions of this expense are offset my fees charged for new service connections.

**Strategic Plan Goal**  
Financial stability  
Infrastructure strategy and performance

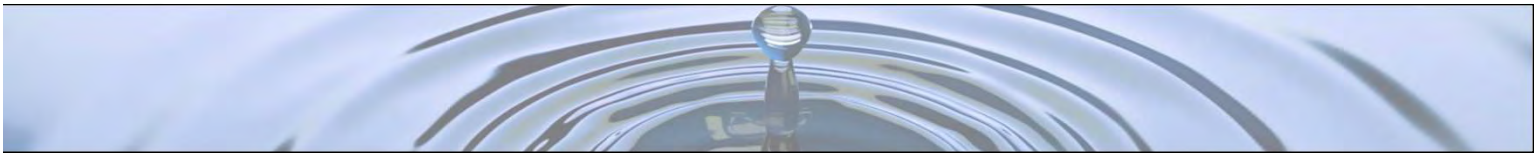
<b>Schedule</b>	
Planning	Q3-Q4
Design	Q4-Q1
Construction	Q2-Q3
Completion	Q3

**Operational Implications**  
Reduction in maintenance needs and reliability concerns with service connections in the system.

**Project References**  
Water Main Prioritization Revised Methodology  
Water Main Prioritization Study

**NOTES**

REVENUE	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	Total
Capital	175,000	175,000	175,000	175,000	175,000	175,000	175,000	175,000	175,000	175,000	1,750,000
Bond											
Grant											
<b>Total</b>	175,000	175,000	175,000	175,000	175,000	175,000	175,000	175,000	175,000	175,000	<b>1,750,000</b>
EXPENSE	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	Total
Distribution	175,000	175,000	175,000	175,000	175,000	175,000	175,000	175,000	175,000	175,000	1,750,000
<b>Total</b>	175,000	175,000	175,000	175,000	175,000	175,000	175,000	175,000	175,000	175,000	<b>1,750,000</b>



<b>Project Name</b>	Lead Service Replacements in right of way	<b>Infrastructure Category</b>	Services
<b>Division</b>	Distribution	<b>Work type</b>	Replacement

**Project Description**  
Annual budget for lead service replacements within the right of way.



**Background**  
Lead services included within project areas are replaced with or ahead of corresponding watermain projects. Standalone lead service replacement projects also replace lead services in areas across the system. A vast majority of lead service replacement work is funded from ARPA and federal/state PFA sources. However, a smaller portion of projects may involve expenses that are not eligible federal funding based on eligibility criteria. This capital budget is intended to cover various ineligible expenses for the program.

**Strategic Plan Goal**  
Financial stability  
Infrastructure strategy and performance

<b>Schedule</b>	
Planning	Q3-Q4
Design	Q4-Q1
Construction	Q2-Q3
Completion	Q3

**Operational Implications**  
Removing lead services from the system to protect public health and reduction in maintenance needs and reliability concerns with service connections in the system.

**Project References**  
Water Main Prioritization Revised Methodology  
Water Main Prioritization Study

**NOTES**

REVENUE	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	Total
Capital	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	2,000,000
Bond											
Grant											
<b>Total</b>	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	<b>2,000,000</b>
EXPENSE	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	Total
Distribution	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	2,000,000
<b>Total</b>	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	<b>2,000,000</b>



<b>Project Name</b>	Tunnel System Improvements	<b>Infrastructure Category</b>	Watermain
<b>Division</b>	Distribution	<b>Work type</b>	Replacement

**Project Description**  
Annual budget for investigation, assessment, and rehabilitation of tunnel network.



**Background**  
Watermain in certain parts of downtown Saint Paul was installed in tunnels cut out of sandstone bedrock. Over time this sandstone will erode and access can become difficult. In order to ensure access and reliability of the watermain in these tunnels annual inspection, assessment and rehabilitation projects are required. In 2023, SPRWS conducted a condition assessment of the tunnel system and identified a list of specific projects to ensure the stability of the system. The expenditures recommended below provide costs to complete the list of tunnel improvement projects.

**Strategic Plan Goal**  
Financial stability  
Infrastructure strategy and performance

<b>Schedule</b>	
Planning	Q3-Q4
Design	Q4-Q1
Construction	Q2-Q3
Completion	Q3

**Operational Implications**  
Reduction in maintenance needs and reliability concerns with watermain in the system within the tunnels.

**Project References**  
Tunnel Condition & Risk Assessment

**NOTES**

REVENUE	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	Total
Capital	489,000	0	0	383,000	686,000	624,000	592,000	633,000	676,000	0	4,083,000
Bond											
Grant											
<b>Total</b>	489,000	0	0	383,000	686,000	624,000	592,000	633,000	676,000	0	<b>4,083,000</b>
EXPENSE	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	Total
Distribution	489,000	0	0	383,000	686,000	624,000	592,000	633,000	676,000	0	4,083,000
<b>Total</b>	489,000	0	0	383,000	686,000	624,000	592,000	633,000	676,000	0	<b>4,083,000</b>



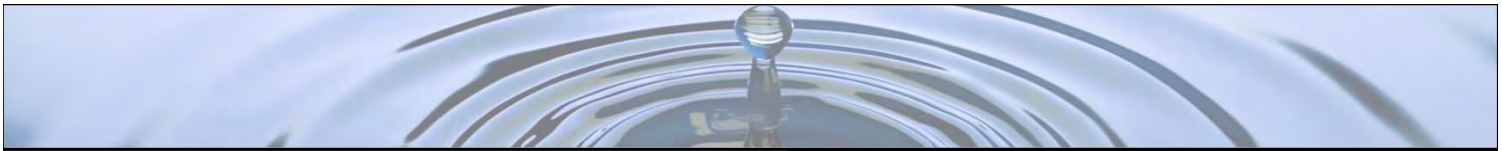
<b>Project Name</b>	Yard Piping Improvements										
<b>Division</b>	Production										
<b>Infrastructure Category</b>	Watermain										
<b>Work type</b>	Replacement										
<b>Project Description</b>	Reconstruct portions of piping directly to the west of the McCarron's pump station										
<b>Background</b>	<p>Piping to/from the finished water reservoir and piping to/from the high and low service pumps is growing old. The pipe network and the associated valving is growing old. This project is aimed at investigating the piping and the valving from the filter clearwells up to the point where the water moves off campus.</p> <p>One suggestion presented in the 2014 master plan was to "add gates or valves so that the 78 inch finished water conduits can be isolated without taking down half of the FW reservoir." Also suggested was, "rebuild yard piping to have influent and effluent header structures that provide improved redundancy and reduce risk of failure of the old lead gasket joints."</p>										
<b>Strategic Plan Goal</b>	Infrastructure strategy and performance										
	Planning		2032								
	Design										
	Construction		2033								
	Completion		2033								
<b>Operational Implications</b>	<b>Project References</b>										
<b>NOTES</b>											
<i>Note: Revenue and Expenses Below are in Thousands</i>											
<b>REVENUE</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>2030</b>	<b>2031</b>	<b>2032</b>	<b>2033</b>	<b>2034</b>	<b>Total</b>
Capital									1,200k		1,200k
Bond											0k
Grant											0k
<b>Total</b>	0k	0k	0k	0k	0k	0k	0k	0k	1200k	0k	<b>1200k</b>
<b>EXPENSE</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>2030</b>	<b>2031</b>	<b>2032</b>	<b>2033</b>	<b>2034</b>	<b>Total</b>
Distribution									1200k		1200k
<b>Total</b>	0k	0k	0k	0k	0k	0k	0k	0k	1200k	0k	<b>1200k</b>



# **Technology Projects**

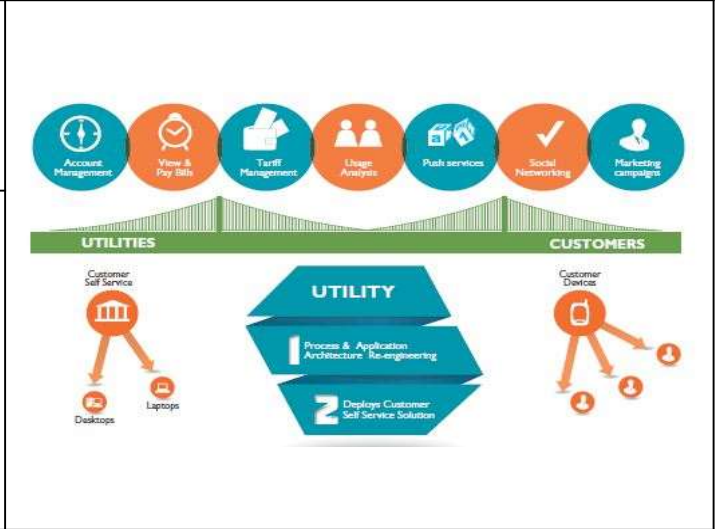
**2025 – 2034 Capital Improvement Plan**

**Saint Paul Regional Water Services**



<b>Project Name</b>	CIS upgrade	<b>Infrastructure Category</b>	Technology
<b>Division</b>	Business	<b>Work type</b>	Expansion

**Project Description**  
Upgrade/replace SPRWS' Customer Information System (CIS).



**Background**  
The billing and customer information system was implemented in 2009. An updated system will enable us to enhance efficiency, improve data security measures, and provide more personalized experiences for our customers. It will also support seamless integration with modern technologies, ensuring we remain efficient in a rapidly advancing technology environment.

**Strategic Plan Goal**  
Infrastructure strategy and performance  
Excellent customer service

**Schedule**

Planning	Q1 2029
Design	Q1 2030
Construction	
Completion	Q4 2030

**Operational Implications**

**Project References**

**NOTES**

REVENUE	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	Total
Capital	0	0	0	0	0	3,000,000	0	0	0	0	3,000,000
Bond											
Grant											
<b>Total</b>	0	0	0	0	0	3,000,000	0	0	0	0	<b>3,000,000</b>
EXPENSE	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	Total
Distribution	0	0	0	0	0	3,000,000	0	0	0	0	3,000,000
<b>Total</b>	0	0	0	0	0	3,000,000	0	0	0	0	<b>3,000,000</b>









<b>Project Name</b>	Digital Twin	<b>Infrastructure Category</b>	Technology
<b>Division</b>	Business	<b>Work type</b>	Expansion

**Project Description**  
 Implementation of a water treatment digital twin - virtual representation of SPRWS' physical water system assets that integrate data, models, and analytics to run simulations utilizing machine learning and artificial intelligence.



**Background**  
 A digital twin in water systems is a virtual model that replicates the physical water infrastructure in real-time. It enables operators to monitor, simulate, and optimize system performance, predict potential issues, and improve decision-making. By providing a dynamic and data-driven representation, digital twins enhance system efficiency, reduce maintenance costs, and support proactive water management.

**Strategic Plan Goal**  
 Infrastructure strategy and performance

<b>Schedule</b>	
Planning	Q1 2033
Design	
Construction	
Completion	Q4 2033

**Operational Implications**  
 The Building Information Modeling system should be implemented first.

**Project References**

**NOTES**

REVENUE	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	Total
Capital	0	0	0	0	0	0	0	0	250,000	0	250,000
Bond											
Grant											
<b>Total</b>	0	0	0	0	0	0	0	0	250,000	0	<b>250,000</b>
EXPENSE	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	Total
Distribution	0	0	0	0	0	0	0	0	250,000	0	250,000
<b>Total</b>	0	0	0	0	0	0	0	0	250,000	0	<b>250,000</b>







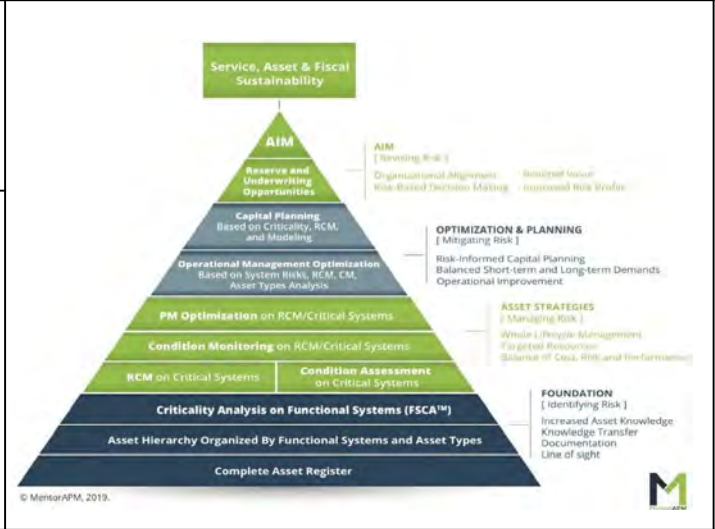




<b>Project Name</b>	Asset Criticality Software	<b>Infrastructure Category</b>	Technology
<b>Division</b>	Business	<b>Work type</b>	Expansion

**Project Description**  
 Implement a solution to facilitate the analysis of risk and criticality of SPRWS' assets to assist with risk mitigation strategies and capital planning decisions.

**Background**  
 This system helps identify the most critical assets and their optimal life cycle, assess potential risks, and prevent failures that could impact water quality and service reliability. By focusing resources on the highest-risk areas, we can improve system resilience, reduce downtime, and ensure the safe and continuous delivery of drinking water to our customers.



**Strategic Plan Goal**  
 Infrastructure strategy and performance

**Schedule**

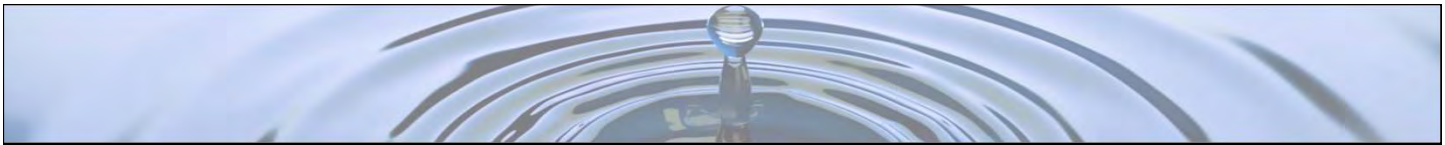
Planning	Q1 2033
Design	
Construction	
Completion	Q4 2033

**Operational Implications**

**Project References**

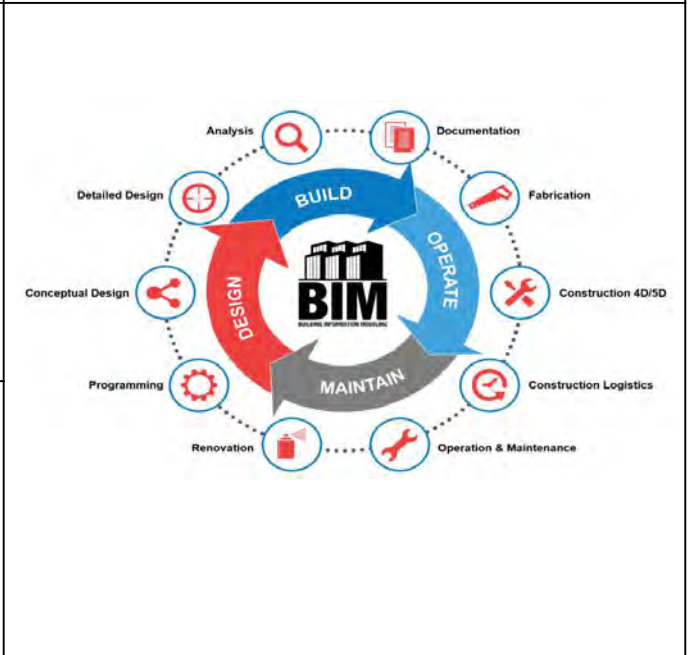
**NOTES**

REVENUE	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	Total
Capital	0	0	0	0	0	0	0	0	150,000	0	150,000
Bond											
Grant											
<b>Total</b>	0	0	0	0	0	0	0	0	150,000	0	<b>150,000</b>
EXPENSE	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	Total
Distribution	0	0	0	0	0	0	0	0	150,000	0	150,000
<b>Total</b>	0	0	0	0	0	0	0	0	150,000	0	<b>150,000</b>



<b>Project Name</b>	Building Information Modeling	<b>Infrastructure Category</b>	Technology
<b>Division</b>	Business	<b>Work type</b>	Expansion

**Project Description**  
 Implementation of a Building Information Modeling (BIM) system. Standards, specifications, business processes, and technology will be designed to assure that contractors and engineers produce and deliver all documentation to which SPRWS is entitled, and to facilitate loading the appropriate spatial and attribute data into SPRWS' asset registries.



**Background**  
 BIM beneficial uses for the digital representation of facilities include streamlined asset onboarding and asset management. During the next several years while the new SPRWS plant is built, the utility should work with the plant's design engineer to assure delivery of the BIM data in the most useful format. SPRWS' potential uses of this BIM data include plant startup and commissioning, populating the EAMS asset registry, simulations and operator training, and reference for designing future plant modifications.

**Strategic Plan Goal**  
 Infrastructure strategy and performance

<b>Schedule</b>	
Planning	Q1 2032
Design	
Construction	
Completion	Q4 2032

**Operational Implications**

**Project References**  
 Information and Technology Roadmap (2022)

**NOTES**

REVENUE	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	Total
Capital	0	0	0	0	0	0	0	250,000	0	0	250,000
Bond											
Grant											
<b>Total</b>	0	0	0	0	0	0	0	250,000	0	0	<b>250,000</b>
EXPENSE	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	Total
Distribution	0	0	0	0	0	0	0	250,000	0	0	250,000
<b>Total</b>	0	0	0	0	0	0	0	250,000	0	0	<b>250,000</b>





<b>Project Name</b>	Future IT Projects	<b>Infrastructure Category</b>	Technology
<b>Division</b>	Business	<b>Work type</b>	Expansion

**Project Description**  
 Unpredictable IT needs due to the technology evolving environment and cybersecurity threats.



**Background**  
 In today's rapidly evolving technology landscape, budgeting extra funds for IT projects is essential to stay ahead of innovation and protect our systems. As cybersecurity threats grow more sophisticated, increased investment is needed to strengthen our defenses, ensure data protection, and maintain system integrity. Allocating additional resources for IT projects will allow us to adapt to emerging technologies, safeguard against cyber risks, and maintain operational resilience in a constantly changing environment.

**Strategic Plan Goal**  
 Infrastructure strategy and performance

<b>Schedule</b>	
Planning	
Design	
Construction	
Completion	

**Operational Implications**

**Project References**

**NOTES**

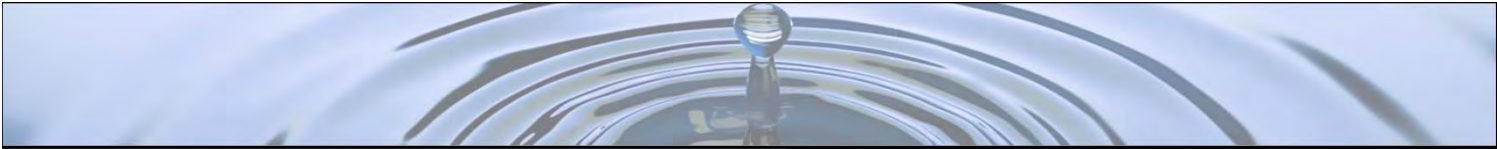
REVENUE	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	Total
Capital	0	0	0	0	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	6,000,000
Bond											
Grant											
<b>Total</b>	0	0	0	0	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	<b>6,000,000</b>
EXPENSE	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	Total
Distribution	0	0	0	0	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	6,000,000
<b>Total</b>	0	0	0	0	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	<b>6,000,000</b>











<b>Project Name</b>	Monthly Billing - CIS	<b>Infrastructure Category</b>	Technology
<b>Division</b>	Business	<b>Work type</b>	Replacement

**Project Description**  
 Converting residential customers to a monthly billing schedule from quarterly billing.



**Background**  
 Switching to monthly water billing instead of quarterly will provide customers with more manageable, predictable payments, reducing the likelihood of bill shock. It will also help improve cash flow for SPRWS, allowing us to address issues more quickly and efficiently. Additionally, monthly billing encourages water conservation by providing more immediate feedback on usage, helping both customers and the environment.

**Strategic Plan Goal**  
 Infrastructure strategy and performance  
 Excellent customer service

<b>Schedule</b>	
Planning	Q1 2028
Design	
Construction	
Completion	Q4 2028

**Operational Implications**  
 Significant effort to configure our Customer Information System to collect and process meter readings on a monthly basis. The cost of printing bills and the capacity of our printing vendor should also be considered. This effort should be complemented with an ebilling campaign.

**Project References**

**NOTES**

REVENUE	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	Total
Capital	0	0	0	1,000,000	0	0	0	0	0	0	1,000,000
Bond											
Grant											
<b>Total</b>	0	0	0	1,000,000	0	0	0	0	0	0	<b>1,000,000</b>
EXPENSE	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	Total
Distribution	0	0	0	1,000,000	0	0	0	0	0	0	1,000,000
<b>Total</b>	0	0	0	1,000,000	0	0	0	0	0	0	<b>1,000,000</b>



<b>Project Name</b>	Server Replacement	<b>Infrastructure Category</b>	Technology
<b>Division</b>	Business	<b>Work type</b>	Replacement

**Project Description**  
 SPRWS server replacement annual plan.

**Background**  
 SPRWS servers have a life expectancy of 4 years in the production environment and 4 years in the disaster recovery site.

The replacement plan includes their rotation from the production environment to the disaster recovery site. This process allows us to maximize their life cycle and distribute costs over several years.



**Strategic Plan Goal**  
 Infrastructure strategy and performance

<b>Schedule</b>	
Planning	2024 Q3
Design	
Construction	
Completion	2026 Q3

**Operational Implications**  
 This project was submitted for the 2024 budget, but it wasn't included in the final budget.  
 Disrupting the rotational cycle might result in system failures and will create the need for larger amounts in 2025 and beyond.

The cycle will restart in 2028, three years in a row.

**Project References**

**NOTES**

REVENUE	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	Total
Capital	30,000	31,500		33,075	34,729	36,465	38,288	40,203	42,213	44,324	330,797
Bond											
Grant											
<b>Total</b>	30,000	31,500	0	33,075	34,729	36,465	38,288	40,203	42,213	44,324	<b>330,797</b>
EXPENSE	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	Total
Distribution	30,000	31,500	0	33,075	34,729	36,465	38,288	40,203	42,213	44,324	330,797
<b>Total</b>	30,000	31,500	0	33,075	34,729	36,465	38,288	40,203	42,213	44,324	<b>330,797</b>





<b>Project Name</b>	VDI Host Replacement	<b>Infrastructure Category</b>	Technology
<b>Division</b>	Business	<b>Work type</b>	Replacement

**Project Description**  
Replacement of two hosts in our production VDI.



**Background**  
VDI hosts are replaced for lifecycle management, they will be rotated to the disaster recovery site for 4 more years.  
  
7 VDI hosts replaced 2/year and 1 the first year (starting in 2023).

**Strategic Plan Goal**  
Infrastructure strategy and performance

<b>Schedule</b>	
Planning	2024 Q3
Design	
Construction	
Completion	Cycle continues

**Operational Implications**  
This project was submitted for the 2024 budget, but it wasn't included in the final budget.  
Disrupting the rotational cycle might result in system failures and will create the need for larger amounts in 2025 and beyond.  
  
Cycle will restart in 2027, four years in a row.

**Project References**

**NOTES**

REVENUE	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	Total
Capital	55,000	57,750	25,000	60,638	63,669	66,853	70,195	73,705	77,391	81,260	631,461
Bond											
Grant											
<b>Total</b>	55,000	57,750	25,000	60,638	63,669	66,853	70,195	73,705	77,391	81,260	<b>631,461</b>
EXPENSE	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	Total
Distribution	55,000	57,750	25,000	60,638	63,669	66,853	70,195	73,705	77,391	81,260	631,461
<b>Total</b>	55,000	57,750	25,000	60,638	63,669	66,853	70,195	73,705	77,391	81,260	<b>631,461</b>





# **Water Meters and Registers**

**2025 – 2034 Capital Improvement Plan**

**Saint Paul Regional Water Services**







<b>Project Name</b>	Meter Replacement	<b>Infrastructure Category</b>	Meters
<b>Division</b>	Business	<b>Work type</b>	Replacement

**Project Description**  
Annual installation and replacement of water meters.



**Background**  
Functional and accurate water meters is essential for SPRWS financial stability. SPRWS installs and replaces water meters in the Distribution system to ensure reading accuracy and performance is within the AWWA recommendation to ensure consumption is accurate.

**Strategic Plan Goal**  
Financial stability  
Excellent customer service

<b>Schedule</b>	
Planning	Ongoing
Design	Ongoing
Construction	Ongoing
Completion	Ongoing

**Operational Implications**  
New meter installations are recovered through permit fees related with new construction. Replacements are budgeted based on replacement needs.  
  
Meter Installations and replacements are required in order to document customer consumption and produce accurate water bills.

**Project References**

**NOTES**

REVENUE	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	Total
Capital	308,000	316,000	323,900	333,617	343,626	353,934	364,552	375,489	386,754	398,356	3,504,228
Bond											
Grant											
<b>Total</b>	<b>308,000</b>	<b>316,000</b>	<b>323,900</b>	<b>333,617</b>	<b>343,626</b>	<b>353,934</b>	<b>364,552</b>	<b>375,489</b>	<b>386,754</b>	<b>398,356</b>	<b>3,504,228</b>
EXPENSE	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	Total
Distribution	308,000	316,000	323,900	333,617	343,626	353,934	364,552	375,489	386,754	398,356	3,504,228
<b>Total</b>	<b>308,000</b>	<b>316,000</b>	<b>323,900</b>	<b>333,617</b>	<b>343,626</b>	<b>353,934</b>	<b>364,552</b>	<b>375,489</b>	<b>386,754</b>	<b>398,356</b>	<b>3,504,228</b>



<b>Project Name</b>	Register Replacement	<b>Infrastructure Category</b>	Meters
<b>Division</b>	Business	<b>Work type</b>	Expansion

**Project Description**  
 Replacement of all residential registers.  
  
 Communication upgrades enabling future advance metering infrastructure.



**Background**  
 SPRWS water meter registers have reached the end of their lifespans. Replacing the register allow SPRWS to accurately determine use and bill appropriately. In addition, the upgraded water meter register will improve the ability to collect frequent and accurate water usage data to improve billing, leak detection, and water resource management.

**Strategic Plan Goal**  
 Excellent customer service  
 Financial stability

<b>Schedule</b>	
Planning	Q2 2023 - Q3-2023
Design	Q2 2023 - Q4-2023
Construction	Q4 2023 - Q4-2030
Completion	Q4-2030

**Operational Implications**  
 The capital cost be offset in recovery of funds that would be lost in the next 10 years due to meter reading failures.  
 Project will increase the lifespan of the register for 20 years.  
 Additional FTE's or Contracted Services will be required.

**Project References**  
 AMI Feasibility Study

**NOTES**

REVENUE	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	Total
Capital	2,800,000	2,940,000	3,087,000	3,241,000	3,403,000	3,574,000	150,000	150,000	150,000	150,000	19,645,000
Bond											
Grant											
<b>Total</b>	<b>2,800,000</b>	<b>2,940,000</b>	<b>3,087,000</b>	<b>3,241,000</b>	<b>3,403,000</b>	<b>3,574,000</b>	<b>150,000</b>	<b>150,000</b>	<b>150,000</b>	<b>150,000</b>	<b>19,645,000</b>
EXPENSE	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	Total
Distribution	2,800,000	2,940,000	3,087,000	3,241,000	3,403,000	3,574,000	150,000	150,000	150,000	150,000	19,645,000
<b>Total</b>	<b>2,800,000</b>	<b>2,940,000</b>	<b>3,087,000</b>	<b>3,241,000</b>	<b>3,403,000</b>	<b>3,574,000</b>	<b>150,000</b>	<b>150,000</b>	<b>150,000</b>	<b>150,000</b>	<b>19,645,000</b>



# **Building and Facility Projects**

**2025 – 2034 Capital Improvement Plan**

**Saint Paul Regional Water Services**









<b>Project Name</b>	Campus Repaving	<b>Infrastructure Category</b>	Building and grounds
<b>Division</b>	Production	<b>Work type</b>	Rehabilitation

**Project Description**  
Repave portions of the McCarron's campus to the east of Sylvan Street to maintain parking surfaces in good condition.



**Background**  
Paved areas on the McCarron's Campus are subject to heavy traffic and heavy equipment on a daily basis. Additionally, during winter months, these areas are plowed regularly to maintain access. Having space available to park vehicles is important to our operations, and having that space be in good shape is important for getting crews out into the field efficiently.

**Strategic Plan Goal**  
Infrastructure strategy and performance

<b>Schedule</b>	
Planning	2029
Design	2030
Construction	2030
Completion	2030

**Operational Implications**  
Minimal impacts expected

**Project References**

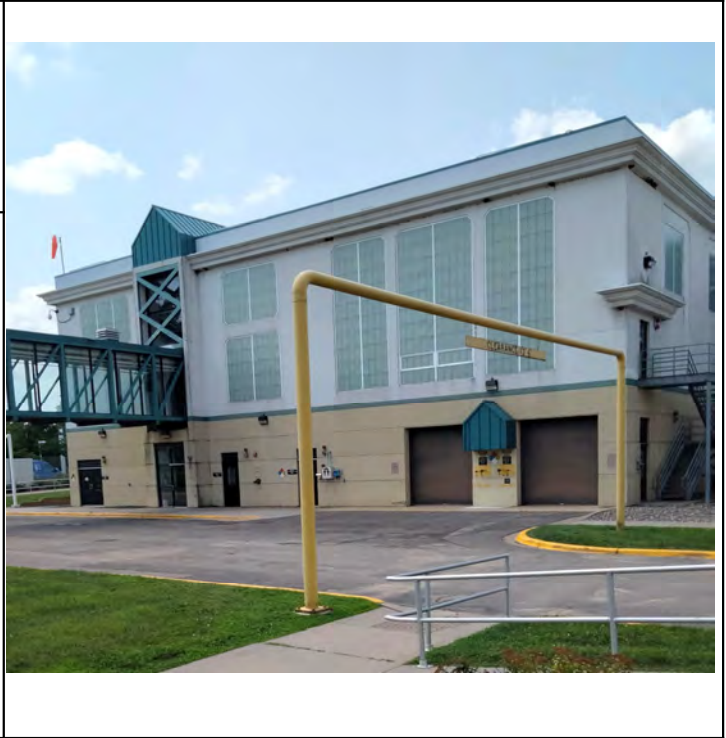
**NOTES**

<i>Note: Revenue and Expenses Below are in Thousands</i>											
REVENUE	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	Total
Capital						220k					220k
Bond											0k
Grant											0k
<b>Total</b>	0k	0k	0k	0k	0k	220k	0k	0k	0k	0k	<b>220k</b>
EXPENSE	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	Total
Distribution						220k					220k
<b>Total</b>	0k	0k	0k	0k	0k	220k	0k	0k	0k	0k	<b>220k</b>



<b>Project Name</b>	Roof Replacement	<b>Infrastructure Category</b>	Building and grounds
<b>Division</b>	Production	<b>Work type</b>	Replacement

**Project Description**  
 Replace roofing on either the chlorine and ammonia building, the filter gallery/pump floor, or the central chemical building area.



**Background**  
 The McCarron's Campus has a tremendous amount of square footage of roofing. Some of the roofs are presently leaking, and leaks are currently addressed with spot fixes. That said, a more permanent solution will be needed in the long term. This project anticipates the replacement of roofing on either the chlorine and ammonia building, the filter gallery/pump floor, or the central chemical building area.

**Strategic Plan Goal**  
 Infrastructure strategy and performance

<b>Schedule</b>	
Planning	2029
Design	2030
Construction	2030-2031
Completion	2031

**Operational Implications**  
 Reduction in the need for repair work and for reactive maintenance that results from leaks

**Project References**  
 Roofing assessments are performed periodically. The chlorine/ammonia building had roof repairs performed in the summer of 2024 under the direction of Tom Blanchard.

**NOTES**

<i>Note: Revenue and Expenses Below are in Thousands</i>											
REVENUE	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	Total
Capital						800k	500k				1,300k
Bond											0k
Grant											0k
<b>Total</b>	0k	0k	0k	0k	0k	800k	500k	0k	0k	0k	<b>1300k</b>
EXPENSE	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	Total
Distribution						800k	500k				1300k
<b>Total</b>	0k	0k	0k	0k	0k	800k	500k	0k	0k	0k	<b>1300k</b>

<b>Project Name</b>	Groundskeeping Storage Facilities (McCarron's Campus)	<b>Infrastructure Category</b>	Building and grounds
<b>Division</b>	Production	<b>Work type</b>	Expansion

**Project Description**  
 Construction of storage facilities on campus to allow for storage of lawn mowers, groundskeeping equipment, etc. Currently, this equipment is being trailered to site which is an inefficient use of staff time and of resources.

**Background**  
 The Vadnais team maintains the grounds of the 1900 Rice Street Campus. Prior to the start of the McCarron's WTP project, the Vadnais team stored grounds maintenance equipment on site in old, rundown storage buildings and trailers. In order to make space for the construction of the new water treatment plant, these buildings and trailers were demolished. For the duration of the construction project, the Vadnais crews will be storing grounds maintenance equipment at the Vadnais Campus and hauling it to the McCarron's campus. This is an inefficient use of staff time and materials, and new storage on campus should be constructed as soon as space becomes available.



**Strategic Plan Goal**  
 High performing workforce  
 Infrastructure strategy and performance

<b>Schedule</b>	
Planning	2029
Design	2029
Construction	2030
Completion	2030

**Operational Implications**  
 This improvement will yield a decrease in operations and maintenance costs. Staff members will spend less time hauling equipment between campuses. Further, vehicles and trailers will be freed up for other purposes to be used more efficiently where needed.

**Project References**

**NOTES**  
 SPRWS investigated potential construction of a warehouse facility to support the McCarron's WTP project that could later serve as a storage facility for the Vadnais team. The location and timeline could not be manipulated to reach a solution. The total cost of the warehouse at that time was estimated at \$300k for a 60ftx40ft building.

<b>Note: Revenue and Expenses Below are in Thousands</b>											
REVENUE	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	Total
Capital						330k					330k
Bond											0k
Grant											0k
<b>Total</b>	0k	0k	0k	0k	0k	330k	0k	0k	0k	0k	<b>330k</b>
EXPENSE	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	Total
Distribution						330k					330k
<b>Total</b>	0k	0k	0k	0k	0k	330k	0k	0k	0k	0k	<b>330k</b>

<b>Project Name</b>	Fire Alarm System Upgrades	<b>Infrastructure Category</b>	Building and grounds
<b>Division</b>	Production	<b>Work type</b>	Rehabilitation

**Project Description**  
Thoroughly investigate fire alarm system performance and potential improvements to the system.

Replace infrastructure as needed to improve the reliability and the performance of the system.

**Background**  
According to staff, the existing fire alarm system is getting old. Bugs in the system lead to frequent alarms for pumping operators. Further, bugs in the system sometimes alert the local fire department and they deploy to the site. These issues should be investigated, and this item anticipates replacement of fire alarm system components.



**Strategic Plan Goal**

<b>Schedule</b>	
Planning	2030
Design	2030
Construction	2031
Completion	2031

**Operational Implications**  
No significant maintenance impacts expected.

**Project References**

**NOTES**

<i>Note: Revenue and Expenses Below are in Thousands</i>											
REVENUE	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	Total
Capital							180k				180k
Bond											0k
Grant											0k
<b>Total</b>	0k	0k	0k	0k	0k	0k	180k	0k	0k	0k	<b>180k</b>
EXPENSE	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	Total
Distribution							180k				180k
<b>Total</b>	0k	0k	0k	0k	0k	0k	180k	0k	0k	0k	<b>180k</b>

<b>Project Name</b> Building Upgrades 2034 <b>Division</b> Production						<b>Infrastructure Category</b> Building and grounds <b>Work type</b> Rehabilitation					
<b>Project Description</b> Project scope is not yet defined and will be further developed in the coming years											
<b>Background</b> Project scope is not yet defined and will be further developed in the coming years											
<b>Strategic Plan Goal</b>						<b>Schedule</b>					
						Planning		2031-2032			
						Design		2033			
						Construction		2034			
						Completion		2034			
<b>Operational Implications</b>						<b>Project References</b>					
<b>NOTES</b>											
<i>Note: Revenue and Expenses Below are in Thousands</i>											
<b>REVENUE</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>2030</b>	<b>2031</b>	<b>2032</b>	<b>2033</b>	<b>2034</b>	<b>Total</b>
Capital										400k	400k
Bond											0k
Grant											0k
<b>Total</b>	0k	0k	0k	0k	0k	0k	0k	0k	0k	400k	<b>400k</b>
<b>EXPENSE</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>2030</b>	<b>2031</b>	<b>2032</b>	<b>2033</b>	<b>2034</b>	<b>Total</b>
Distribution	15k									400k	415k
<b>Total</b>	15k	0k	0k	0k	0k	0k	0k	0k	0k	400k	<b>415k</b>









# **Safety and Security Projects**

**2025 – 2034 Capital Improvement Plan**

**Saint Paul Regional Water Services**

















# **Vehicles and Equipment**

**2025 – 2034 Capital Improvement Plan**

**Saint Paul Regional Water Services**



<b>Project Name</b>	Distribution Vehicles and Equipment	<b>Infrastructure Category</b>	Vehicles and small capital
<b>Division</b>	Distribution	<b>Work type</b>	Replacement

**Project Description**  
Annual budget for vehicles and small equipment replacement assigned to the Distribution Division.



**Background**  
The equipment fleet for the Distribution Division includes approximately 185 vehicles and construction equipment items required to support operations, construction, and preventative maintenance tasks performed by division staff. Equipment is systematically replaced at appropriate times to minimize the overall cost of ownership and maintain equipment reliability. The projected capital costs represent the expenses associated with vehicle and equipment replacement, adjusted for the projected rate of inflation.

**Strategic Plan Goal**  
Financial stability  
Infrastructure strategy and performance

<b>Schedule</b>	
Planning	Q3-Q4
Design	Q4-Q1
Construction	Q2-Q3
Completion	Q3

**Operational Implications**  
Reduction in maintenance needs and reliability concerns with critical equipment assigned to the Distribution Division.

**Project References**  
Vehicle and Equipment Replacement Policy

**NOTES**

REVENUE	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	Total
Capital	845,000	870,000	895,000	920,000	945,000	975,000	1,005,000	1,025,000	1,055,000	1,087,000	9,622,000
Bond											
Grant											
<b>Total</b>	845,000	870,000	895,000	920,000	945,000	975,000	1,005,000	1,025,000	1,055,000	1,087,000	<b>9,622,000</b>
EXPENSE	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	Total
Distribution	845,000	870,000	895,000	920,000	945,000	975,000	1,005,000	1,025,000	1,055,000	1,009,000	9,544,000
<b>Total</b>	845,000	870,000	895,000	920,000	945,000	975,000	1,005,000	1,025,000	1,055,000	1,009,000	<b>9,544,000</b>







<b>Project Name</b> Purchase Skid Steer & Wood Chipper <b>Division</b> Production	<b>Infrastructure Category</b> Vehicles and small capital purchases <b>Work type</b> Replacement										
<b>Project Description</b> Purchase a new skid steer for the Vadnais team. Determine whether the existing skid steer should be auctioned off or kept in service until it fails.											
<b>Background</b> The Vadnais team makes frequent use of a skid steer that is believed to be approaching the end of its useful life.  The Vadnais team maintains a significant amount of wooded/forested land adjacent to our infrastructure. The land contains diseased trees and requires regular maintenance, particularly when our property abuts private property. Vadnais currently has one wood chipper but often has to rent a second wood chipper to keep up. Purchasing a second wood chipper will help our team to keep up without requiring rentals. Also, the existing wood chipper is approaching the end of its useful life. Purchasing a second wood chipper will allow us to run the first wood chipper to failure and prepare us for when that failure occurs.											
<b>Strategic Plan Goal</b> Infrastructure strategy and performance	<b>Schedule</b> <table border="1" data-bbox="803 1058 1524 1199"> <tr><td>Planning</td><td></td></tr> <tr><td>Design</td><td></td></tr> <tr><td>Construction</td><td></td></tr> <tr><td>Completion</td><td>2026</td></tr> </table>	Planning		Design		Construction		Completion	2026		
Planning											
Design											
Construction											
Completion	2026										
<b>Operational Implications</b>	<b>Project References</b>										
<b>NOTES</b>											
<i>Note: Revenue and Expenses Below are in Thousands</i>											
<b>REVENUE</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>2030</b>	<b>2031</b>	<b>2032</b>	<b>2033</b>	<b>2034</b>	<b>Total</b>
Capital		73k									73k
Bond											0k
Grant											0k
<b>Total</b>	0k	73k	0k	0k	0k	0k	0k	0k	0k	0k	<b>73k</b>
<b>EXPENSE</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>2030</b>	<b>2031</b>	<b>2032</b>	<b>2033</b>	<b>2034</b>	<b>Total</b>
Distribution		73k									73k
<b>Total</b>	0k	73k	0k	0k	0k	0k	0k	0k	0k	0k	<b>73k</b>



<b>Project Name</b>	2028 Production Vehicle Replacements & Repairs					<b>Infrastructure Category</b>	Vehicles and small capital purchases				
<b>Division</b>	Production					<b>Work type</b>	Replacement				
<b>Project Description</b>											
Replace the following vehicles: - 681: 2015 Ford F350 4x4 Supercab - 512: 2016 Ford F350 4x2 Regular Cab											
<b>Background</b>											
<b>Strategic Plan Goal</b>						<b>Schedule</b>					
Infrastructure strategy and performance						Planning					
						Design					
						Construction					
						Completion		2028			
<b>Operational Implications</b>						<b>Project References</b>					
<b>NOTES</b>											
<b>Note: Revenue and Expenses Below are in Thousands</b>											
<b>REVENUE</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>2030</b>	<b>2031</b>	<b>2032</b>	<b>2033</b>	<b>2034</b>	<b>Total</b>
Capital				136k							136k
Bond											0k
Grant											0k
<b>Total</b>	0k	0k	0k	136k	0k	0k	0k	0k	0k	0k	<b>136k</b>
<b>EXPENSE</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>2030</b>	<b>2031</b>	<b>2032</b>	<b>2033</b>	<b>2034</b>	<b>Total</b>
Distribution				136k							136k
<b>Total</b>	0k	0k	0k	136k	0k	0k	0k	0k	0k	0k	<b>136k</b>

<b>Project Name</b>	2029 Production Vehicle Replacements & Repairs					<b>Infrastructure Category</b>	Vehicles and small capital purchases				
<b>Division</b>	Production					<b>Work type</b>	Replacement				
<b>Project Description</b>											
Replace the following vehicles: 2016 FORD F-350 PICKUP #688 2016 FORD F350 4X2 REG CAB #514 (2017 per title) 2016 FORD F350 4X4 SUPERCAB #601 6.5' BOX #601 2015 JOHN DEERE 5055E TRACTOR W/ LOADER #T-97											
<b>Background</b>											
<b>Strategic Plan Goal</b>						<b>Schedule</b>					
Infrastructure strategy and performance						Planning					
						Design					
						Construction					
						Completion		2029			
<b>Operational Implications</b>						<b>Project References</b>					
<b>NOTES</b>											
<b>Note: Revenue and Expenses Below are in Thousands</b>											
<b>REVENUE</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>2030</b>	<b>2031</b>	<b>2032</b>	<b>2033</b>	<b>2034</b>	<b>Total</b>
Capital					280k						280k
Bond											0k
Grant											0k
<b>Total</b>	0k	0k	0k	0k	280k	0k	0k	0k	0k	0k	<b>280k</b>
<b>EXPENSE</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>2030</b>	<b>2031</b>	<b>2032</b>	<b>2033</b>	<b>2034</b>	<b>Total</b>
Distribution					280k						280k
<b>Total</b>	0k	0k	0k	0k	280k	0k	0k	0k	0k	0k	<b>280k</b>

<b>Project Name</b>	Replace Boat Used for Lake Sample					<b>Infrastructure Category</b>	Vehicles and small capital purchases				
<b>Division</b>	Production					<b>Work type</b>	Replacement				
<b>Project Description</b>											
Purchase a New Boat for Lake/Lagoon Sampling.											
<b>Background</b>											
SPRWS owns a small boat that we utilize to collect samples from the raw water supply system. The boat is also used to measure sludge depths in the process wastewater storage lagoons (north of Roselawn). Per discussions with the lab staff, who performs sampling, this boat is old and will be in need of replacement in this timeframe.											
<b>Strategic Plan Goal</b>						<b>Schedule</b>					
Infrastructure strategy and performance						Planning					
						Design					
						Construction					
						Completion		2025			
<b>Operational Implications</b>						<b>Project References</b>					
<b>NOTES</b>											
<b>Note: Revenue and Expenses Below are in Thousands</b>											
<b>REVENUE</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>2030</b>	<b>2031</b>	<b>2032</b>	<b>2033</b>	<b>2034</b>	<b>Total</b>
Capital					18k						18k
Bond											0k
Grant											0k
<b>Total</b>	0k	0k	0k	0k	18k	0k	0k	0k	0k	0k	<b>18k</b>
<b>EXPENSE</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>2030</b>	<b>2031</b>	<b>2032</b>	<b>2033</b>	<b>2034</b>	<b>Total</b>
Distribution					18k						18k
<b>Total</b>	0k	0k	0k	0k	18k	0k	0k	0k	0k	0k	<b>18k</b>

<b>Project Name</b>	2030 Production Vehicle Replacements & Repairs					<b>Infrastructure Category</b>	Vehicles and small capital purchases				
<b>Division</b>	Production					<b>Work type</b>	Replacement				
<b>Project Description</b>											
Replace the following vehicles: - 598: 2011 Mercedes Sprinter Van (Electricians) - 2016 RAM 3500 CARGO VAN (title is 2017) - 2017 PICKUP FORD F350 4X4 #517 - 2017 PICKUP FORD F350 4X4 #527 - 2018 FORD ESCAPE SUV #545											
<b>Background</b>											
<b>Strategic Plan Goal</b>						<b>Schedule</b>					
Infrastructure strategy and performance						Planning					
						Design					
						Construction					
						Completion		2030			
<b>Operational Implications</b>						<b>Project References</b>					
<b>NOTES</b>											
<b>Note: Revenue and Expenses Below are in Thousands</b>											
<b>REVENUE</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>2030</b>	<b>2031</b>	<b>2032</b>	<b>2033</b>	<b>2034</b>	<b>Total</b>
Capital						396k					396k
Bond											0k
Grant											0k
<b>Total</b>	0k	0k	0k	0k	0k	396k	0k	0k	0k	0k	<b>396k</b>
<b>EXPENSE</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>2030</b>	<b>2031</b>	<b>2032</b>	<b>2033</b>	<b>2034</b>	<b>Total</b>
Distribution						396k					396k
<b>Total</b>	0k	0k	0k	0k	0k	396k	0k	0k	0k	0k	<b>396k</b>



<b>Project Name</b> Purchase New Tractor for Vadnais Team <b>Division</b> Production						<b>Infrastructure Category</b> Vehicles and small capital purchases <b>Work type</b> Replacement					
<b>Project Description</b> Purchase New Tractor for Vadnais Team											
<b>Background</b> Per discussion with the Vadnais team, I understand that this should be replaced in the next 5-10 years (as of 2024).											
<b>Strategic Plan Goal</b> Infrastructure strategy and performance						<b>Schedule</b>					
						Planning					
						Design					
						Construction					
						Completion		2030			
<b>Operational Implications</b>						<b>Project References</b>					
<b>NOTES</b>											
<i>Note: Revenue and Expenses Below are in Thousands</i>											
<b>REVENUE</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>2030</b>	<b>2031</b>	<b>2032</b>	<b>2033</b>	<b>2034</b>	<b>Total</b>
Capital						65k					65k
Bond											0k
Grant											0k
<b>Total</b>	0k	0k	0k	0k	0k	65k	0k	0k	0k	0k	<b>65k</b>
<b>EXPENSE</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>2030</b>	<b>2031</b>	<b>2032</b>	<b>2033</b>	<b>2034</b>	<b>Total</b>
Distribution						65k					65k
<b>Total</b>	0k	0k	0k	0k	0k	65k	0k	0k	0k	0k	<b>65k</b>

<b>Project Name</b>	2031 Production Vehicle Replacements & Repairs					<b>Infrastructure Category</b>	Vehicles and small capital purchases				
<b>Division</b>	Production					<b>Work type</b>	Replacement				
<b>Project Description</b>											
Replace the following vehicles: 2018 PICKUP FORD F350 4X4 #538 2019 PICKUP FORD F350 4X4 #546 2019 PICKUP FORD F350 4X4 #547											
<b>Background</b>											
<b>Strategic Plan Goal</b>						<b>Schedule</b>					
Infrastructure strategy and performance						Planning					
						Design					
						Construction					
						Completion		2031			
<b>Operational Implications</b>						<b>Project References</b>					
<b>NOTES</b>											
<b>Note: Revenue and Expenses Below are in Thousands</b>											
<b>REVENUE</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>2030</b>	<b>2031</b>	<b>2032</b>	<b>2033</b>	<b>2034</b>	<b>Total</b>
Capital							219k				219k
Bond											0k
Grant											0k
<b>Total</b>	0k	0k	0k	0k	0k	0k	219k	0k	0k	0k	<b>219k</b>
<b>EXPENSE</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>2030</b>	<b>2031</b>	<b>2032</b>	<b>2033</b>	<b>2034</b>	<b>Total</b>
Distribution							219k				219k
<b>Total</b>	0k	0k	0k	0k	0k	0k	219k	0k	0k	0k	<b>219k</b>

<b>Project Name</b>	2032 Production Vehicle Replacements & Repairs					<b>Infrastructure Category</b>	Vehicles and small capital purchases				
<b>Division</b>	Production					<b>Work type</b>	Replacement				
<b>Project Description</b>											
Replace the following vehicles: 2020 FORD F350 #516 SUPERCAB 2020 FORD F450 4X4 PU #517 W/DUALS 2021 FORD RANGER #622 VADNAIS											
<b>Background</b>											
<b>Strategic Plan Goal</b>						<b>Schedule</b>					
Infrastructure strategy and performance						Planning					
						Design					
						Construction					
						Completion		2032			
<b>Operational Implications</b>						<b>Project References</b>					
<b>NOTES</b>											
<b>Note: Revenue and Expenses Below are in Thousands</b>											
<b>REVENUE</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>2030</b>	<b>2031</b>	<b>2032</b>	<b>2033</b>	<b>2034</b>	<b>Total</b>
Capital								225k			225k
Bond											0k
Grant											0k
<b>Total</b>	0k	0k	0k	0k	0k	0k	0k	225k	0k	0k	<b>225k</b>
<b>EXPENSE</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>2030</b>	<b>2031</b>	<b>2032</b>	<b>2033</b>	<b>2034</b>	<b>Total</b>
Distribution								225k			225k
<b>Total</b>	0k	0k	0k	0k	0k	0k	0k	225k	0k	0k	<b>225k</b>

<b>Project Name</b>	2033 Production Vehicle Replacements & Repairs					<b>Infrastructure Category</b>	Vehicles and small capital purchases				
<b>Division</b>	Production					<b>Work type</b>	Replacement				
<b>Project Description</b>											
Replace the following vehicles: 2020 FORD T250 TRANSIT CARGO VAN #611 (painters) (2021 per title) 2021 FORD F350 4x4 TRUCK #623 Vadnais 2021 MACK SINGLE AXLE DUMP TRK #626 (Vadnais)											
<b>Background</b>											
<b>Strategic Plan Goal</b>						<b>Schedule</b>					
Infrastructure strategy and performance						Planning					
						Design					
						Construction					
						Completion		2033			
<b>Operational Implications</b>						<b>Project References</b>					
<b>NOTES</b>											
<b>Note: Revenue and Expenses Below are in Thousands</b>											
<b>REVENUE</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>2030</b>	<b>2031</b>	<b>2032</b>	<b>2033</b>	<b>2034</b>	<b>Total</b>
Capital									265k		265k
Bond											0k
Grant											0k
<b>Total</b>	0k	0k	0k	0k	0k	0k	0k	0k	265k	0k	<b>265k</b>
<b>EXPENSE</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>2030</b>	<b>2031</b>	<b>2032</b>	<b>2033</b>	<b>2034</b>	<b>Total</b>
Distribution									265k		265k
<b>Total</b>	0k	0k	0k	0k	0k	0k	0k	0k	265k	0k	<b>265k</b>

<b>Project Name</b> 2033 Production Vehicle Replacements & Repairs <b>Division</b> Production		<b>Infrastructure Category</b> Vehicles and small capital purchases <b>Work type</b> Replacement									
<b>Project Description</b> Placeholder. Vehicles have not been identified for replacement yet.											
<b>Background</b>											
<b>Strategic Plan Goal</b> Infrastructure strategy and performance		<b>Schedule</b>									
		Planning									
		Design									
		Construction									
		Completion	2034								
<b>Operational Implications</b>		<b>Project References</b>									
<b>NOTES</b>											
<b>Note: Revenue and Expenses Below are in Thousands</b>											
<b>REVENUE</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>2030</b>	<b>2031</b>	<b>2032</b>	<b>2033</b>	<b>2034</b>	<b>Total</b>
Capital										300k	300k
Bond											0k
Grant											0k
<b>Total</b>	0k	0k	0k	0k	0k	0k	0k	0k	0k	300k	<b>300k</b>
<b>EXPENSE</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>2030</b>	<b>2031</b>	<b>2032</b>	<b>2033</b>	<b>2034</b>	<b>Total</b>
Distribution										300k	300k
<b>Total</b>	0k	0k	0k	0k	0k	0k	0k	0k	0k	300k	<b>300k</b>