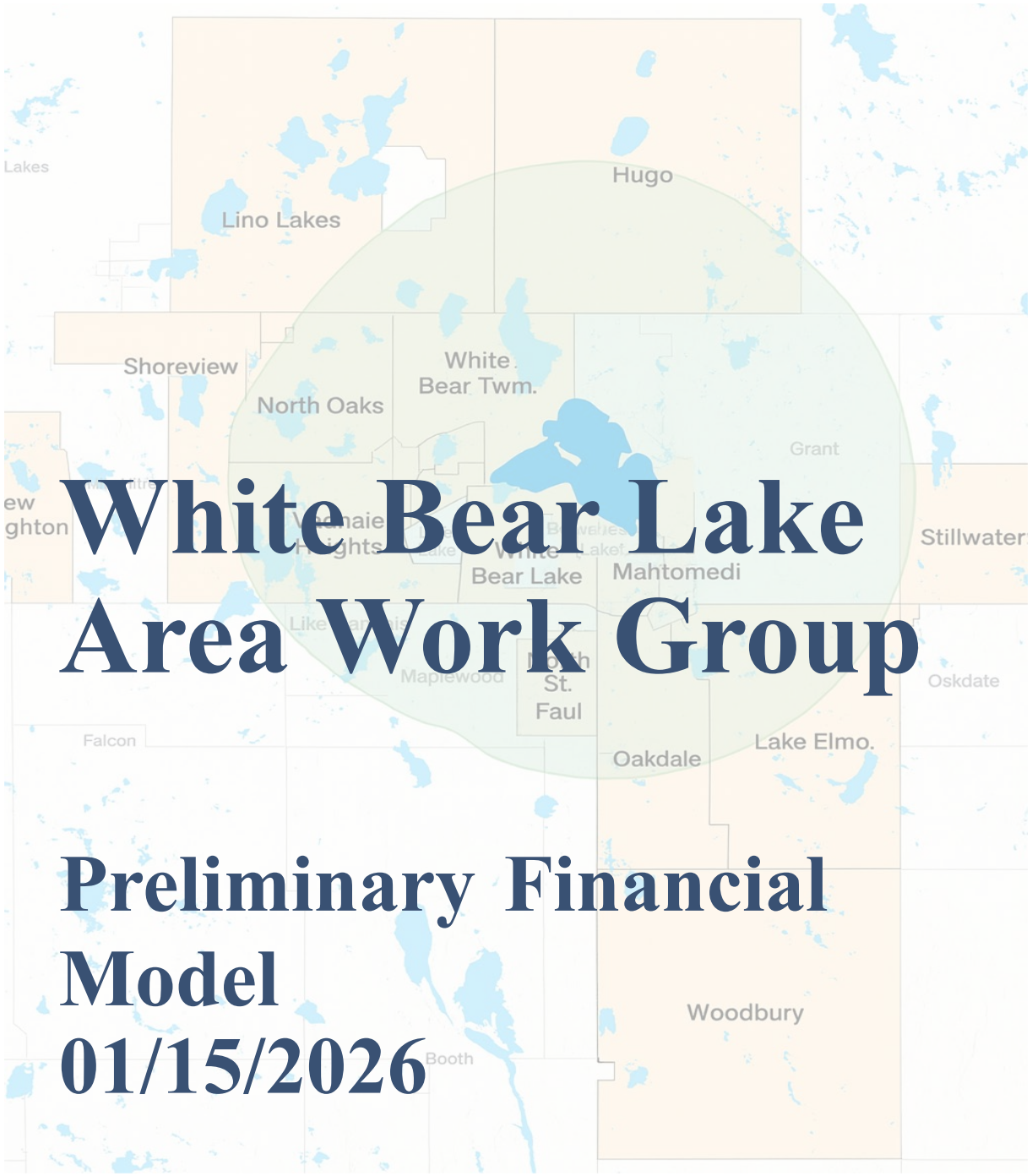


White Bear Lake Area Work Group

Preliminary Financial Model 01/15/2026

Hazen

Agenda

- Introduce Hazen Team and Scope of Financial Analysis
- Preliminary Financial Model
  - **Model Inputs**
  - **Baseline Model Outputs**
    - *Rates Comparison, Affordability, Model Prediction*
- Regionalization and Cost Sharing Examples
- Work Group Exercise and Discussion

Introductions and Scope Overview

Introductions, Goals, and Objectives

- **Introduction to the Hazen Team**
- **Overarching Project Goal**
  - **Develop a comprehensive plan to ensure communities in the White Bear Lake area (WBLA) have sustainable potable water supply while protecting the water levels in White Bear Lake.**
- **Financial Assessment Objectives**
  - **Assess how the estimated cost associated with supply alternatives could potentially impact the rate payers and communities in the WBLA.**
  - **Support comprehensive plan technical teams by advising them on cost considerations.**
- **Work Order #1:**
  - **Preliminary work to streamline the financial analysis of the technical alternatives**
  - **The effort will yield:**

    1) a foundational assessment of financial status for each of the fourteen member communities, and

    2) a financial model that can be used to compare the financial impact of courses of action based on estimated costs and user rates generated from the water supply alternative studies.

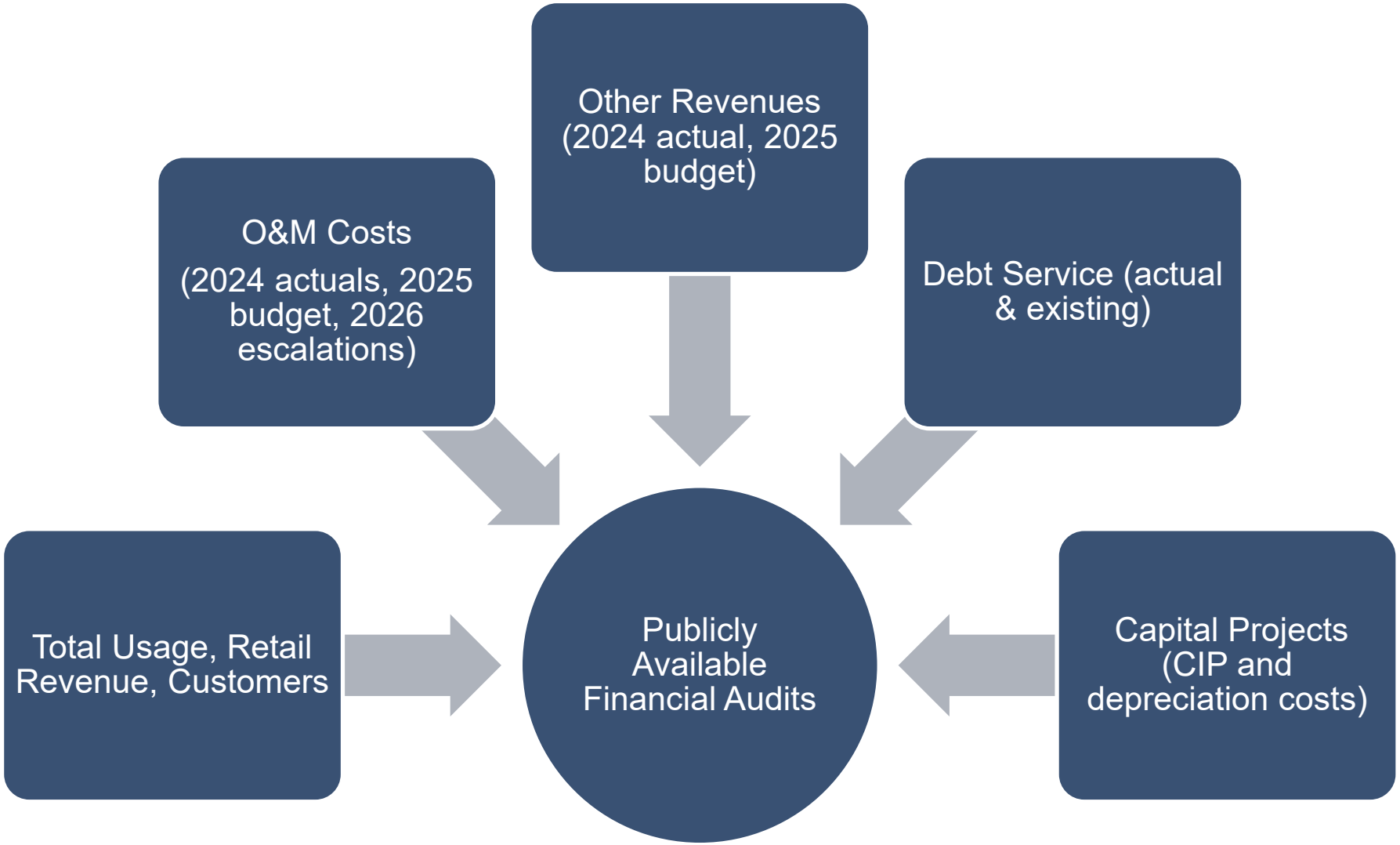
Scope Overview

- ✓**Data Request and Assemblage**
- ✓**Create a Financial Model**
- ✓**Baseline Financial Status Assessment of Each Utility**
- **Next Steps**
  - Seek feedback on baseline financial analysis from communities
  - Use cost data from technical teams to assess financial impact to each community
  - Identify and test funding options to cover costs and projected CIP
- **Deliverables:**
  - Work Group Presentation
  - Technical Memorandum – summarize data, analysis, and model methodology
  - Excel-based preliminary financial model

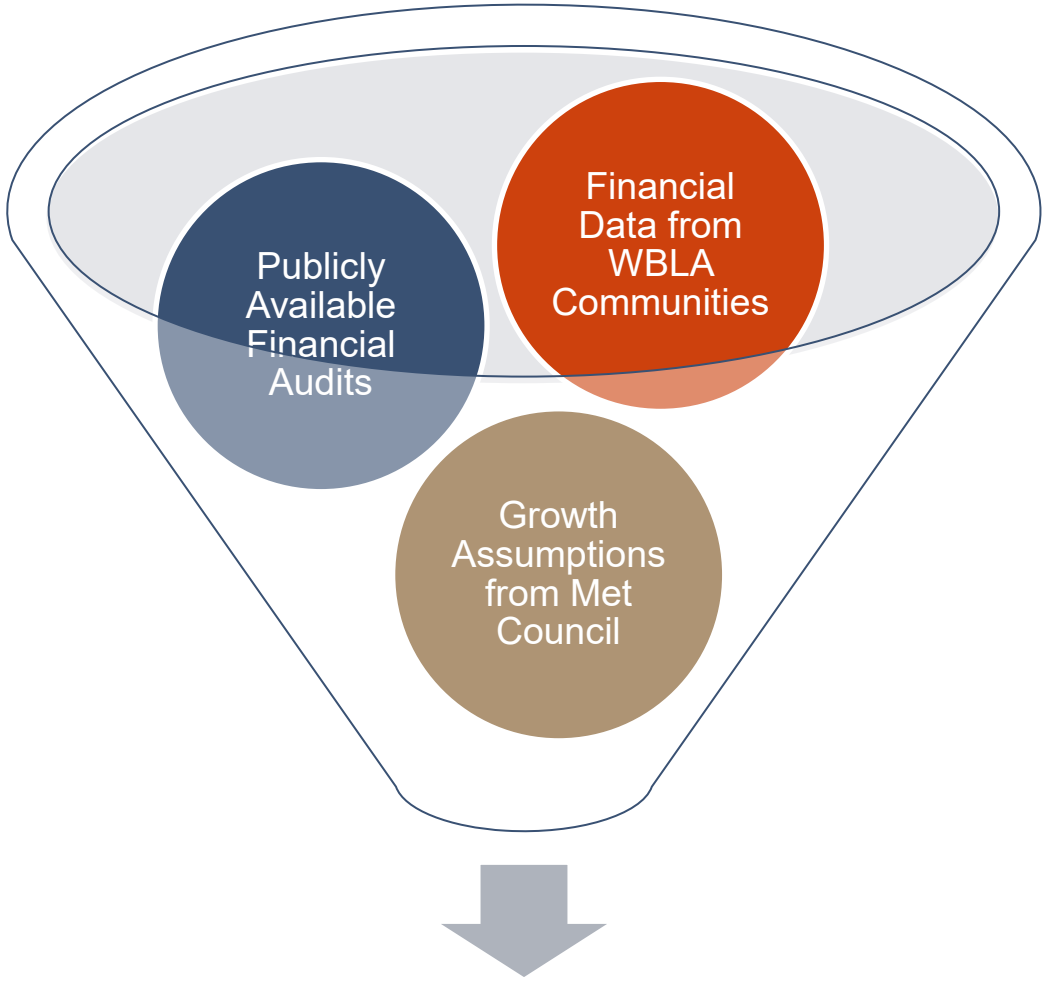
	June 2025 - Dec 2025	Jan-26	Feb-26	Mar-26	Apr-26	May-26	Jun-26	Jul-26	Aug-26	Sep-26
Develop and Test Financial Model	X	X	X							
Evaluate and Document Financial Impact of Water Supply Alternatives		X	X	X	X	X	X	X	X	X

Preliminary Financial Model

Financial Model Inputs – Data Available Online from Community Websites



Financial Model Overview

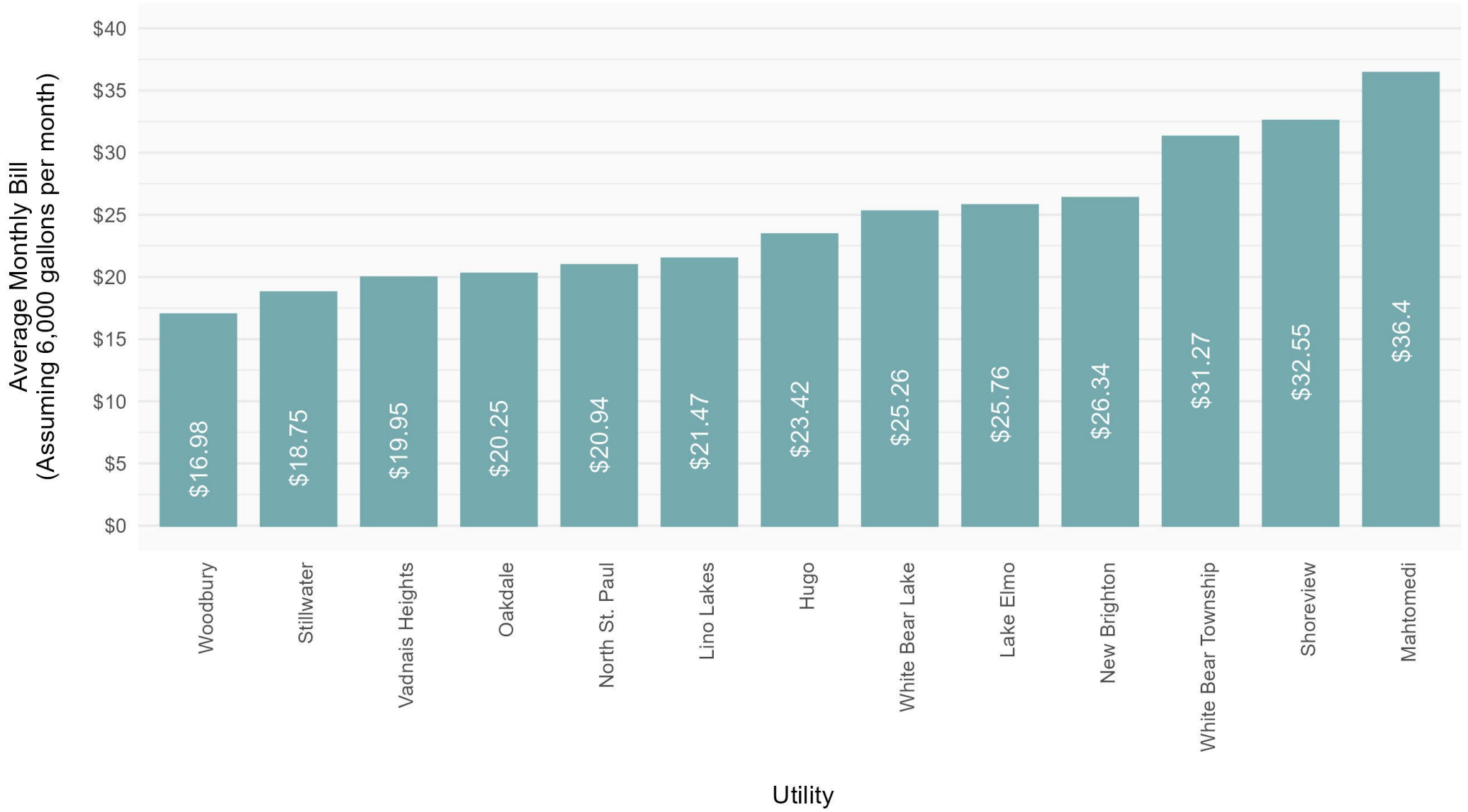


- **Cash Flow Projection**
  - Revenues (account for growth)
  - Expenses (account for inflation)
- **Maintain Financial Health**
  - Minimum Cash Balance
  - Debt Service Coverage
  - Fund Depreciation
- **Main Levers**
  - Rate Adjustments
  - Debt Funding

White Bear Lake Area Rate Benchmarking

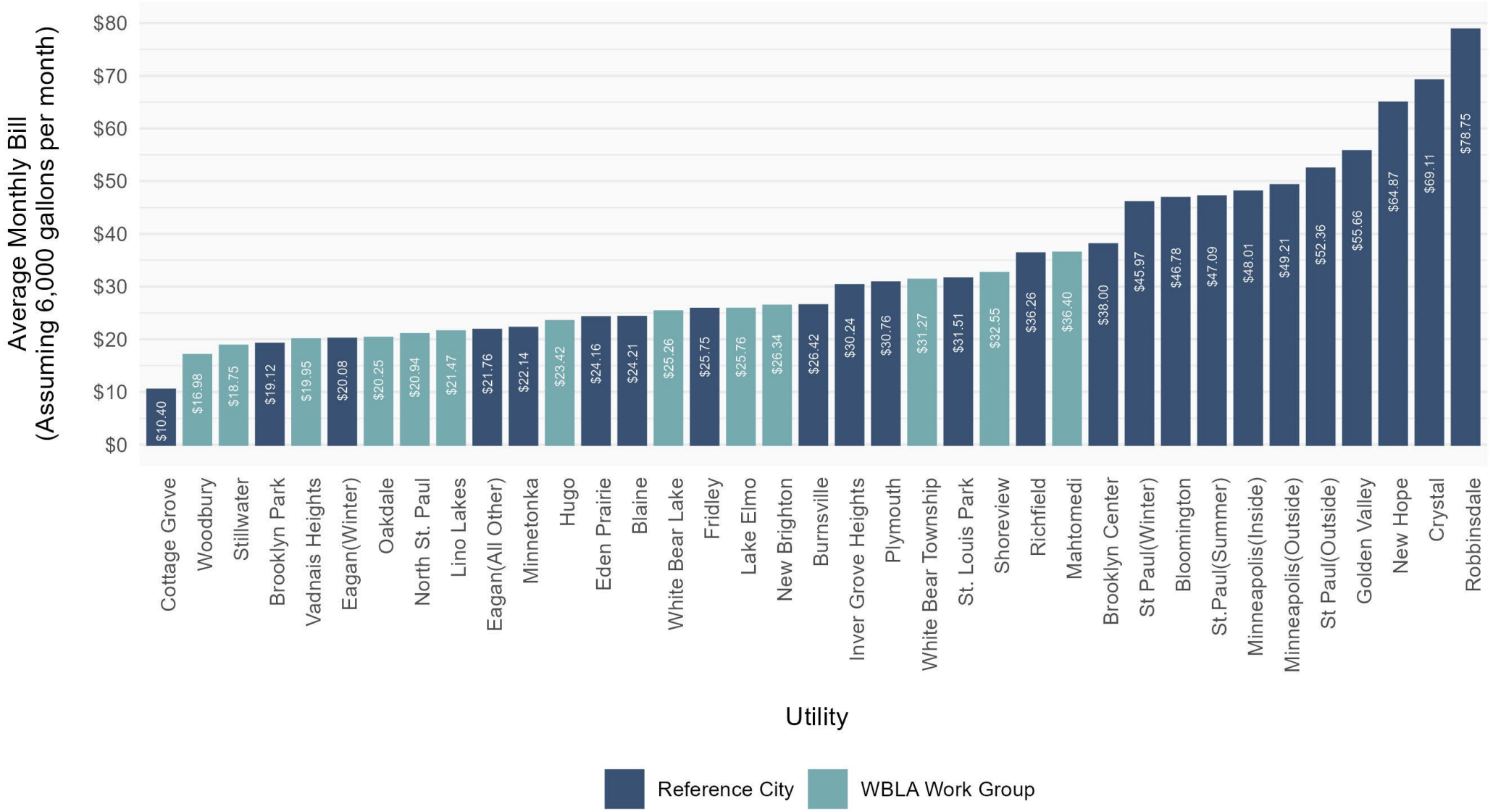
Average Residential Water Monthly Bill

Assuming 6,000 gallons per month of water use



Average Residential Monthly Bill

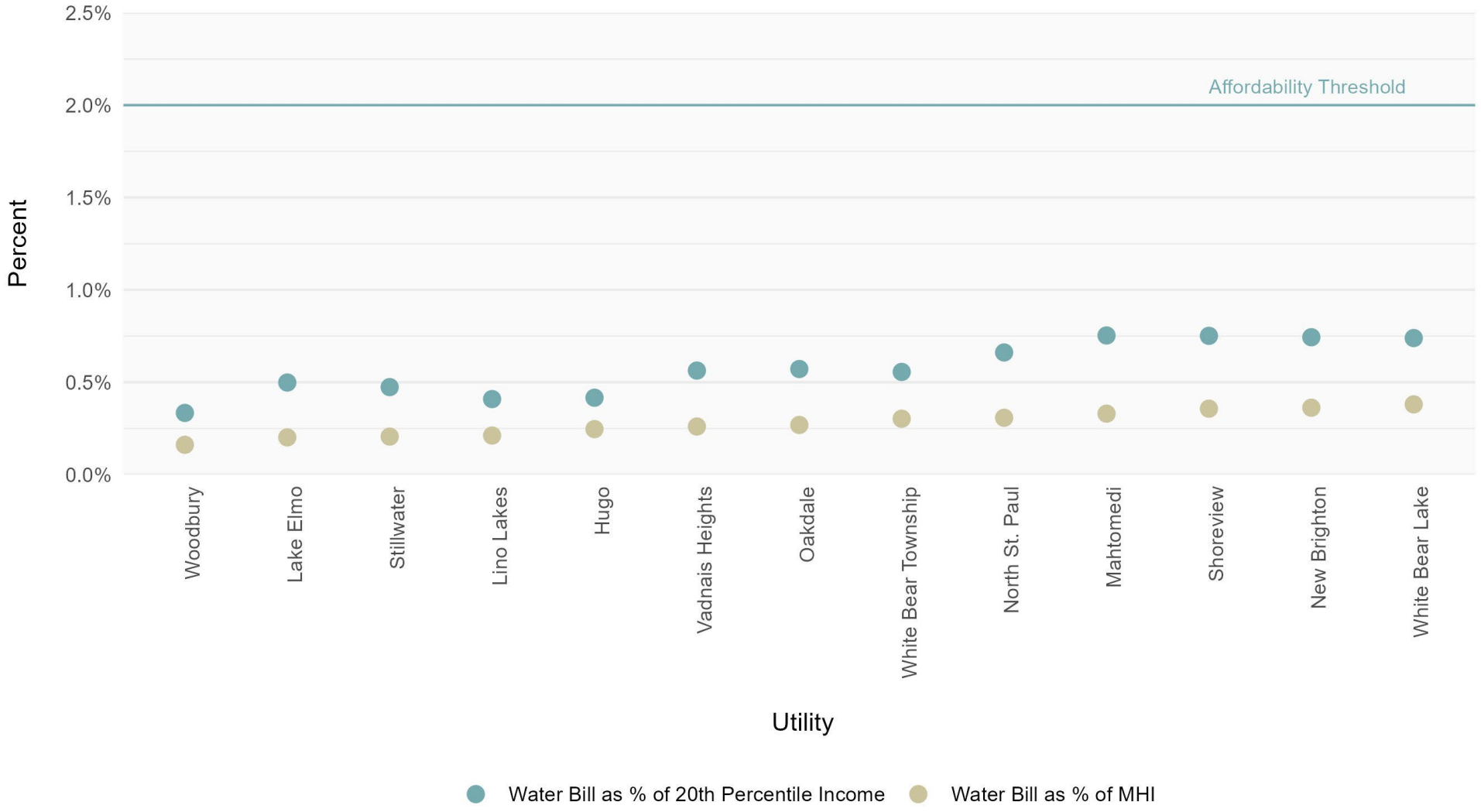
Assuming 6,000 gallons per month of water use



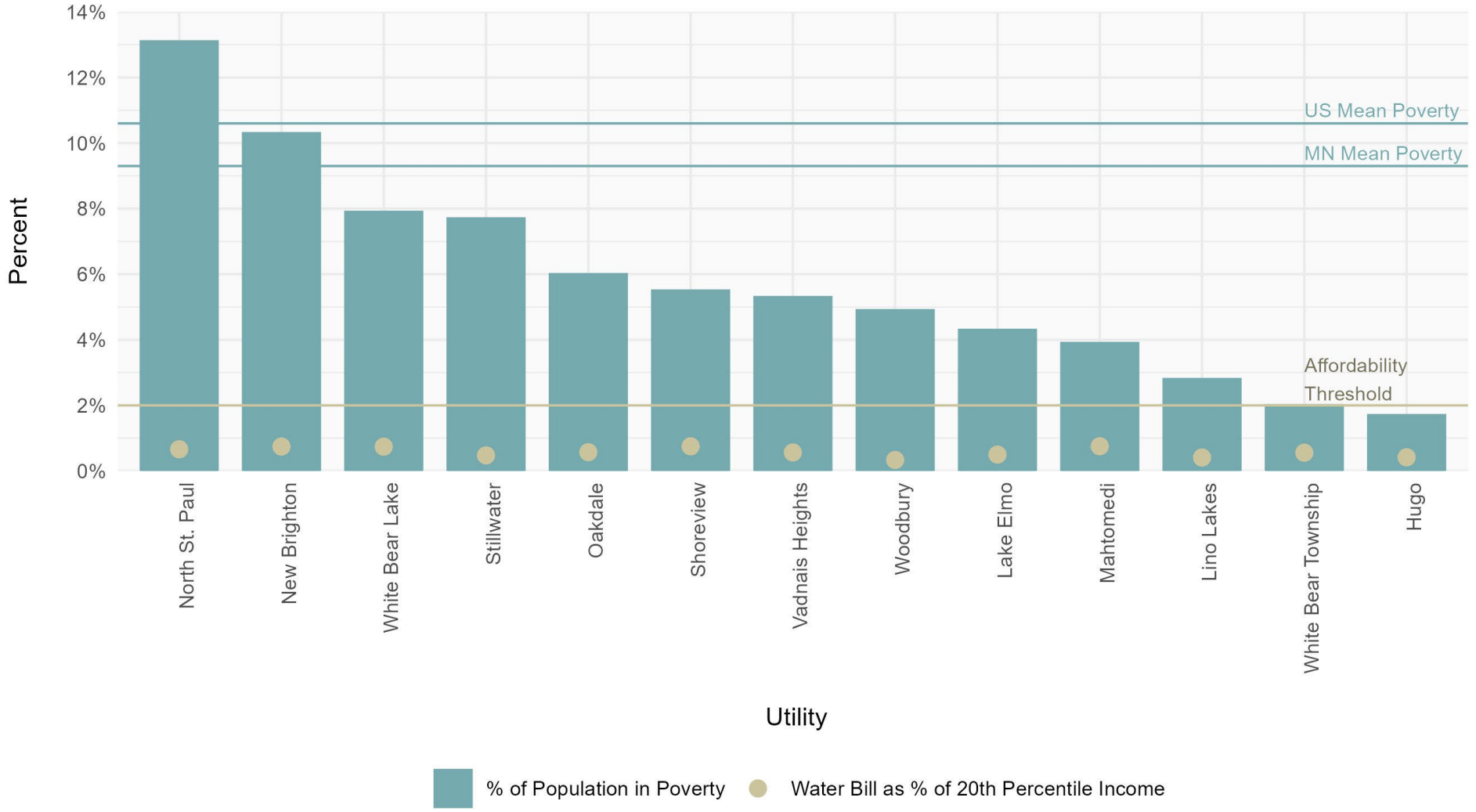
Affordability

Affordability of Existing Water Rates

*** 2025 Annual Water Bills as a Percent of Median Household Income and of the 20th Percentile of Income**



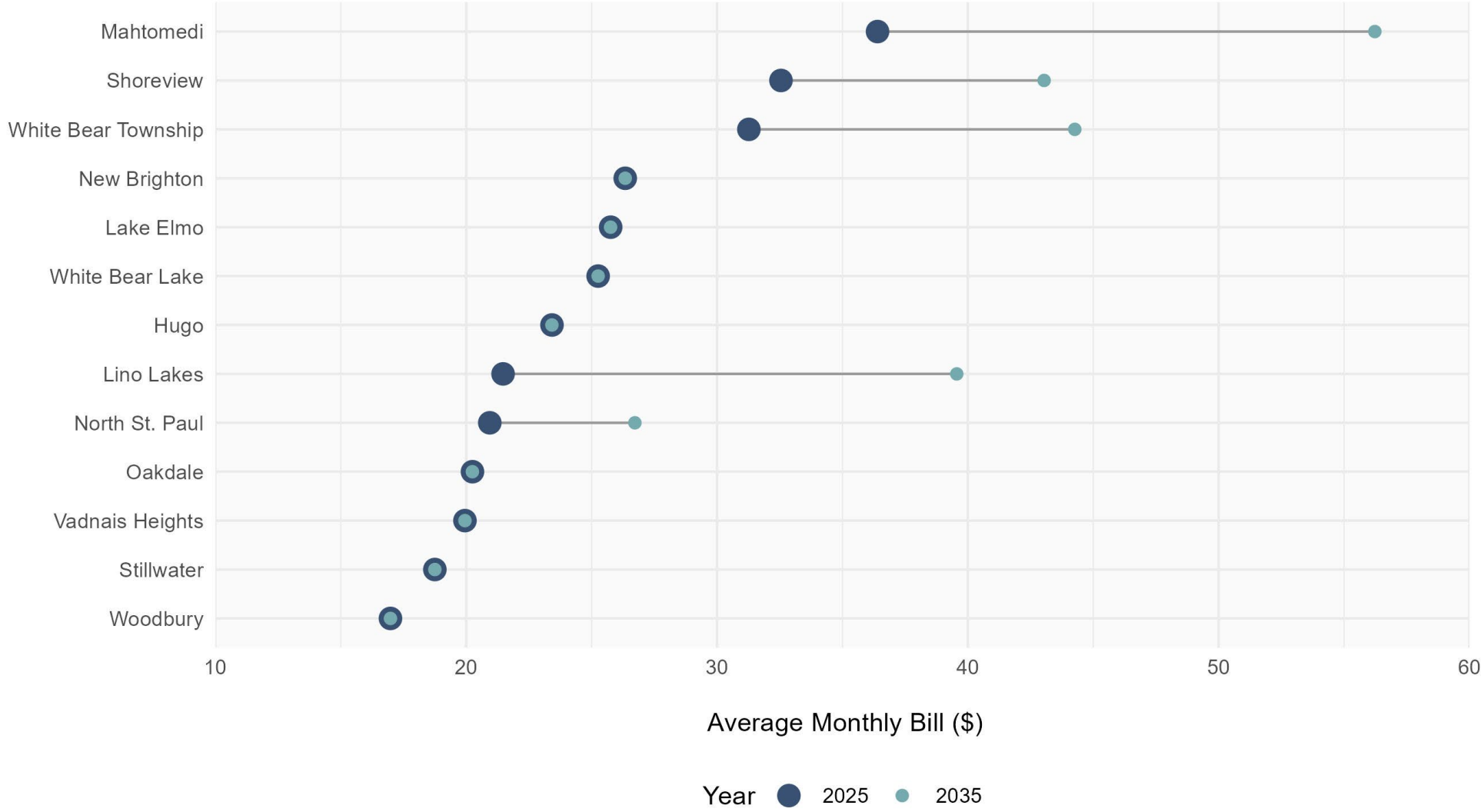
Affordability - Poverty and Bill as a Percent of 20th Percentile Income



Preliminary Model Projections

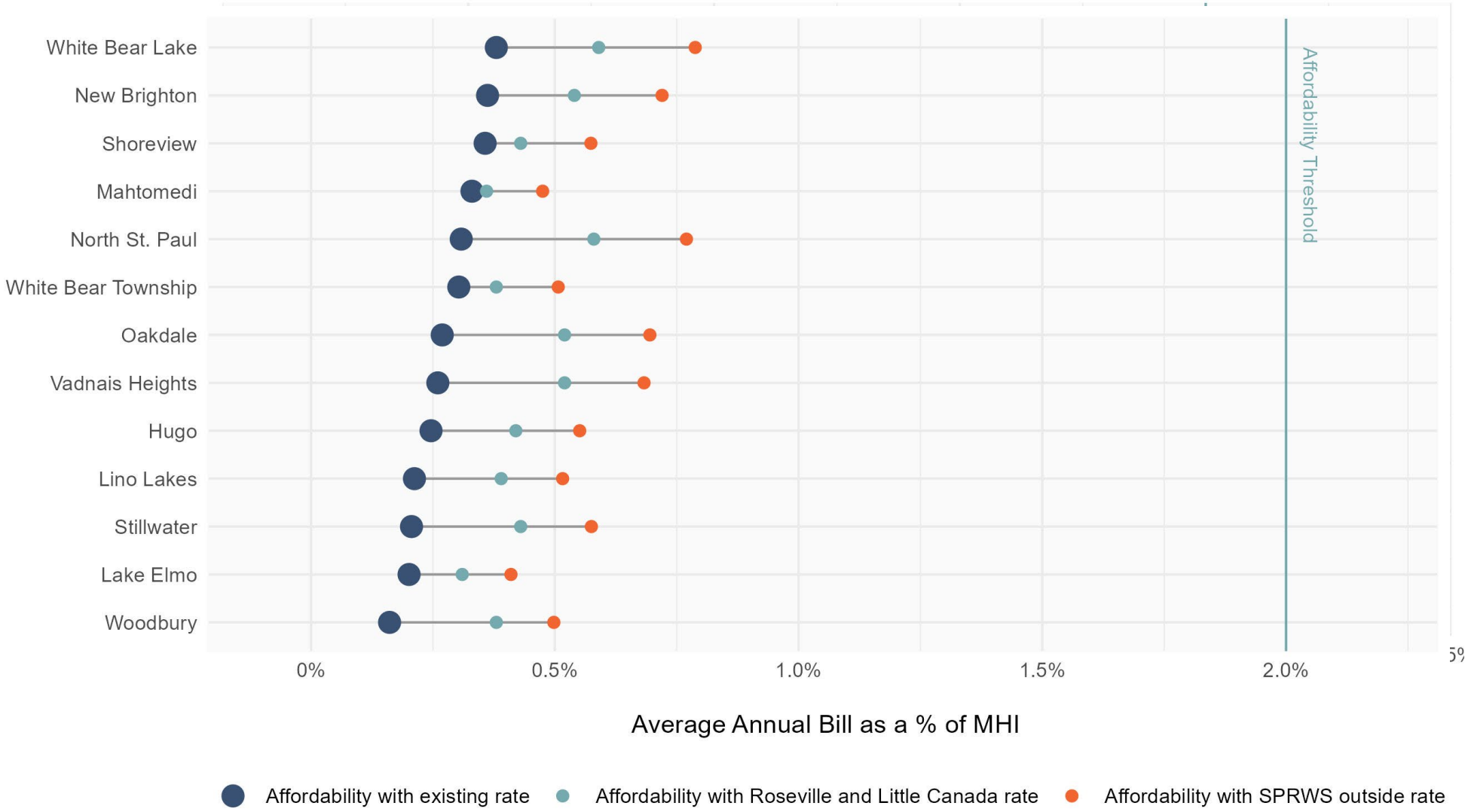
Projected Average Bill if Current Financial Conditions Remain Unchanged

Based on preliminary financial forecast



Affordability with Example Water Rates

*** 2025 Annual Water Bills as a Percent of Median Household Income and hypothetical rates**



****This is not a complete costing scenario.**

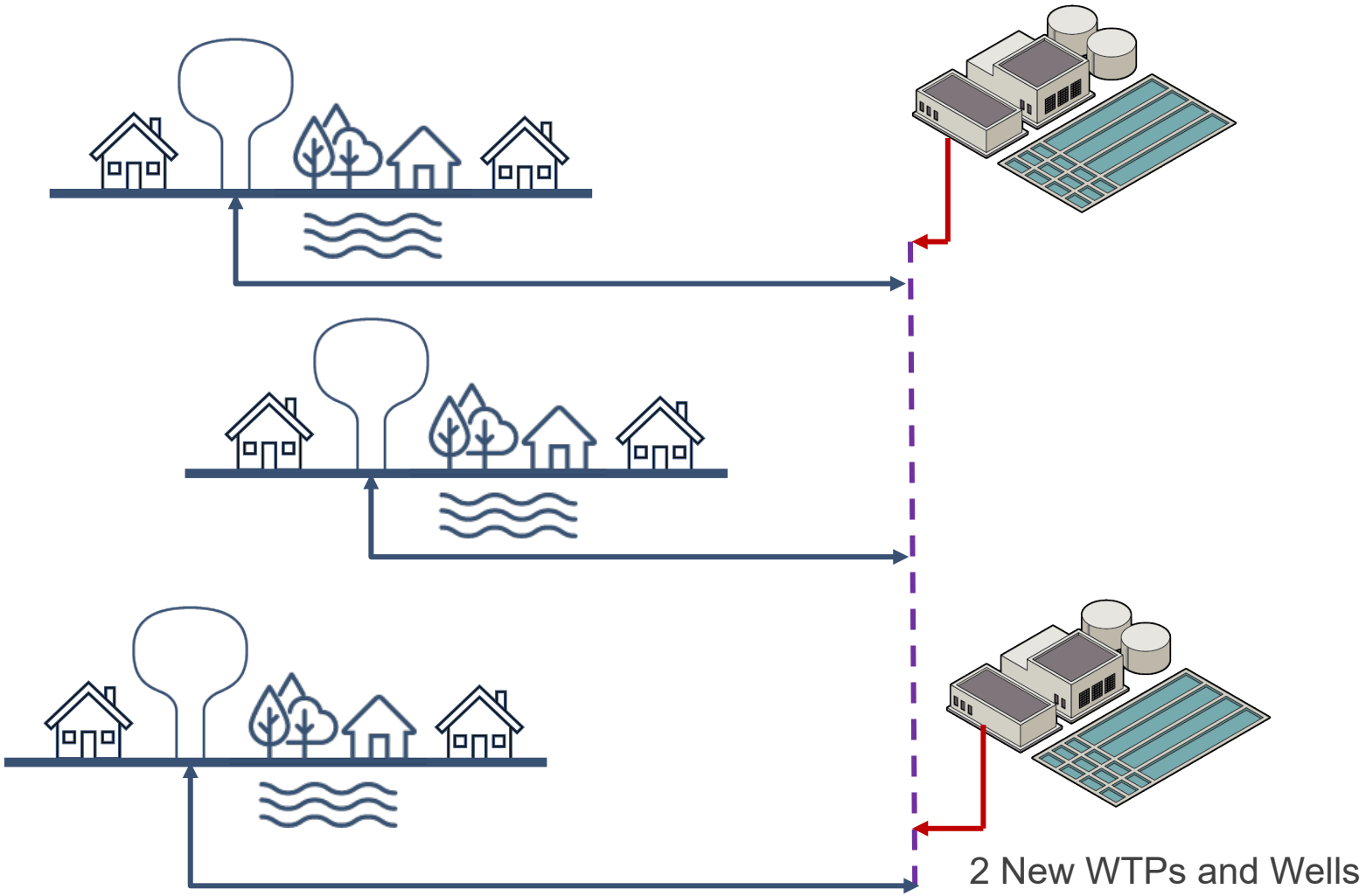
This plot compares affordability in each WBLA community based each utility's **existing rates** and the affordability if rates were set to the reported **rates and service charges for SPRWS outside retail**.

Ultimate forecasted cost and affordability will include the impact of adding and maintaining new infrastructure, cost savings from the decommissioning of active wells, and factors specific to each community and/or technical alternative.

Funding Examples from Shared Water Systems

Polk Regional Water Cooperative

Southwest Florida



15 Water Cooperative Member Communities with Existing Water Systems

2 New WTPs and Wells

Cooperation Drivers

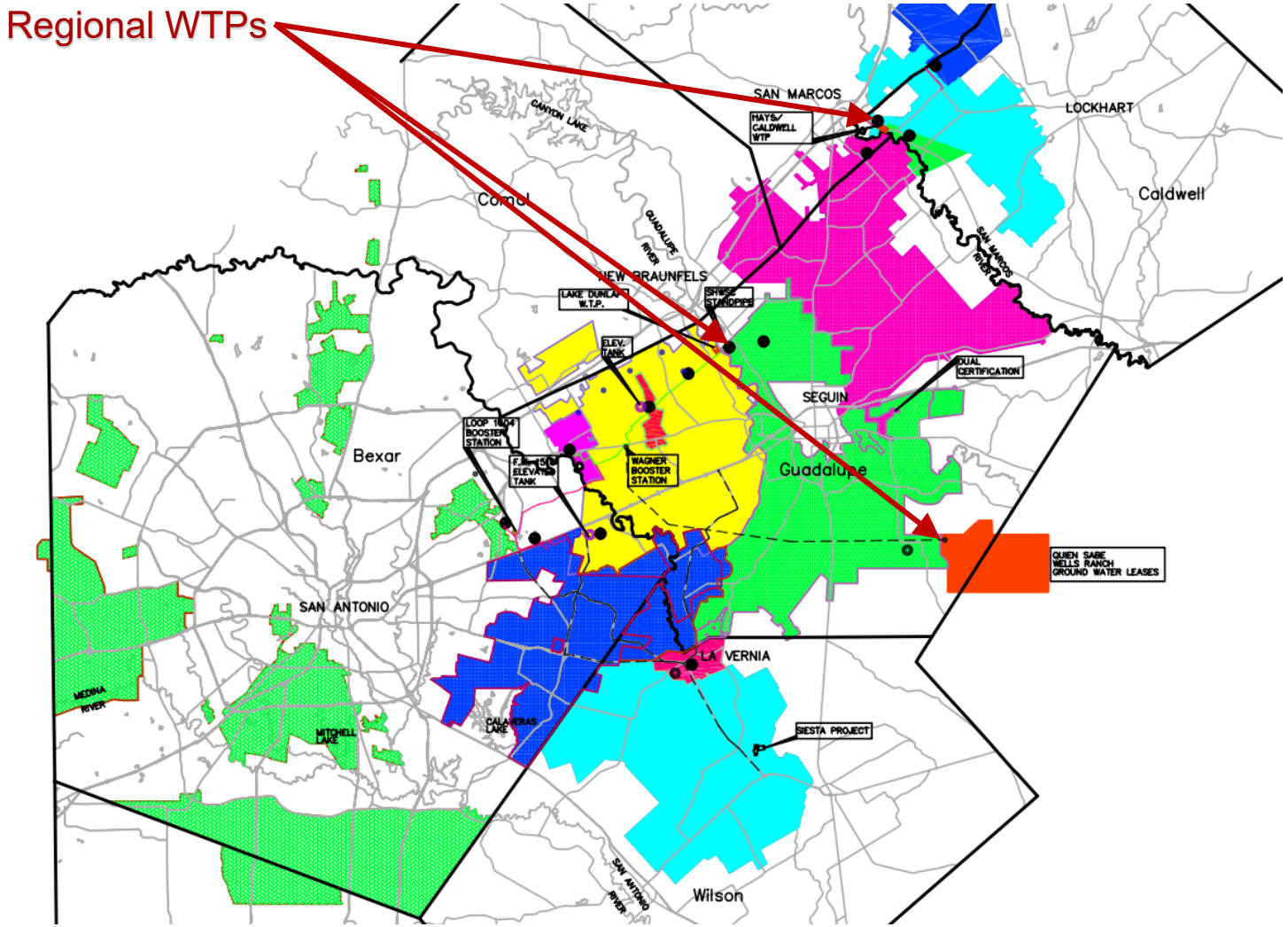
- Address long-term water supply needs by sharing new sources and treatment systems
- Municipalities relied on wells, all in same aquifer with limited sustainable yield
- Population growth, increased demand

Benefits of Cooperation

- Shared cost of new, deeper wells and advanced treatment facilities
- Supports growth of all member communities

Canyon Regional Water Authority

Texas



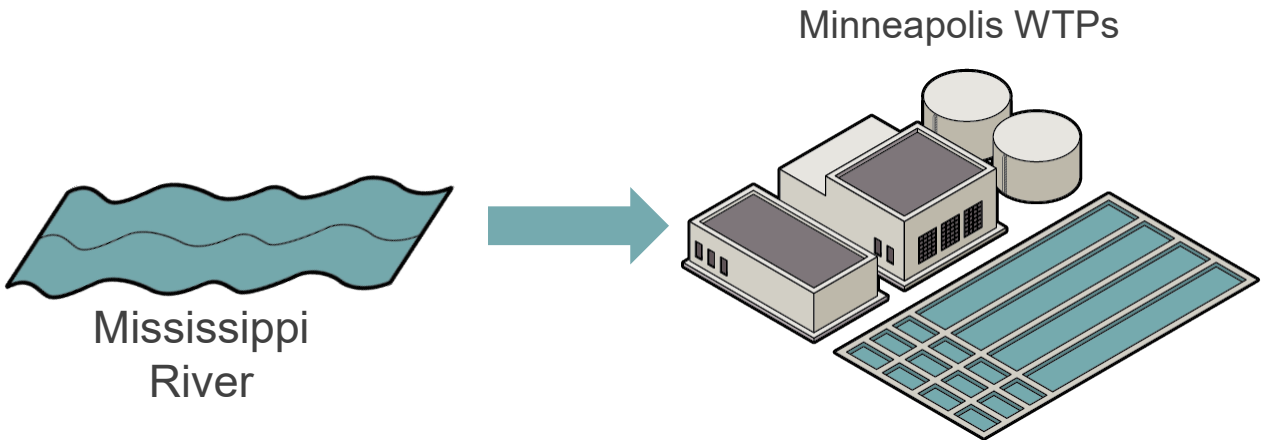
Cooperation Drivers

- State legislation (1989)
- Over-pumping of the Edwards Aquifer to supply many small communities
- Population growth, increased demand

Benefits of Cooperation

- The Water Authority can implement sustainable water management for the entire region
- Consensus on plans for water supply, treatment, and distribution for region's municipalities, water corporations, and utility districts
- Surface water sources were developed to reduce aquifer pumping
- Shared cost and benefits of growth

Crystal, New Hope, and Golden Valley – Joint Water Commission (JWC)



- Minneapolis residents
- Individual communities: Columbia Heights, Bloomington, Edina
- JWC (Crystal, New Hope, and Golden Valley)

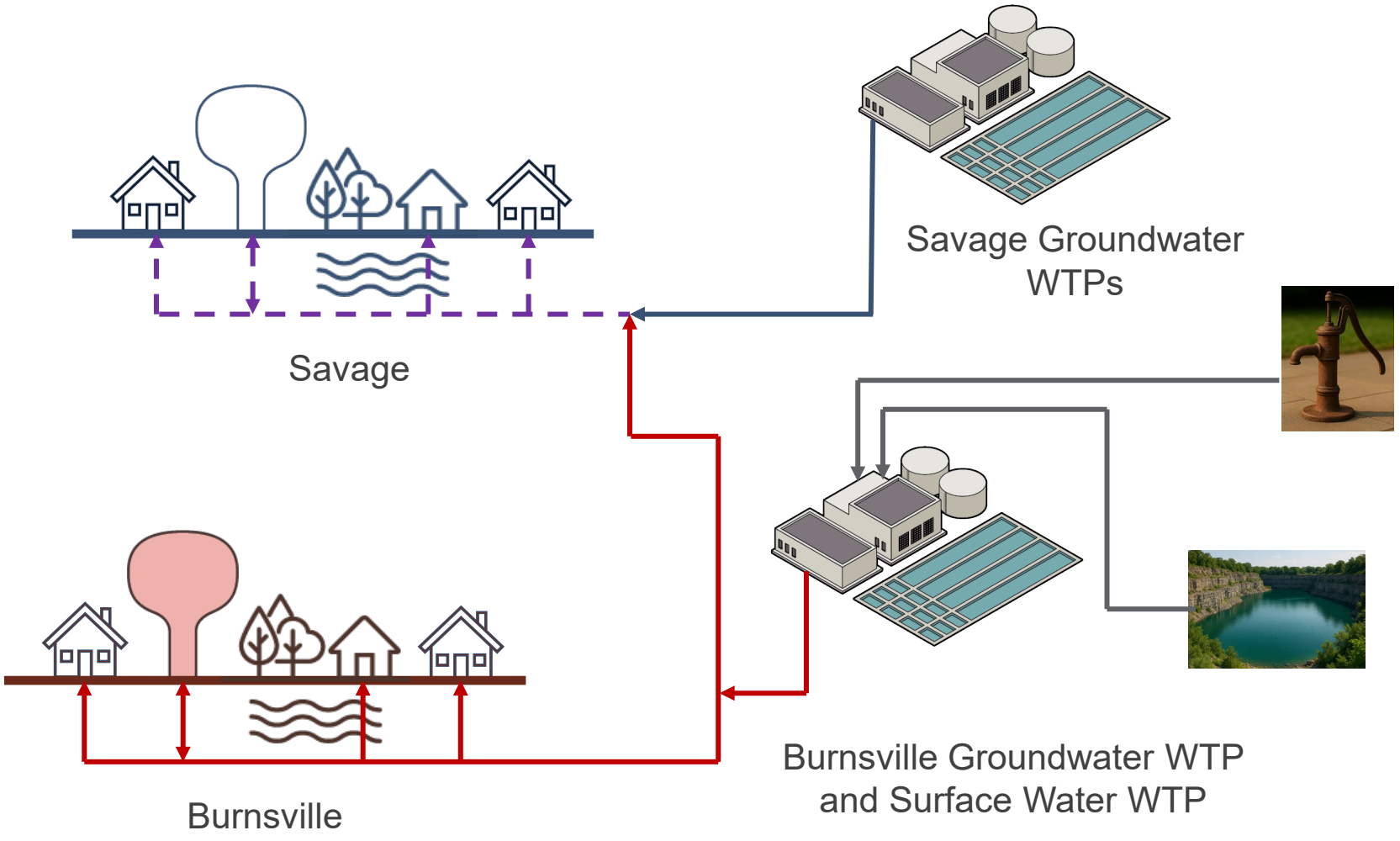
Cooperation Drivers

- Growth
- System resiliency and redundancy
- Water quality (softened)
- Cost effectiveness

Benefits of Cooperation

- High quality finished water
- Shared, existing treatment infrastructure
- Generates revenue for Minneapolis

Burnsville and Savage, MN



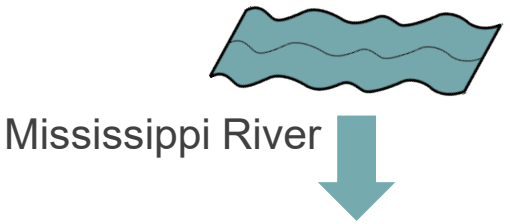
Cooperation Drivers

- Kraemer Quarry in Burnsville wanted to expand operations but was limited by mine pit dewatering discharge restrictions
- Population growth
- Cities' existing groundwater withdrawals were stressing the region's protected calcareous fens

Benefits of Cooperation

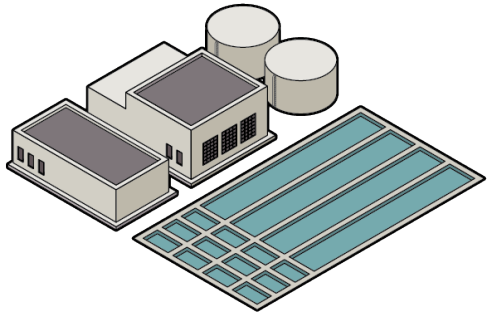
- Responsible use of water resource
- Avoided developing new wells
- Reduced stress on existing wells

Saint Paul Regional Water Services



Mississippi River

Chain of lakes



McCarrons Treatment Plant

- Retail: St. Paul, Falcon Heights, Lauderdale, Maplewood, Mendota Heights, Mendota, West St. Paul
- Wholesale customers: Arden Hills, Roseville, Little Canada
- Limited retail: Lilydale, Sunfish Lake, South St. Paul, Newport

Cooperation Drivers

- Growth
- System resiliency and redundancy
- Water quality (softened)
- Cost effectiveness

Benefits of Cooperation

- High quality finished water
- Shared treatment infrastructure
- Generates revenue for SPRWS
- Minimizes groundwater pumping

Other Examples of Shared Water Systems

System Name	State	Type of Partnership	Ownership	Project Driver	Information Source
Eastern Wyoming Public Service District	West Virginia	Ownership Transfer	EWPDS owns and maintains WTP, interconnections, storage, distribution	15 small, aging water systems with significant microbiological contamination, irregular service, inadequate disinfection, and deteriorating distribution systems	https://nepis.epa.gov/Exe/ZyPDF.cgi/P100399Z.PDF?Dockey=P100399Z.PDF
Alliance Regional Water Authority & Guadalupe-Blanco River Authority, Hays Caldwell WTP	Texas	Joint Powers Authority	Each Authority has separate well fields but pump water to a shared WTP, then pump finished water to their customers	Rapid growth, limited water supply	https://www.expressnews.com/hill-country/article/san-antonio-water-system-guadalupe-blanco-alliance-20789934.php
Woodland-Davis Clean Water Agency	California	Joint Powers Authority	Authority owns and maintains the surface water treatment plant and transmission mains to each community	The Cities of Woodland and Davis relied on local groundwater wells as their primary drinking water source but were facing long-term quality and quantity issues.	https://www.wdcwa.com/operations/water-treatment
Tripp County Water User District	South Dakota	Interconnection of Stand-alone Systems to Private Entity	TCWUD supplies treated water from its wells to member communities. Each member system operates and maintains their own distribution systems.	Water quality and quantity challenges for individual communities and farmers.	https://trippcountywater.com/

Other informative materials can be found at: https://www.epa.gov/system/files/documents/2022-09/water_system_partnerships_-_case_study_summaries.pdf

Questions

Group Exercise