International Falls Water Treatment Facility Critical Facility Needs

Filters

The original filters were installed over 35 years ago and are showing signs of corrosion failure. The age is directly affecting the quality of the water produced by the facility by allowing particles and pathogens to pass through the filter media.

In addition, the current filter arrangement does not meet the EPA standard for filter to waste operation. Filter to waste is a required process that prevents water containing pathogens to be "wasted" after each backwash. Filter to waste technology needs to be added to the existing filters to meet EPA requirements and protect system users from exposure to pathogens.

Filter Valve Actuators

Filter valve actuators allow the crucial backwash cycle to function automatically before high levels of contaminant breakthrough are detected. The existing equipment is obsolete and repair parts are hard to locate. Replacement is required to ensure timely backwashes and safe drinking water.





Chemical Feed Systems

The entire chemical feed system is in disarray:

- Incompatible chemicals are stored together and could create a hazardous reaction or explosion
- A polymer leak could contaminate the finished water system
- Ventilation issues expose staff to dangerous gases and unsafe working conditions
- Inaccurate monitoring risks improper disinfection and poor water quality delivered to the community
- Staff sustained work related injuries from the strenuous physical demand of manually carrying 50 lb soda ash sacks to the feeder daily





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Flooding Potential

In 2022, the Rainy River was within a foot of flooding the plant. Had this occurred, the facility would have been out of operation for weeks or even months, resulting in catastrophic failure of the water supply chain.

Frequent Pump Failures and Electrical Issues

Pumps throughout the system are 35 years old and not reliable to move water throughout the facility. Electricians visit the plant more frequently to deal with the pumps and other electrical issues.

4,000 Gallon User Rates

Average Cost of Similar Cities (28 Cities)	\$41
International Falls Total Average Cost	\$61
Rate Estimate with Funding Assistance	\$72
Rate Estimate without Assistance	\$84

Affordability and Equity

The treatment facility serves an Environmental Justice Area where 35% of the people are 200% under the poverty income. International Falls also has significantly higher water rates compared to similar sized cities in Minnesota due to its geographical location. Assistance is needed to keep water affordable.