



Town of Bowden
Box 338, 2101 20th Ave
Bowden, Alberta, T0M 0K0

Friday March 14, 2025.

WATER SERVICE REPORT

Service Interruption on 21st Avenue

On Monday March 10, the Town commenced work on 21st Avenue to repair what was originally thought to be a leak in a Town water main this having been identified by a small stream of water appearing on the road surface (at this time there were no abnormalities or excess flow reported by the SCADA system in the pumphouse).

External contractors (excavators & hydrovac services) were employed to provide the necessary equipment to excavate and expose a pipe that is buried more than 9 feet underground.

However, the excavation revealed that the leak was in the lateral water line that provides treated water to the Town's reservoir from the regional water line.

Line breaks / leaks tend to occur relatively infrequently but when they do, they must be repaired to prevent water loss, water shortages or any risk to water quality. In this case the cause was a corrosion leak in a 50-year-old steel pipe despite the pipe being protected by a "yellow jacket" polyethylene external coating that provides protection against long term corrosion.

Once it was positively identified that this was not municipal infrastructure, control and management of the matter was handed over to the Director of Operations of Mountain View Regional Water Commission.

The immediate task was to control the water loss by fitting a steel collar around the section of broken pipe. This was a temporary repair until a new section of pipe could be fitted. Fitting a new section of pipe means longer service downtime and more complex water management operations. The specific action taken in all cases is determined, however, by the circumstances of each incident.

Prior to any repair being made it is important to keep the system pressurized to prevent contaminated water from entering the distribution system. This intentional task inevitably leads to additional water loss but maintains the integrity of the water distribution system.

By close of play on Monday evening the temporary repair was completed.

Alberta Environment was notified as per the requirements of the Alberta Potable Water Regulation and an Environmental Protection Officer is allocated to the incident.

Mountain View Regional Water Commission were then concerned with ensuring that all Towns and facilities affected by the leak receive notice of the event and the fact that at some point

water supplies would be shut down through the use of isolation valves. The immediate task was to "top up" all of the affected reservoirs prior to isolation of the supply of water.

The Bowden reservoir is normally maintained at 75% capacity this providing 12 days supply of water at normal flow rates. The capacity of the reservoir was filled to 90% prior to isolating the water supply. This therefore provided sufficient water to meet many days demand.

On Thursday March 13, contractors arrived on site with the necessary equipment and supplies to commence the removal of the affected section of pipe and to install (weld) new pipe and flange fittings.

At this point the water within the regional line was slowly drained and the water supply isolated (closed off). This affected all customers who receive water from the Anthony Henday Water Treatment Plant on this segment of line including the Town of Olds.

At approximately 1:00 pm the new section of pipe was fitted however additional time was needed for the seals and coatings to cure.

Water supplies were gradually introduced at a slow rate so as not to create a large pressure difference within the system. At this point the water supply to the Bowden reservoir remained isolated.

The water line was then flushed to remove any contaminated material that may have been introduced into the system. At the end of the flushing process chlorine and turbidity tests are made and bacteriological samples are taken for laboratory analysis.

Please note that it was not necessary at any time to issue water advisories or restrictions to Town residents as the water supply within the Town's distribution system was not affected.

Work continued on Friday to backfill the trench with compacted gravel and clay.

As per the requirements of the Code of Practice, Mountain View Regional Water Commission will submit a written report to Alberta Environment providing details on the cause of the break and all actions taken to remediate the matter.

Please note that further remedial work will be required in the summer to repair the concrete curb and to add an asphalt layer to the road surface. Contractors have been appointed to carry out this work later this year.

Finally, I apologize for any inconvenience caused particularly to residents who live immediately near the site of the excavation. I would like to personally thank those residents for their patience and understanding, particularly throughout the extended period of construction and for the disruption of access to their properties.

Regards,



Arno Glover
CAO