TOWN OF POWERVIEW – PINE FALLS

Public Water System Annual Report ***February 2026***

The Council for the Town of Powerview – Pine Falls is dedicated in providing quality potable water to our residents in an efficient, reliable manner. It is our belief that citizens deserve to be informed concerning the water they consume and that is the intent of this report.

Where do we get our water from?

The Winnipeg River is our source of raw water. The raw water is piped to the water treatment plant owned and operated by the Town of Powerview – Pine Falls. Potable water from the water treatment plant is distributed through a piping system to our residents.

Type of Water Treatment

Treatment of raw water consists of a "coagulation/flocculation process" followed by sand filtration. These processes clarify the water and remove microbial contaminates (i.e.; bacteria) and organic material normally found in river water.

Water Disinfection

The Drinking Water Safety Act and supporting regulations require water in a potable system be disinfected to ensure safe drinking water throughout the distribution system right to the consumer. The Town Water Treatment Plant uses Chlorine to disinfect our water supply and consistently monitor the level as it leaves the plant. The Water Treatment Plant Operators for the Town of Powerview – Pine Falls confirm chlorine levels at the treatment plant and within the distribution system on a regular basis as per provincial requirement. Town of Powerview - Pine Falls water treatment plant operators are fully certified under The Environment Act's Water and Wastewater Facility Operators Certification Program. In July of 2017, the Town installed a UV system that uses ultraviolet light to provide additional Cryptosporidium and Giardia inactivation and also creates a multiple-barrier disinfection system.

Treatment Plant Upgrades

As part of the UV installation in 2017, new pumps were installed in the clear well with new piping supplying finished water to the storage tank. This allows for better chlorine control and allows us to backwash the filters with unchlorinated water. This addresses concerns from the Department of Fisheries and Oceans regarding the discharge of chlorinated waste water to the river.
In 2017 we also had divers inspect the water intake. The intake is in good condition with no sign of deterioration or zebra mussels.

In 2018 the SCADA, (Supervisory Control and Data Acquisition – computer system that operates and monitors the plant), was replaced with a new system.
In 2018 the measuring system on the distribution piping was upgraded with the installation of magnetic flow meters. As part of the installation, many old valves and old mild steel piping was replaced with stainless steel.

VFD's were installed on distribution pumps in 2021 because of the pressure reducing valve failure.

Water Storage

The Water Treatment Plant has a reservoir with the capacity of 672,000 liters to meet our needs. This allows us to shut down for the day if the reservoir is full and do maintenance as needed.

Distribution System

The water distribution system is a network of underground pipes used to carry treated water from the Water Treatment Plant to homes and businesses within our community. The pipe composition consists of a variety of materials based on the year installed. Ward 2 pipes consist mainly of cast steel ranging in 6, 8, & 10 inch size. Some sections have been upgraded to a polyethylene (plastic) pipe in areas where leaks have been prevalent. Ward 1 also has the cast steel piping, however, the eight inch feed line along Main

(Desilet Street to Thomas) was changed to polyethylene in the late 90's and the six inch main along Art was replaced in '06. Fire Hydrants strategically located throughout the distribution system provide fire protection for our residents and businesses.

In 2016 extension of the water main was completed. This line provides potable water to remaining residents of Powerview – Pine Falls that were previously on the Flett's Water Co-op as well as Manitoba Conservation, the Hydro Dam and Hydro Office within the RM of Alexander. Additional fire protection is also provided within Ward II with this line.
The Town replaced a 250 foot section of water main between Tamarack and Cedar Street in 2020.

New water main project took place in 2024, which consisted of a brand new 8 inch HDPE water main extension. This extension forms a loop system from Ward 1 to Ward 2 which will greatly reduce the impact of water breaks on consumers. We will have the ability to isolate the break site and will only affect residents on the immediate break area. This new line starts at the end of Maple street, where the waterline dead ended and follows Dupont street all the way to Thomas street. New tie ins to existing water mains along with new main valves, curb stop valves and new hydrants were all replaced along the way, with 4 additional hydrants installed along the line as well. That was phase 1 of the project.

Phase 2 of the project was a renewal of old cast piping from water plant all the way to Desilet Street. This old line was prone to water breaks the town would have several a year. This was also an 8 inch HDPE pipe. New water main valves, curb stop valves and hydrants were changed along the way. With the addition of more water main valves to help isolation and 1 more hydrant added as well.

Both Phases are complete. While the work was going on there were many times of low pressure or emptying of water lines/mains, new hook ups and every time there was we would go on a BWO for that affected area. After hook up we would do our flushing and pressure testing, sampling for chlorine and turbidity then take our bacterial samples , 2 consecutive sets 24hrs apart wait for results then get BWO rescinded by DWO and medical health officer.

With both phases complete the town is working on new distribution mapping that will have all the new valves and hydrants and extensions up to date along with the old ones as well. Mapping will be available at the town office in the near future.
Funding for the 2 phases was from the water services board was at 50% funded and the other 50% the town's rate payers are paying for it over the next 20 years.

Water Testing

Water samples are collected on a regular basis to ensure our water is safe to consume and to monitor efficiency of the treatment process. We are required to submit all water test results to the provincial Office of Drinking Water.

Bacterial testing: Water Treatment Plant Operators sample the raw water coming in from the river, treated water leaving the plant and water samples taken from the distribution system on a bi-weekly basis to be tested for E. coli bacteria and Total Coliform. If these bacteria are present in the sample, it would indicate disease causing organisms may also be present. Further testing would be required immediately to determine if there was bacteria present or just an error while sampling.

Disinfectant testing: Chlorine levels of the treated water leaving the treatment plant are measured on a continuous basis and are sampled daily to verify the accuracy of on-line equipment and sent to DWO monthly. Chlorine tests are also conducted throughout the distribution system at the same time as the bi-weekly water samples.

Turbidity testing: Treated water from the filters and storage tank are tested for clarity on a daily basis by the water treatment staff and are reported to DWO every month.

Trihalomethane (THM) testing: Trihalomethanes are formed when chlorine reacts with naturally occurring organic matter in the water. Studies have shown a link between high levels of THMs and cancer. The province has established a health based standard for THMs of 100 micrograms per liter of water. We submit a sample for testing, from the distribution system, four

times per year in the sampling year. We are currently required to test every second year.

When sampling for THMs we are also required to test for Haloacetic acids (HAA) within the distribution system. HAAs are another form of chlorination byproducts when chlorine reacts with naturally occurring organic matter in water.

Annual samples are collected and tested for routine chemistry and metals. Samples are collected from the raw water, treated water and midpoint in the distribution system.

Lead sampling- Sampling was completed this year resulting in 1 re sample due to a high result. A 30min flush test was done and results were withing compliance.

Test Results

External water testing is conducted by an accredited laboratory in Winnipeg, with all results sent to the Drinking Water Officer and the Town of Powerview – Pine Falls.

Bi-Weekly samples were conducted all of them were in compliance.

Bi-Weekly results for distribution treated chlorine residual were in compliance. The requirement is a minimum 0.1 mg/L.

The Treated Chlorine requirement of 0.5mg/L leaving the water treatment plant was compliant.

The THM standard is 0.10mg/L and is tested every second year. Due in 2026.

HAA standard is 80 ug/L and is done with the THM's in 2026.

Microcystin on Raw water 2025 result were <0.15 ug/L.

UV requirement of a 22.53 mj/cm2 dose and daily monitoring requirement met compliance.
The standard for the treated water turbidity is less than 0.3 NTU. This standard has also been met on a consistent basis.

Engineering Assessment

Public Water Systems are required to complete and Engineering Assessment of the Water Treatment Plant and water system every five years.

WSP completed it in March 2025. Copies are available from the town as requested.

Water Emergencies

Water pipes and service connections fail on occasion causing water breaks and a disruption of service. In 2025 we had 4 water main breaks/repairs. Boil water orders were issued. After break is completed we flush the lines to get the turbidity and chlorine to normal levels then we sample for bacteria and have to pass 2 consecutive rounds of samples determined by the medical officer of health and the drinking water officer. Then the boil water order gets rescinded.

Contact Information

For general inquiries during regular business hours, call the Town of Powerview – Pine Falls Office, 277B Main Street, (204) 367-8483

To report an issue with the water supply during regular business hours, contact the Public Works Foreman 1-204-340-5032

For reporting emergencies after hours, weekends, and holidays, contact the Operator in Charge 204-213-0544

Additional Information
Celco is in the works on upgrading our Scada system again as the Siemens system is out of date with very limited spare parts and support. This will happen this year when council decides on the proposal. Funding for the Scada project will be at 50/50 cost from water service board.

A copy of the 2025 Annual Audit Report from Manitoba Water Stewardship is also available upon request for the Town of Powerview-Pine Falls Water Treatment Plant - Community Code 171.5.

https://www.powerview-pinefalls.com/admin/dm/Public/DownloadFile/?fileid=14593

Health Canada published new technical guidelines on cyanobacteria (algae), manganese, and **lead.** The guidelines are posted on their website at: https://www.canada.ca/en/health-canada/services/environmental-workplace-health/water-quality/drinking-water/canadian-drinking-water-guidelines.html

Future Considerations

There's a DRAFT of a utility rate study that will increases all the rates charged to connections and will come into effect sometime this year when the draft is finalized. This will be available at the town office.

Report compiled and submitted by: Dan Coss operator in charge.

Town of Powerview – Pine Falls