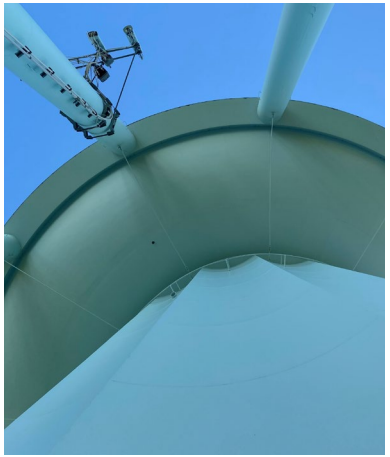
Saint Paul Regional Water Services

Overview

May 22, 2024



Racquel Vaske
General Manager

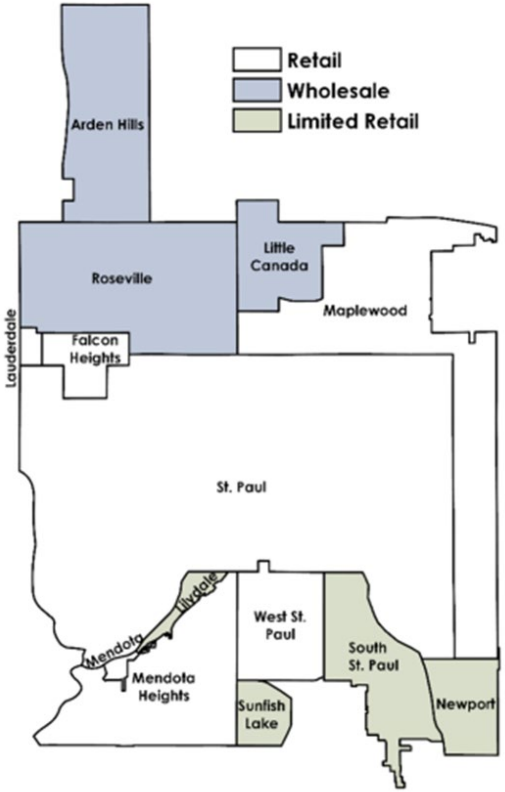
Rich Hibbard
Engineering Division Manager

CheFei Chen
Production Division Manager

SAINT PAUL REGIONAL WATER SERVICES

Saint Paul Regional Water Services

Customers



Active Accounts

96,961

Population

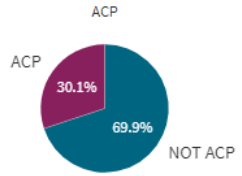
441,350

Retail and Wholesale Only

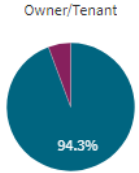
MHI

$74,831

ACP vs Non-ACP Accounts



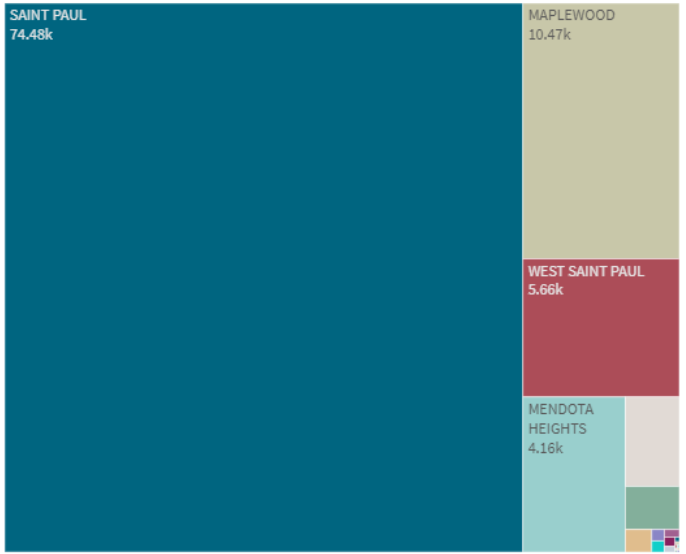
Owner or Tenant on Account



Account Type

Account Type	Count	Percent
Totals	96961	100%
Quarterly - Single Family	77326	80%
Quarterly-Non Sngl Family	12818	13%
Monthly-Non Single Family	4131	4%
Auto Fire	2303	2%
Monthly - Municipal	238	0%
Private Hydrants Only	56	0%
Quarterly - Municipal	38	0%
Monthly - Single Family	29	0%
Hydrant Meters	22	0%

Retail Accounts by Municipality



Facts & Statistics

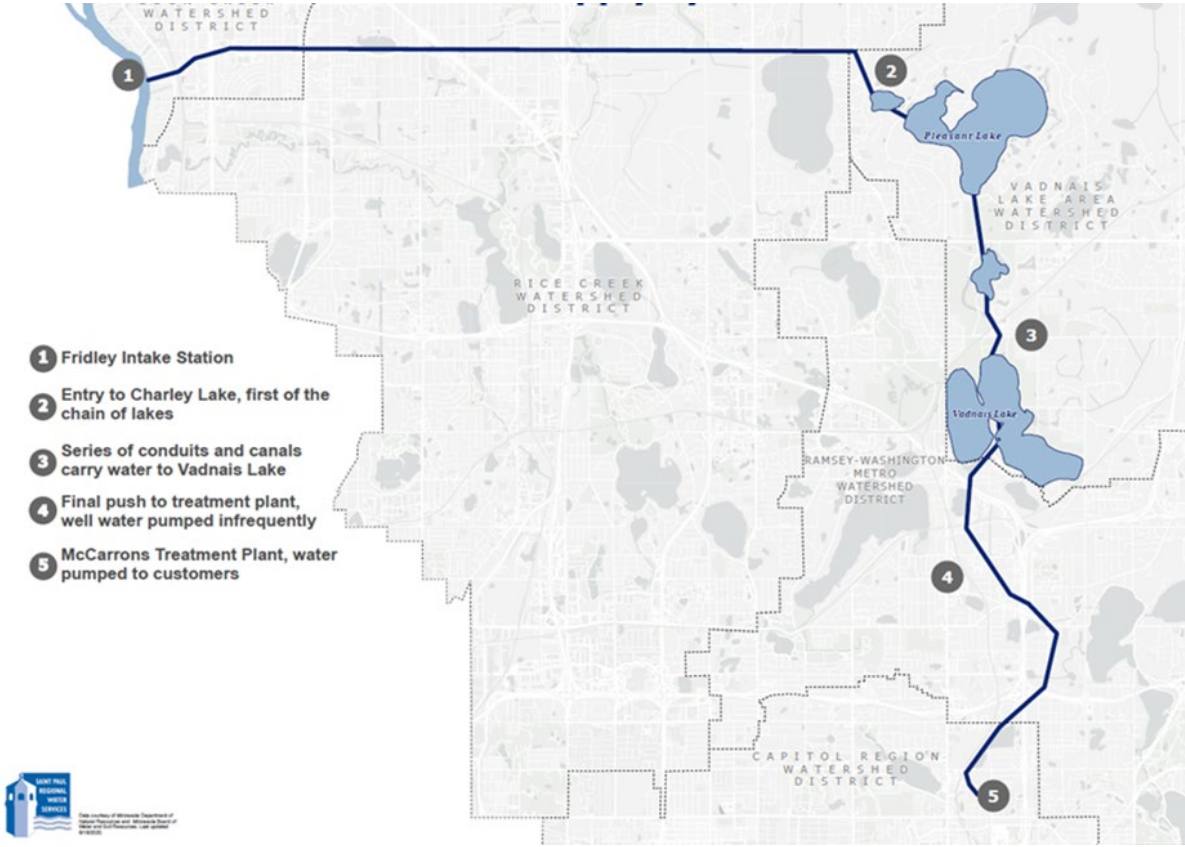
- Regional supplier of water and services to Saint Paul and surrounding suburban communities
- ~450,000 people served
- ~97,000 accounts
- Owned and operated by Board of Water Commissioners- 7 members.
    - 3 Members of Saint Paul City Council
    - 2 Saint Paul Residents
    - 2 Suburban Representatives

Supply System

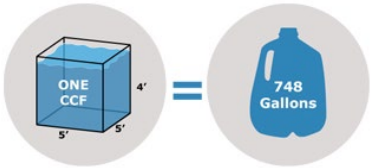
Mississippi River Appropriations Permit:
Up to 109 MGD

Treatment Capacity
Current Treatment Plant: Max ~ 120 MGD
New Treatment Plant: Max ~112 MGD
Full Redundancy: ~ 84 MGD

We can build a 5th clarifier for an additional 28 MGD if deemed necessary in the future.



Current Rate Structures (2024)



Retails Rates

Consumption Based
Winter Rate: $4.00/unit
Summer Rate: $4.14/unit
Water Main Surcharge: $0.24/unit

Water Service Base Fee:
$7.25/month (5/8, 3/4, 1” Single Family)

Right-of-Way Recovery Fee:
$1.50/month

Wholesale Rates

Rates (consumption + base) are calculated using a variety of factors including demand on SPRWS system infrastructure.

Wholesale study completed every 5 years as a group.
Next Study: 2028

Roseville (1,714 Million Gallons/Year)
Average: $2.56/unit = $3,421/Million Gallons
Volume Rate (60%)

Little Canada (354 Million Gallons/Year)
Average: $2.61/unit = $3,489/Million Gallons
Volume Rate (60%)

University of MN (117 Million Gallons/Year)
$5.11/unit = $6,829/Million Gallons
Volume Rate (92%)

McCarrons Plant Project SPRWS

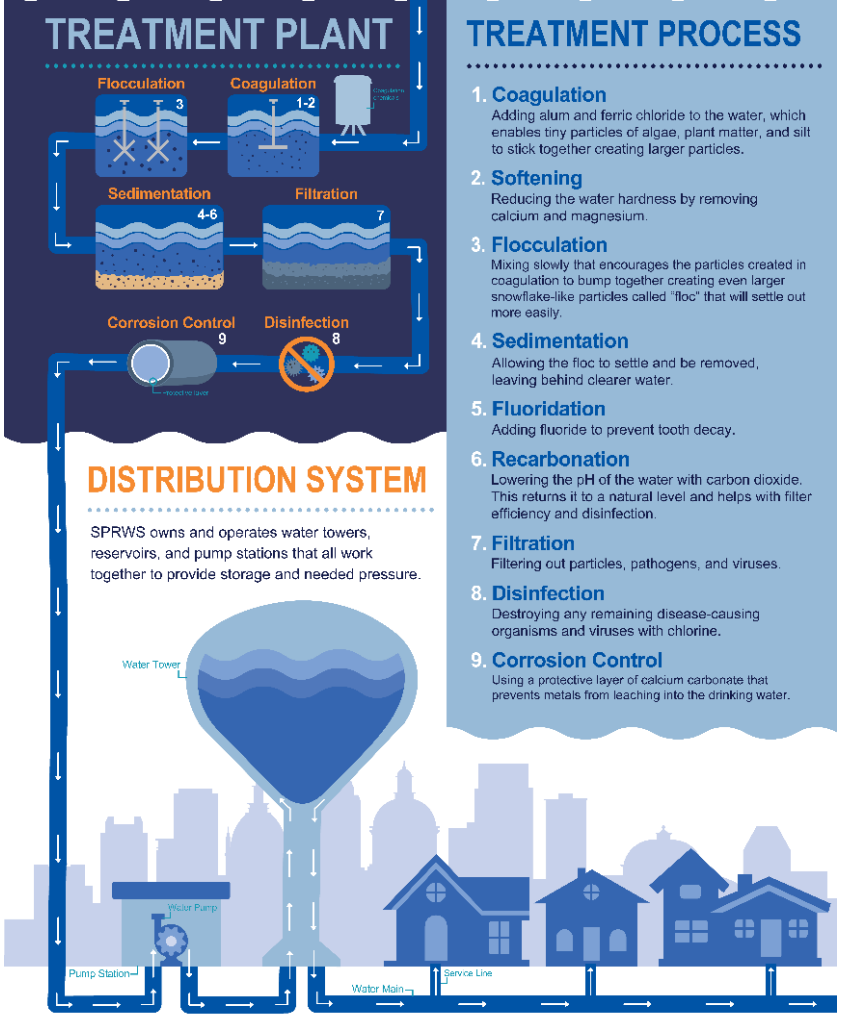
Construction began in February 2022

Begin operations in Summer 2025

Proactively replacing 100-year-old infrastructure. Improvements to redundancy and removal of emerging contaminants of concern.

2/3 of existing facility being replaced with modern technology: batch slaking, softening clarifiers, recarbonation. Adding ozonation.

SPRWS
System Overview



2023
Production Data

Lowest Day:

29 Million Gallons (January 31st)

Highest Day:

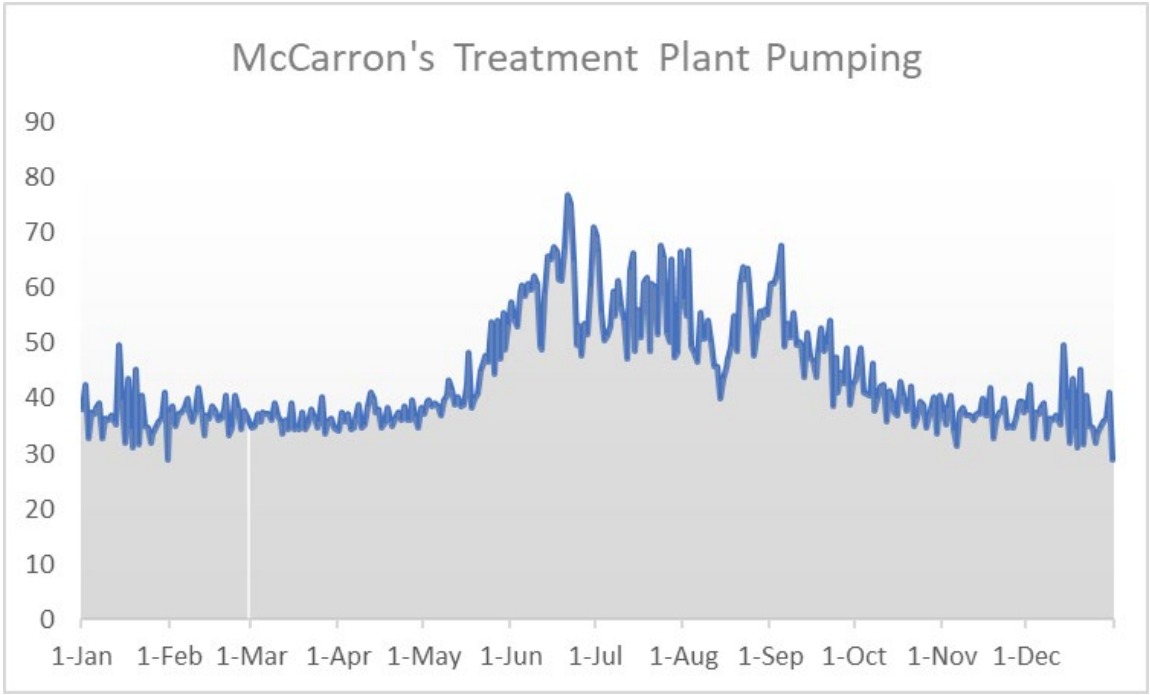
77 Million Gallons (June 21st)

Average Day:

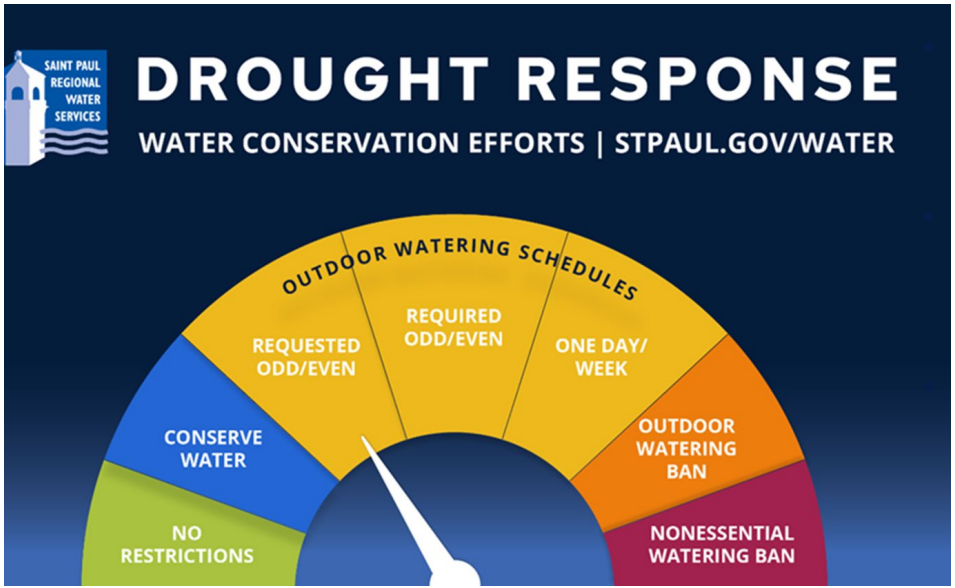
44 Million Gallons

Total Annual Production:

16 Billion Gallons



What About Droughts?



Drought Warning Phase

- Flow Rate < 2000 cfs for 5 consecutive days
- SPRWS Goal: Reduce to 50% above January levels:

  35.595 * 1.5= 53.4 MGD

Drought Restrictive Phase

- Flow Rate < 1500 cfs for 5 consecutive days
- SPRWS Goal: Reduce to 25% above January levels:

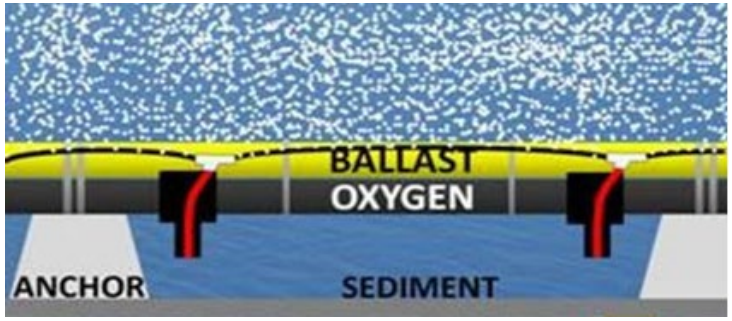
  35.595 * 1.25= 44.25 MGD

Emergency Phase

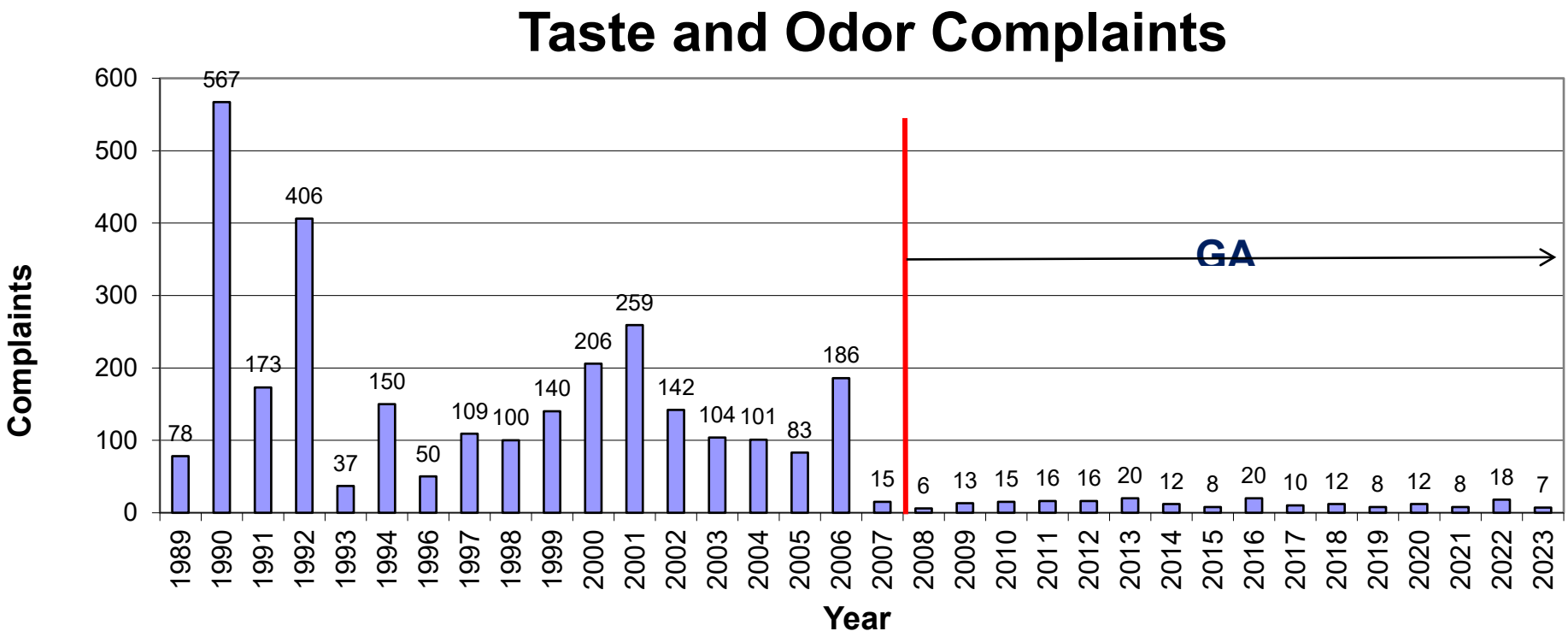
- Flow Rate < 1000 cfs for 5 consecutive days
- Public water suppliers implement mandatory water use reduction actions with a goal of reducing water use to January levels.

How Do You Control Taste and Odor?

- Control External Phosphorus Loading from Mississippi River Entry Into Lakes: Ferric Chloride Injection at Fridley Pump Station
- Control Internal Phosphorus Loading from Lakes Sediment Released under Anoxic/Reduced Condition:
  - ➢ Oxidize Pleasant and Vadnais Lake with Hypolimnetic Aeration treatment
  - ➢ Dose Ferric Chloride into Vadnais Lake

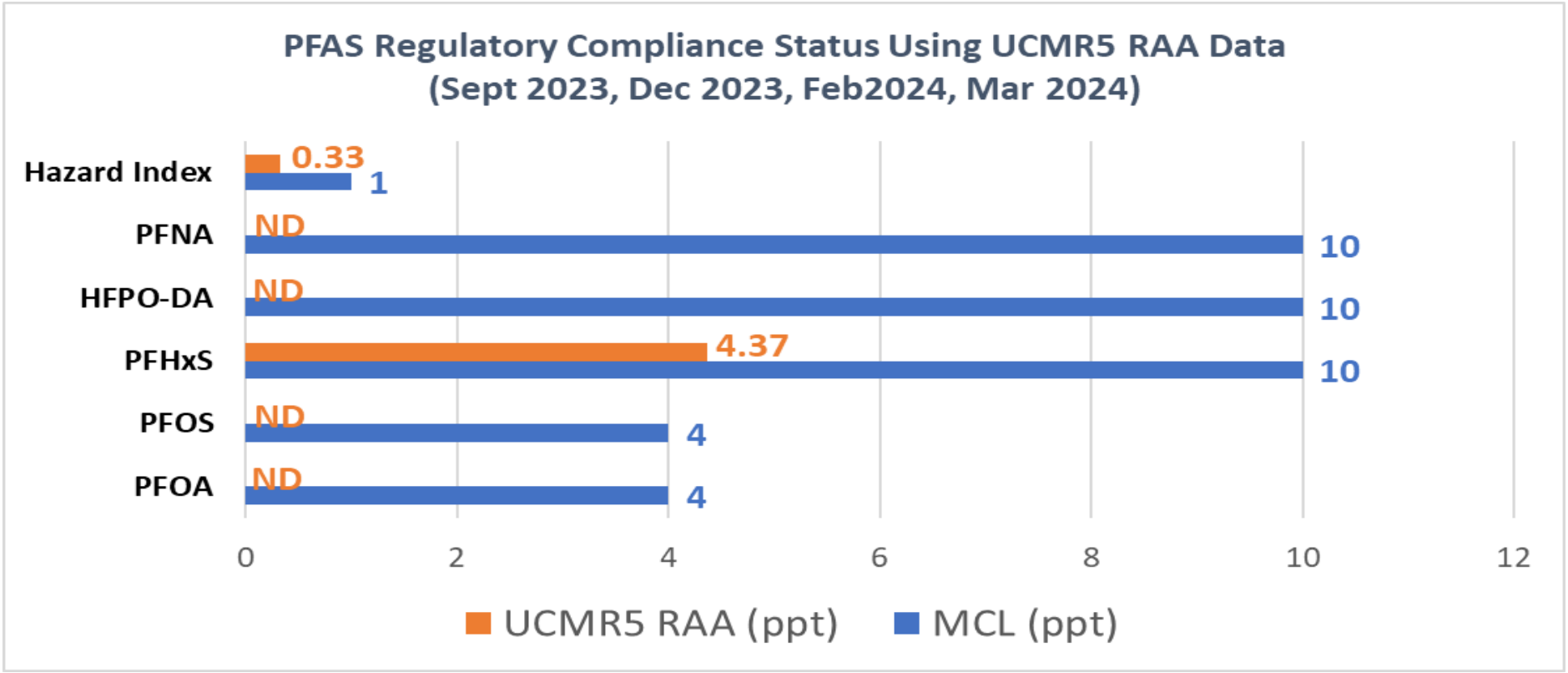


SPRWS Drinking Water Taste & Odor Complaints Trend



What Are You Doing About PFAs?

Overview of SPRWS PFAS Detection in Entry Point



PFAS Planning for Future

- ✓ Ongoing Monitoring of PFAS in Source Water and Drinking Water
- ✓ Work with stakeholders like MDH and MPCA to implement source water protection best practices:
  - ➢ Require pre-treatment for industrial facilities discharge that release PFAS into sewers and storm drains or off-gas treatment in stacks at manufacturing plants
- ✓ Validating treatment technologies through bench and pilot-scale testing
- ✓ Initiate engineering feasibility study to help SPRWS to select the best PFAS removal treatment technology if PFAS trend is rising
- ✓ Lining up funding options for 3 years planning in design for construction of new treatment system to remove PFAS approaching MCL level or Hazard Index trigger at 0.90
  - ➢ The Bipartisan Infrastructure Law set aside $9 billion for PFAS-impacted drinking water systems
- ✓ Evaluating options for full-scale PFAS treatment
- ✓ Establishing strategic communication plan

Thank You

Questions?

www.stpaul.gov/water