RM OF
PIPESTONE

Public Water System Annual Report

Summary of 2021

Prepared by:

Tyson Anderson, Manager of Utilities

(Free paper copies of this report can be made available at the town office upon request)

To report an emergency, call our on-call phone @ 204-851-1480

The Rm of Pipestone's water system is known as a "Satellite System". The water pipeline supplied by the Rm of Wallace-Woodworth is able to service not only the town of Reston but our rural residents along with our other rural communities as well. It is the goal of the Utilities department to provide safe, cost-effective water to residents of the Rm of Pipestone while staying in compliance with the regulatory requirement's governing provision of drinking water.

BWA = Boil Water Advisory

ODW = Office of Drinking Water

JRCC = J.R Cousin Consulting (Engineer)

MWSB = Manitoba Water Services Board

Where do we get our drinking water from?

We get our drinking water from our bordering RM of Wallace-Woodworth through various sizes of water pipelines ranging from 2 inch to 8 inch. We have 3 water shacks located all on road 53 where the water is metered and then piped to our residents. We check these water shack 3 times per week to check for proper pressures and to make sure we have no leaks in our system. The water source for the Rm of Wallace is a secure ground water and is treated with sodium hypochlorite for disinfection. It arrives by pipeline to our reservoir or directly to your tap if you're in the rural.

What kind of chemical treatment do we use?

The Rm of Wallace-Woodworth provides us with clean, safe drinking water treated from their water plant. Our job is to test the chlorine levels every day to ensure the chlorine levels are above government standards. Our standards are to keep chlorine levels higher than .1 mg/l at the farthest end of our distribution system. Over the whole year of 2020 we met 100% compliance with this standard. If a problem should arise that the chlorine level dip below our standard, we would then begin infusing chlorine by pump into our reservoir to bring chlorine levels up to standard or higher. In 2020 this process was not needed as chlorine levels did not go that low.

Guidelines as for testing as per our Drink Water License

Test results from Rm of Wallace-Woodworth

Water System Code 168.5

Parameter and MAC (only applies to treated)	Guide Limit	Treated
Arsenic	Less than of equal to 0.01mg/L	<0.0001 mg/L
Benzene	.005 Mg/L	<0.00050 Mg/L
Fluoride	1.5 Mg/L	0.035 Mg/L
Lead	0.01 Mg/L	0.000126 Mg/L
Nitrate	10 Mg/L	0.0413 Mg/L
Trichloroethylene	1.005 Mg/L	<0.00050 Mg/L
Tetrachloroethylene	0.01 Mg/L	<0.00050 Mg/L
Uranium	.02 Mg/L	<0.000466 Mg/L

Bacteriological Sample and Chlorine Residual Results

Parameter	Treated	Distribution
Total Coliform-Less than one detected per….	100% (26/26 samples)	100% (26/26 samples)
E.Coli- Less than one…	100% (26/26 samples)	100% (26/26 samples)
Free Chlorine Entering the Distribution system 0.5 mg/L	100% (365/365 samples)	100% (26/26 samples)

Samples are taken from 4 places:

1. Reston water plant distribution side
2. Reston Health Center
3. Town of Sinclair
4. Town of Cromer (Road 48 and highway 256 water shack)

How much water storage do we have?

The town of Reston has a reservoir which is used to store water for users' needs and for firefighting. The reservoir has a capacity of 90,000 Gallons of water which is approximately 3 days' worth of water. The reservoir is designed to have the fresh water come in the bottom of the reservoir causing it to cycle the water in it so it does not become stale. If a major water break were to occur or a major fire the town of Reston would put out a phone message to residents to reduce water usage. If this situation were to happen, reduce usage. Meaning no showering (If possible), no laundry, and don't fill the hot tub or pool.

The rural connections do not have a reservoir to rely on if there is a break but the Utilities department will do the best, we can to get the supply to the consumer as fast and as safely as possible. We have purchased a new enclosed trailer and stocked it with electro fuse couplers and mechanical couplers. With these parts we are able to dig up leaks and have all the parts that we need in stock to fix it immediately. The Rm of Wallace-Woodworth is set up with back up generators to keep water flowing in the event of a power outage.

Is our water tested? What for? When?

Our water is tested and sent to Winnipeg to be analyzed by ALS in their lab. We take samples every 2 weeks. The sample points are the water plant in Reston, the hospital in Reston and we alter between Sinclair and Cromer each time we test. We test for 2 different things, **Total Coliforms and Escherichia Coli.** These test results are submitted to the provincial Office of Drinking Water for review. In 2020 we met all the provincial standards.

What do we have to alert Rm of Pipestone residents of water emergencies?

We have set up an emergency telephone system that allows us to get the first phone call out within minutes of the emergency happening. This new system also includes the features of texting and emailing residents. We have had great feedback on the new system texting out our alerts. People have found that even if they miss the phone call, they see the text regardless. If the rate payer affected

can not be reached a BWA paper will left on the front door. Please ensure that the Rm has an up-to-date phone number where you can be reached at. Every year we are to send an emergency response plan to the province. In 2020 I failed to send this procedure to them and was not in compliance. I am currently working with the Utility Dept and ODW to complete this plan for May 2020.

Were there any emergencies to report in 2020?

Our year in 2020 started out quiet in the world of water line breaks but as summer started to come to an end the problems started to occur.

Aug 11th- A break in our 6" PVC piping located in the water plant in Reston started small. As the days went on the leak grew. Having no way to by pass this leaking join, we hired Contec to bring a stainless-steel replacement for the broken PVC fitting. The town was depressurized and the repair was made. The lines were re pressurized, flushed and samples were sent 24 hrs apart and submitted to the Office of Drinking water. Once cleared the BWA was rescinded.

Cost of repair was estimated at $9000.00

Sept 12th – On Saturday morning at approx. 8:00 AM I was notified by a resident of Reston (7th street between 2nd and 3rd Ave) that the ditch in front of their house was full of water and it had not rained in days. A leak was detected and the work began. After acquiring locates and alerting the on call ODW, myself and another Rm of Pipestone staff member began to dig up the water line break. Once excavated it was discovered the original saddle connecting the house to the water main had rotted off causing a leak. A new saddle was installed and the line to the house was re-attached. A BWA was issued for the houses affected by the depressurization. The line was flushed using a fire hydrant and samples were sent on the first week day possible.

Cost of repair were estimated at $6500.00

Oct 2nd – A small leak was detected by a resident of Reston (6th street between 1st and 2nd Ave) on Oct 1st at night. The leak size was small so it was determined to wait till morning of Friday Oct 2nd to fix. Emergency locates were submitted and the ODW was notified. The leak was dug up and found to be a saddle which was connected to a house to have rotted off causing the leak. The saddle was replaced and the connection was repaired.

At approx. 9:00 PM on the Friday evening I was called by a resident on the street and was alerted to a 2nd leak. to failing valves the leak was not able to be isolated enough to leave till the next morning. After calling Cros-Man, their crew along with the Utility Dept started work. After digging out the fresh material and hydro-vacing around the leak it was determined to be a 2nd saddle that was not dug up earlier in the day to have shifted causing the 2nd leak. Due to the fresh material over the first repair the water rose straight to surface and cause a high-water loss. The saddle was changed out and the house was re-connected. Starting on the Monday samples were taken and sent to ALS for testing. Once clear the BWA was rescinded.

Cost of repairs was estimated at $11,500.00 (2 repairs)

Oct 25th- Sunday morning a call came in from a rate payer on our road 159-line saying they had no water. After searching the rural and investigating the leak was found at the intersection of road 159 + 41 on our main 8” water line. Emergency locates and the ODW was notified of the leak. It was discovered to be an electric fuse coupler that that started to leak. A temporary fix was made and parts were ordered to be able to repair the leak. On Oct 28th Rob Smith and Sons were able to fuse the parts together and complete the repair.

Cost of repair were estimated at $8500.00

Oct 27th- During work on the Sinclair sewer project a line was hit in the town of Sinclair. The crew repaired the line and it was reported to the ODW and a BWA was issued. Samples were sent 24 hours apart and the BWA was rescinded once approved by the ODW.

Cost of repair was estimated at $1000.00

Others

Nov 11th- A call was made in the evening from a rate payer stating he had no water. After investigating it was determined somewhere in the main line a blockage had occurred. The customer was set up with a temporary holding tank of water and a pressure pump to supply water to the house. The RM delivered water when required by the user. Only 1 person was affected by this blockage. After digging test holes to determine the area of where the blockage was it was narrowed down to approx. 180 m running under a slough. New 3" HDPE was directionally drilled and reattached to the existing water line. The cause of blockage was not able to be determined. A BWA was not issued as it was an isolated customer and we were able to work with them directly to ensure samples were taken to make sure the water was safe to use once it was put back in to service.

Cost of repair was estimated at $13,000.00

Nov 18 – A leak was detected on the 6" supply line to the water plant from highway #2 ditch. Approx. 200 m of new HDPE 6" line was directionally drilled in and replaced the leaking portion of the line. As this line was able to be isolated and we were able to keep water to the town of Reston by using the reservoir stored water a BWA was not needed. The new line was super chlorinated (added granular chlorine with being installed) and filled with water, then sat for 24 hours. The line was flushed until the chlorine was back to safe numbers. A sample was taken then and drove to Winnipeg for analysis. Once the results came back clean the ODW approved us to start filling the reservoir again.

Cost of repair was estimated at $9500.00

This is why it is very important for water user to conserve as much water as possibly when requested by the RM of Pipestone. By using our stored water for approx. 2 days we were able to avoid a BWA helping our local businesses and nursing homes, who require treated water brought to them to use for drinking and cooking. This saves a lot of people cost and time in having to use a different water source.

Utility Department Leak Trailer

We have a 16' enclosed trailer and have filled it with every part that could be needed to repair a leak in the rural, town of Reston, Sinclair and Cromer. The reason for this is that each town and in the rural all take different parts due to different ages of infrastructure. We have added a new fusing machine and generator to this trailer. This fusing machine will be able to repair and HDPE along with electro fusion couplers that we stock. We have added to the trailer a few new items and features. We added a vice to the work bench to ensure clean cuts on pipe and a new Honda generator capable of running out fusing machine and any lights or tools that may be needed at the job site.

Future system expansion

The Town of Reston has been working with and engineer on developing a plan to upgrade infrastructure and pumps in the Reston water plant. Due to go out for tender in 2-4 weeks we are upgrading our pumps and piping systems inside the water plant located in Reston. VFD pumps are being added along with some work done to the building. Included is a new KOHLER gen set which will keep the water running during outages. This helps us better ensure safe drinking water for the town of Reston and surrounding areas in the event of a significant outage of power.

We are also currently working with JRCC and MWSB on a new cell being added to our reservoir. This would double the amount of storage that we currently have in our existing reservoir. This will give us the ability to not have to de pressurized the system as much as we will be able to isolate each cell. This also

ensures we have enough water needed for future expansion in the town and for our own fire protection.

Purchases

In 2020 the Rm of Pipestone purchased our own fusing machine, generator and scraper. With this new set up we will be able to fuse any type of HDPE pipe ranging from 2" to 12". This purchase is a critical need in our rural jobs and all the pipe is HDPE. Utility staff have been training on this new machine and have it ready to operate for 2021.

Classification and Certification

- The Pipestone PWS system is classified as 'Class 1 Water Distribution' under the *Environment Act*.
- Certification Level of Operators;

Utility Manager: Tyson Anderson – Water Treatment Class 1, Water Distribution Class 1, Wastewater Treatment Class 1 and Wastewater Distribution Class 1

Utility Operator: Riley Bodin - Water Treatment Class 1, Water Distribution Class 1, Wastewater Treatment Class 1 and Wastewater Distribution Class 1

Utility Operator: Arvin Reyes – Water Treatment Class 1, Water Distribution Class 1, Wastewater Treatment Class 1 and Wastewater Distribution Class 1

Corrective Actions/Enforcement

Failure to Meet a Drinking Water Quality Standard

- In 2020, there were no incidents of failing to meet a water quality standard (ie) low chlorine residual

Drinking Water Safety Orders and Actions Taken in Response

- In 2020, no drinking water safety orders were issued for the Pipestone PWS.

Boil Water Advisories Issued and Actions Taken in Response

- In 2020, 5 boil water advisories were issued for the Pipestone PWS. All were rescinded by ODW after samples were taken and came back clean.

Warnings Issued/Charges Laid in Accordance with the Drinking Water Safety Act

In 2020, no warnings were issued or charges laid for the Pipestone PWS.

Manitoba
Conservation and Climate

January 21, 2021

2020 Annual Compliance Audit

Water System: PIPESTONE (WALLACE REGIONAL) - PWS	**Code:** 168.50
Water System Owner: Rural Municipality of Pipestone	**Address:** Box 99, Reston, MB R0M 1X0
Operating Licence: PWS-13-524-01	**Expiry Date:** November 30, 2021
Water System Assessment Due Date: March 1, 2024	
Public Water System Annual Report Due Date: March 31, 2021	**Advisory Notification Plan Due Date:** May 1, 2021

1) This report documents compliance of the Pipestone (Wallace Regional) Public Water System for the period from January 1 to December 31, 2020.

2) This report provides specific information on the non-compliance incidents identified in the summary below.

3) Other than the information provided in this report, the water supplier has complied with The Drinking Water Safety Act, its supporting regulations, and the terms and conditions of the water system's current operating licence.

4) This report is based on information submitted by the water supplier, agents of the water supplier, and / or the Province of Manitoba.

5) Where non-compliance items are identified, the issues do not necessarily translate into increased public health risk. The Office of Drinking Water uses processes, including boil water advisories, to notify water users of a public health risk.

Non-compliance with Treatment Standards:

Water system was compliant in the audited time period.

Non-compliance Incidents:

Date	Incident	Outcome
2020	Failure to submit a Advisory Notification Plan	Non-compliant

If you have any questions, please do not hesitate to contact me at (204) 724-0685.

Sincerely,

Nancy Fitzgerald
Regional Drinking Water Officer

Who can we call with questions or concerns?

You can call our office in Reston at 877-3327 within the hours of 9:00 AM to 5:00 PM (closed 12:00 to 1:00pm for lunch). You can also email Tyson Anderson at Tyson@rmofpipestone.com