



2025 Annual Report

RM of Stanley Public Water System

PWS: 218.25
Red River Regional

Reinfeld, Schanzenfeld, Blumstein



Name of the public water system:
RM of Stanley Public Water System

Name of the legal owner:
Rural Municipality of Stanley

Water Source:
Red River Regional Public Water System- Pembina Valley Water CO-OP

Emergency Contact Information:

Call the RM of Stanley Office: 204-325-4101

In the event of an emergency outside of regular business hours you will be transferred to an on-call operator.

Email: info@rmofstanley.ca

Contact Persons:

Dave Rempel	-OIC (Operator-in-Charge)
Dustin Dyck	-Utility Operator
Melanie Walker	-Utilities - (Admin)
Luc Lahaie	-CAO
Kale Black	-Drinking Water Officer

Overview of the RM of Stanley Public Water System

This RM of Stanley Public Water System consists of three local utility systems that have been amalgamated under a single operating license. This system serves the communities of Reinfeld, Schanzenfeld, Blumstein, and surrounding rural areas.

The Schanzenfeld and Reinfeld utility systems began receiving treated drinking water from the Pembina Valley Water Co-op (PVWC) in 2002 and continue to rely on this supply today. Water from the system is distributed to the unincorporated villages of Schanzenfeld, Chortitz, Friedensruh, and Reinfeld, as well as to various rural properties throughout the surrounding area.

Due to continued growth and development within the region, the water distribution system has expanded over time to accommodate increasing demand. In the fall of 2010, reservoir expansions of 300,000 litres were completed at both the Schanzenfeld and Reinfeld sites. This increased the total storage capacity at each location to 500,000 litres, ensuring adequate supply and system reliability as the number of water connections continues to grow.

Description of the Water System

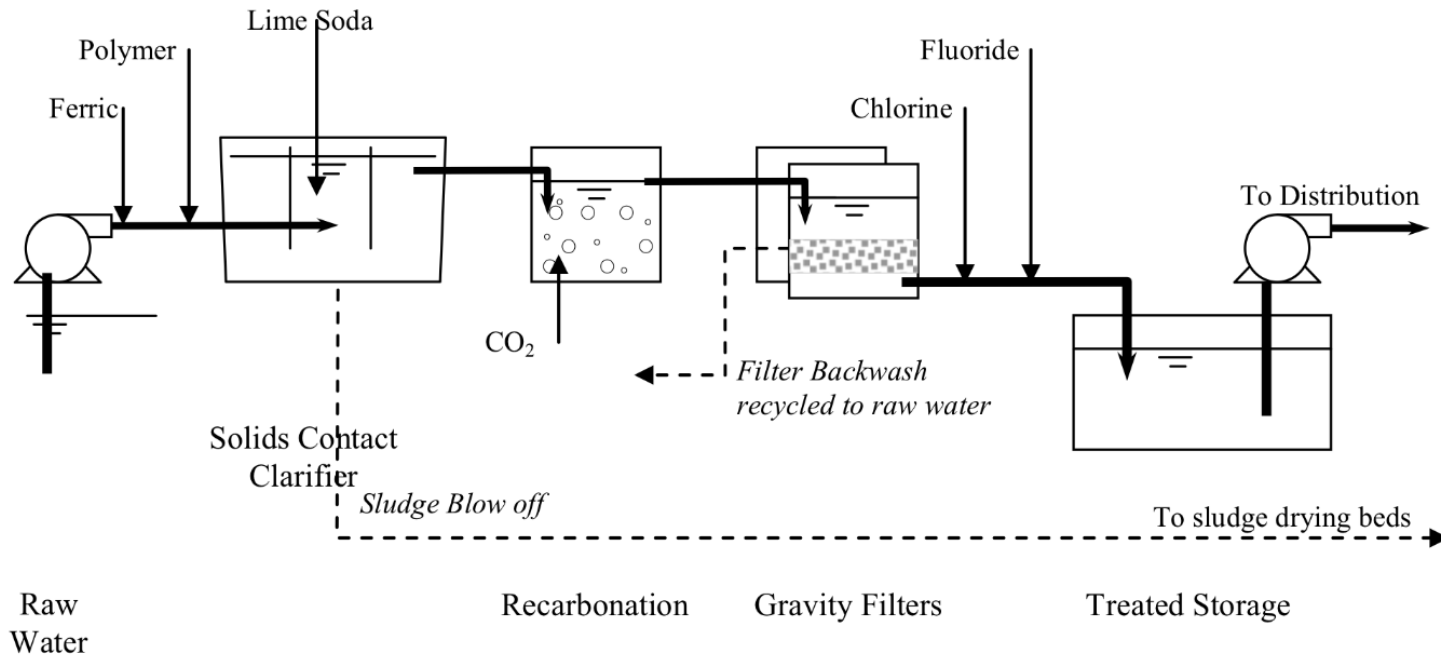
Source:

The RM of Stanley Public Water System purchases treated drinking water from the Pembina Valley Water Co-op (PVWC). PVWC sources its water from the Red River and treats it at the Letellier Water Treatment Plant located in Letellier, Manitoba.

The Pembina Valley Water Co-op operates as a regional wholesale supplier, providing treated drinking water to several municipalities, including the RM of Stanley. From the Letellier treatment facility, treated water is pumped west through the PVWC transmission main to the Reinfeld reservoir. From there, it continues to the Winkler South Booster Station, where it is pumped into the Schanzenfeld reservoir. The water is then distributed through the local distribution network to homes, businesses, and other consumers within the service area.

Treatment

The water is treated at the Pembina Valley Water Co-op Treatment Plant in Letellier. A detailed description of their treatment process can be obtained directly from the PVWC at 204-324-1931 or email: pvwc@mts.net.



Upon entering the RM of Stanley reservoirs, the treated water is re-chlorinated using sodium hypochlorite. This process ensures that appropriate disinfection residuals are maintained throughout the entire distribution system, helping to protect water quality as it travels to consumers.

After re-chlorination, the treated water is pumped through the distribution network and delivered to homes, businesses, and other users within the service area.

Distribution System

The distribution system consists of a network of underground pipes that deliver drinking water to end users. Once water leaves the reservoirs, it is pumped through PVC water mains ranging in size from 2 inches to 6 inches in diameter. Individual service lines connecting properties to the system typically range from ½ inch to 1½ inches in diameter.

The total length of the distribution network is approximately 80 kilometres.

Backup generators are installed at all RM of Stanley water stations. These generators allow the system to maintain consistent pressure and operation during power outages.

Gate valves are located throughout the distribution system to allow operators to isolate sections of the pipeline for maintenance or in the event of an emergency. Each individual service connection is also equipped with a curb stop valve, which allows operators to shut off water to a specific property if necessary. Customers are encouraged to avoid damaging these valves.

Storage Reservoirs

The system includes two reservoir sites, located near Schanzenfeld and Reinfeld. Each site contains:

- one 200,000 litre reinforced concrete two-cell reservoir, and
- one 300,000 litre reinforced concrete three-cell reservoir

This provides 500,000 litres of storage capacity at each location.

These reservoirs serve as storage buffers that help manage peak water demand and maintain adequate system pressure. Under current demand conditions, the combined reservoir storage provides approximately one day of water supply.

Number of Connections, Population Served, and Types of Water Users

As of December 2025, the RM of Stanley Public Water System had:

- 1,121 service connections
- an average of 64,000 cubic metres of water billed per quarter
- an estimated population served of approximately 4,460 residents

The system serves a variety of users, including:

- 4 elementary schools
- 7 churches
- numerous agricultural and commercial customers

The majority of connections are residential properties.

Each service connection is equipped with a water meter to measure water usage for monitoring, administrative, and billing purposes. Water meters are read quarterly by the customer.

Classification and Operator Certification

The RM of Stanley Public Water System is classified as a Class II Distribution System.

System classification and operator certification are regulated by Manitoba Conservation under the Water and Wastewater Facility Operators Regulation of The Environment Act.

The RM of Stanley employs:

- two full-time certified operators, and
- one part-time certified operator

Operators regularly participate in training courses and educational seminars to maintain certification and remain current with industry standards and regulatory requirements.

Equipment

Each pumphouse is equipped with:

- one 2-horsepower variable-speed pump, and
- three 5-horsepower variable-speed pumps

These pumps provide a combined pumping capacity of approximately 225 gallons per minute.

All water mains within the system are constructed using PVC and high-density polyethylene (HDPE) materials. Water pressure along the corridor between Winkler and Morden (Blumstein) is supplied by the Pembina Valley Water Co-op transmission system.

Emergency Monitoring and Response

The water pumphouses are equipped with electronic tele-metering systems that allow operators to monitor system operations. This monitoring system automatically alerts the utility operator by telephone if issues occur, including:

- pressure changes
- reservoir level fluctuations
- power failures
- abnormal temperatures
- unusual equipment noise

The system also allows operators to monitor several components of reservoir operations remotely.

In 2020, the Schanzenfeld and Reinfeld systems were upgraded to an electronic Programmable Logic Controller (PLC) monitoring system. This system allows operators to view real-time data such as pressures, reservoir levels, and system flows remotely. It also assists operators in diagnosing problems and tracking operational trends within the pumphouses.

A Utility Operator is on call 24 hours a day to respond to emergencies or system issues.

In case of an emergency, residents should contact the RM of Stanley office, where calls will be forwarded to the on-call operator.

Emergency Phone Number:
204-325-4101

Water Quality Standards

The RM of Stanley Public Water System follows strict water quality standards to ensure the safety of the drinking water supplied to the community. These standards are established by provincial regulations and are designed to protect public health.

Routine testing and monitoring are conducted to ensure these standards are consistently met. If testing indicates that any standard is not being met, immediate corrective action is taken to protect water quality and maintain system safety.

Parameter	Quality Standard
Total Coliform	Less than one total coliform bacteria detectable per 100 mL in all distributed water
<i>E. coli</i>	Less than one <i>E. coli</i> bacteria detectable per 100 mL in all distributed water
Chlorine Residual	A free chlorine residual of at least 0.1 mg/L at all times at any point in the water distribution system
Total Trihalomethanes (THMs)	Less than or equal to 0.10 mg/L as locational annual average of quarterly samples
Lead	Less than or equal to 0.005 mg/L in the water distribution system

Water

samples are retrieved, tested, and recorded onsite for chlorine levels each day. There are two chlorine standards, one for leaving the reservoir and one for within the distribution system. The minimum free chlorine standards are 0.50 mg/L leaving the reservoir and 0.10 mg/L throughout the distribution system.

These charts outline the 2025 Chlorination results leaving the Schanzenfeld and Reinfeld reservoirs as reported by the Utility Operator.

2025 Schanzenfeld

Month	# of Samples Taken	Compliance
January	30	100%
February	28	100%
March	31	100%
April	30	100%
May	31	100%
June	30	100%
July	31	100%
August	31	100%
September	30	100%
October	31	100%
November	30	100%
December	30	97%

2025 Reinfeld

Compliance

Month

of Samples Taken

January	31	100%
February	28	100%
March	31	100%
April	30	100%
May	31	100%
June	30	100%
July	31	100%
August	31	100%
September	30	100%
October	31	100%
November	30	100%
December	30	97%

The following outlines the 2025 test results as submitted by the Operator to ALS Environmental or Duracan Labs for analysis. Samples are submitted every two weeks from the incoming treated water (PVWC), the outgoing treated water from the reservoir, and a distribution system location. The distribution chlorine residuals are measured at the same time and location as the bacteriological distribution samples and are included in the chart below.

Blumstein

This system runs off PVWC's line between Winkler and Morden. The chlorine residual is dependent on PVWC chlorination.

Coliforms & E. coli - Outflow Treated

Date

In Distribution System

	Coliforms	E. coli	Complian	Chlorine	Chlorine	Complian
	MPN/100ml	MPN/100ml	t	Free	Total	
				mg/L	mg/L	t
Jan 8/25	0	0	Yes	0.08	0.54	Yes
Jan 21/25	0	0	Yes	0.89	1.16	Yes
Jan 29/25	0	0	Yes	0.81	0.98	Yes
Feb 19/25	0	0	Yes	0.96	1.18	Yes
Feb 28/25	0	0	Yes	1.46	2.06	Yes
Mar 18/25	0	0	Yes	0.68	0.94	Yes
Mar 26/25	0	0	Yes	0.76	0.99	Yes
Apr 15/25	0	0	Yes	1.20	1.39	Yes
Apr 28/25	0	0	Yes	1.87	2.09	Yes
May 6/25	0	0	Yes	0.78	1.01	Yes
May 27/25	0	0	Yes	0.66	0.96	Yes
June 3/25	0	0	Yes	0.88	1.02	Yes

June 17/25	0	0	Yes	0.73	1.01	Yes
July 3/25	0	0	Yes	0.90	1.12	Yes
July 15/25	0	0	Yes	0.76	0.99	Yes
Aug 18/25	0	0	Yes	0.62	1.06	Yes
Aug 28/25	0	0	Yes	0.48	0.86	Yes
Sept 10/25	0	0	Yes	0.79	1.01	Yes
Sept 23/25	0	0	Yes	0.86	1.03	Yes
Oct 7/25	0	0	Yes	0.63	0.98	Yes
Oct 24/25	0	0	Yes	0.68	0.89	Yes
Nov 12/25	0	0	Yes	0.27	0.48	Yes
Nov 25/25	0	0	Yes	0.73	0.89	Yes
Dec 9/25	0	0	Yes	0.69	0.89	Yes
Dec 30/25	0	0	Yes	0.04	0.21	Yes

Reinfeld Distribution
Coliforms & E. coli – Distribution system

Date	In Distribution System					
	Coliforms	E. coli	Complian	Chlorine	Chlorine	Compliant
	MPN/100m	MPN/100m		Free	Total	
	l	l	t	mg/L	mg/L	
Jan 8/25	0	0	Yes	0.99	1.40	Yes
Jan 21/25	0	0	Yes	0.96	1.29	Yes
Jan 29/25	0	0	Yes	0.68	1.21	Yes
Feb 19/25	0	0	Yes	0.81	0.96	Yes
Feb 28/25	0	0	Yes	1.46	2.01	Yes
Mar 18/25	0	0	Yes	1.58	1.99	Yes
Mar 26/25	0	0	Yes	1.46	1.62	Yes
Apr 15/25	0	0	Yes	1.18	1.38	Yes
Apr 28/25	0	0	Yes	1.87	2.09	Yes
May 6/25	0	0	Yes	1.21	1.47	Yes
May 27/25	0	0	Yes	0.87	1.08	Yes
June 3/25	0	0	Yes	0.86	1.01	Yes
June 17/25	0	0	Yes	1.23	1.62	Yes
July 3/25	0	0	Yes	1.18	1.36	Yes
July 15/25	0	0	Yes	1.01	1.26	Yes
Aug 18/25	0	0	Yes	1.12	1.46	Yes
Aug 28/25	0	0	Yes	0.87	1.20	Yes
Sept 10/25	0	0	Yes	0.80	1.11	Yes
Sept 23/25	0	0	Yes	1.06	1.38	Yes
Oct.7/25	0	0	Yes	1.52	1.76	Yes
Oct 24/25	0	0	Yes	0.96	1.23	Yes
Nov.12/25	0	0	Yes	0.81	1.05	Yes
Nov.25/25	0	0	Yes	0.96	1.28	Yes

Dec.9/25	0	0	Yes	0.89	1.26	Yes
Dec.30/25	0	0	Yes	1.07	1.49	Yes

Schanzenfeld Distribution

Coliforms & E. coli - Outflow Treated

Date	In Distribution System					
	Coliforms MPN/100ml	E. coli MPN/100ml	Compliant	Chlorine Free mg/L	Chlorine Total mg/L	Compliant
Jan 8/25	0	0	Yes	0.96	1.18	Yes
Jan 21/25	0	0	Yes	0.96	1.38	Yes
Jan 29/25	0	0	Yes	1.18	1.68	Yes
Feb 19/25	0	0	Yes	1.26	1.81	Yes
Feb 28/25	0	0	Yes	1.38	1.97	Yes
Mar 18/25	0	0	Yes	1.43	1.86	Yes
Mar 26/25	0	0	Yes	1.52	1.72	Yes
Apr 15/25	0	0	Yes	1.18	1.61	Yes
Apr 28/25	0	0	Yes	1.68	1.99	Yes
May 6/25	0	0	Yes	0.97	1.17	Yes
May 27/25	0	0	Yes	1.21	1.51	Yes
June 3/25	0	0	Yes	0.99	1.32	Yes
June 17/25	0	0	Yes	1.18	1.51	Yes
July 3/25	0	0	Yes	1.07	1.42	Yes
July 15/25	0	0	Yes	0.86	1.21	Yes
Aug 18/25	0	0	Yes	0.91	1.29	Yes
Aug 22/25	0	0	Yes	0.97	1.21	Yes
Sept.10/25	0	0	Yes	0.78	1.29	Yes
Sept 23/25	0	0	Yes	1.06	1.38	Yes
Oct.7/25	0	0	Yes	1.56	1.93	Yes
Oct 24/25	0	0	Yes	1.11	1.41	Yes
Nov.12/25	0	0	Yes	0.75	0.99	Yes
Nov.25/25	0	0	Yes	0.96	1.21	Yes
Dec.9/25	0	0	Yes	0.78	0.99	Yes
Dec.30/25	0	0	Yes	0.89	1.35	Yes

At any time when the free chlorine residual requirement is not met immediate action is taken by the Operator to adjust amounts of chlorine being added to ensure future compliance.

THM's

Every two years, quarterly testing is done for THM's as required by the Office of Drinking Water. Reporting years are 2024, 2026 and so on.

Trihalomethanes (THM's) are formed when chlorine reacts with naturally occurring organic matter in the water. Studies have shown a link between high levels of THM's and cancer. For that reason, the province has set a health-based standard for THM's of *0.1mg/L*. THM's were tested in the Schanzenfeld Public Water System in 2024 producing the following results. Compliance with provincial standards is dependent on the effectiveness of the treatment process.

THM's

Feb. 2025 0.0840 mg/L
May. 2025 0.124 mg/L
Aug. 2025 0.335 mg/L
Nov. 2025 0.180 mg/L

Total Metals

The RM of Stanley (Red River Regional) PWS 218.25 water system tests for total metals and total manganese in the distribution system every two years, alternately. The following are the total metals results from a sample collected on April 8, 2026.

Analysis	Detection Limit	Results	Units
Total Metals			
Aluminum, total	0.0030	0.0039	mg/L
Antimony, total	0.00010	0.00017	mg/L
Arsenic, total	0.00010	0.00077	mg/L
Barium, total	0.00010	0.0350	mg/L
Beryllium, total	0.000020	<0.000020	mg/L
Bismuth, total	0.000050	<0.000050	mg/L
Boron, total	0.010	0.067	mg/L
Cadmium, total	0.0000050	0.0000071	mg/L
Calcium, total	0.050	77.3	mg/L
Cesium, total	0.000010	0.000014	mg/L
Chromium, total	0.00050	<0.00050	mg/L
Cobalt, total	0.00010	0.00013	mg/L
Copper, total	0.00050	0.00759	mg/L
Iron, total	0.010	0.022	mg/L
Lead, total	0.000050	0.000207	mg/L
Lithium, total	0.0010	0.0520	mg/L
Magnesium, total	0.0050	11.5	mg/L
Manganese, total	0.00010	0.00150	mg/L
Molybdenum, total	0.000050	0.00171	mg/L
Nickel, total	0.00050	0.00119	mg/L

Phosphorus, total	0.050	<0.050	mg/L
Potassium, total	0.050	9.44	mg/L
Rubidium, total	0.00020	0.00274	mg/L
Selenium, total	0.000050	0.000617	mg/L
Silicon, total	0.10	2.64	mg/L
Silver, total	0.000010	<0.000010	mg/L
Sodium, total	0.050	57.8	mg/L
Strontium, total	0.00020	0.247	mg/L
Sulfur, total	0.50	74.3	mg/L
Tellurium, total	0.00020	<0.00020	mg/L
Thallium, total	0.000010	<0.000010	mg/L
Thorium, total	0.00010	<0.00010	mg/L
Tin, total	0.00010	<0.00010	mg/L
Titanium, total	0.00030	<0.00030	mg/L
Tungsten, total	0.00010	<0.00010	mg/L
Uranium, total	0.000010	0.000233	mg/L
Vanadium, total	0.00050	0.00200	mg/L
Zinc, total	0.0030	0.0137	mg/L
Zirconium, total	0.00020	<0.00020	mg/L

Lead Sampling

Manitoba has launched a new lead testing program for drinking water to ensure safety and compliance with Health Canada's updated guidelines. The program focuses on testing water at consumer taps, particularly in schools and childcare centers, to detect and mitigate lead contamination.

Each municipality needs to comply with licensing requirements regarding lead sampling. Lead in drinking water can cause serious health issues, especially for children and pregnant women.

Key risks include:

- Developmental delays and learning disabilities in children
- Cognitive impairments like memory loss
- High blood pressure and heart disease in adults
- Kidney damage
- Reproductive health problems

The maximum acceptable concentration of lead in drinking water is 0.005 mg/L. This limit is set to minimize health risks associated with lead exposure.

RM of Stanley (PWS 218.25)			
Residential Lead Monitoring - 2025			
DATE	RESULT	RE-TEST RESULT	WATER CODE
July 17/25	0.000262		218.25
July 17/25	0.000204		218.25
July 17/25	0.000410		218.25
July 17/25	0.020100	0.000172	218.25
July 17/25	0.002490		218.25
July 17/25	0.001140		218.25
July 17/25	1.230000	0.000117	218.25
July 17/25	0.000244		218.25
July 10/25	0.000164		218.25
July 10/25	0.000370		218.25
June 3/25	0.001720		218.25
July 10/25	0.000641		218.25
July 10/25	0.002670		218.25
Aug 28/25	0.000534		218.25
Nov 17/25	0.000122		218.25
Nov 17/25	0.000176		218.25
Nov 17/25	0.000847		218.25
Nov 27/25	0.000188		218.25
Nov 27/25	0.000010		218.25
Nov 29/25	0.000158		218.25

Water system incidents.

11 water breaks were recorded for 2025.

Drinking water safety orders on system.

None

Boil water advisories issued.

There was 1 BWA on PWS 218.25. Boil Water advisories are issued when the line pressure drops below 20 psi. Samples were taken and the advisories were rescinded.

Warnings issued or charges laid in accordance with Drinking Water Safety Act.

None.

Annual Audit by the Office of Drinking Water

A copy of the annual audit done by the Office of Drinking water is available by request through the RM of Stanley.

Permits and Licenses

All operator licenses are valid and up to date. A third part time fully licensed operator has been added as a contract operator. System permits are also all in place as required. This information is posted at every site and available at the RM of Stanley Office.

Major Expenses Incurred.

None

Anticipated Expenses

Pumphouse upgrades in Reinfeld and Schanzenfeld. (bigger pumps)

Future system expansion.

Possible system expansion in 2027

RM of Stanley Notifications**Stay Connected! Register Today!**

Connect Stanley is our communication system. Along with a new website and mobile apps, we will keep you alerted on road closures, other public works and transportation notices, burning restrictions, water service disruptions and emergency alert messages from Canada's national emergency alerting system (Alert Ready). You decide how you want to receive information, whether it be by text messages, phone calls, e-mails or any combination you choose.

Register with us never miss out on the latest news on road closures, other public works and transportation notices, burning restrictions, water service disruptions and emergency alert messages from Canada's national emergency alerting system (Alert Ready).

A free copy of the 2025 Annual Report can be obtained at the RM office.