

# Protecting Water Quality and Source Water for Public Health and Long-Term Resilience

Water contamination and its consequences impact public health, ecosystem function and regional economic competitiveness. Over the past century, federal and state water protection laws significantly reduced the amount of pollution in rivers, lakes, and streams nationwide, especially since the passage of the Clean Water Act. However, the country and metro region have not met the ambitious Clean Water Act goal to provide drinkable, swimmable, and fishable water for all areas of the metro region<sup>WQ-1</sup>.

Clean and reliable drinking water is essential to public health, economic stability, and quality of life in the Twin Cities metropolitan region. Communities throughout the region depend on groundwater, rivers, lakes, and aquifers<sup>WQ-2</sup> that can become more difficult and expensive to protect once contamination occurs.

Some contaminants can be treated relatively easily, while others require complex and costly long-term treatment systems once they reach groundwater, rivers, drinking water facilities, or wastewater systems.

Many communities are now facing rising costs related to PFAS<sup>WQ-4</sup> treatment, nitrate<sup>WQ-5</sup> concerns, aging treatment infrastructure<sup>WQ-6</sup>, changing drinking water standards<sup>WQ-7</sup>, cybersecurity expectations<sup>WQ-8</sup>, and climate-related water quality impacts<sup>WQ-9</sup>. Preventing contamination and planning proactively for future treatment needs can reduce long-term costs and risks for residents, businesses, utilities, and natural resources<sup>WQ-3</sup>.

**Preventing contamination can avoid significant costs for investigation and remediation to protect drinking water**

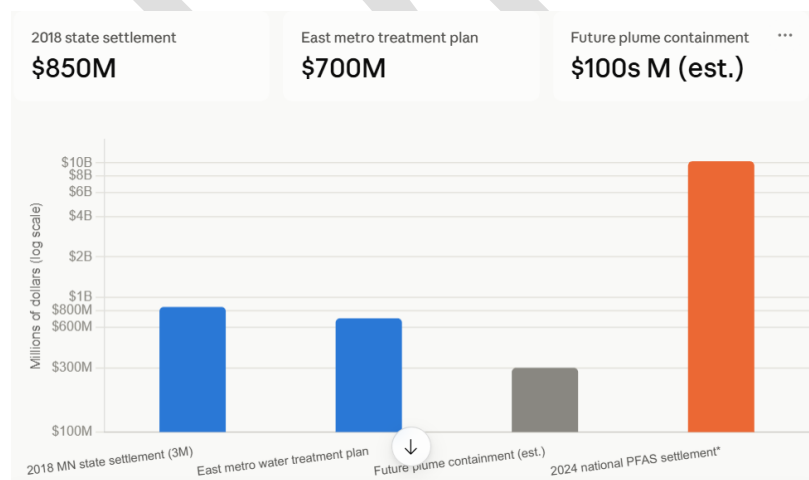


FIGURE 1. PFAS COSTS IN THE TWIN CITIES REGION

## CURRENT CONTEXT

Funding is inadequate for aging and non-sufficient water treatment infrastructure while many utilities face major maintenance on 50- to 100-year old water treatment facilities.

Additional funding is needed for source water planning and protection to prevent groundwater contamination before aquifers become contaminated and very costly to clean up.

Additional funding is needed to treat current (ex. PFAS) and future emerging contaminants (see EPA Unregulated Contaminants Monitoring Rule) with higher levels of water treatment.

## Legislative Opportunities:

### **Support pollution prevention and source water protection**

Provide funding and policy support for practical actions that prevent pollution before it reaches drinking water sources. Examples include efforts that identify and reduce nonpoint source pollution, expanding agricultural conservation practices such as cover crops and nutrient reduction efforts, reducing chloride use on the landscape, and strengthening wellhead protection across jurisdictional boundaries.

### **Invest in drinking water treatment and contaminant response**

Provide sustained funding to help community water suppliers and private well owners address contaminants of concern such as nitrate, manganese, PFAS, chloride, and other known and emerging contaminants through monitoring and treatment.

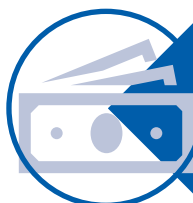
### **Increase capacity for water quality monitoring and research**

Increase investment in monitoring, research, laboratory capacity, technical assistance, and collaboration among agencies, researchers, and local governments so communities have the tools needed to implement effective water quality programs.

## Communities and agencies are taking more proactive and collaborative approaches to protect source water quality:



Eight communities in the western part of the Twin Cities metro region collaborated with the Minnesota Department of Health to pilot the state's first multi-community Wellhead Protection Plan.



Minnesota is providing funding to communities and watersheds to protect source waters through grants to implement source water protection plans, watershed plans, and county groundwater plans.



Minnesota's Total Maximum Daily Load (TMDL) effort has led to water quality improvements, including the receiving waters of wastewater treatment facilities upstream of water supply intakes in the metro region.

To see the full report: [LINK/QR code to website where full report is posted](#)