COMMUNICATION UPDATE

TO:	Mayor and Members City Council
DATE:	June 16, 2025
SUBJECT:	Stoney Creek Water Quality - May 20 and 21, 2025 (HW2504) (Ward 10)
WARD(S) AFFECTED:	Ward 10
SUBMITTED BY: **SIGNATURE:**	Nick Winters Director, Hamilton Water Public Works Department 

The purpose of this Communication Update is to inform Council of the details of the water pressure and quality complaints experienced in the Stoney Creek plateau area (Ward 10, between Highway 8 and the escarpment, and between Green Road and Regalview Drive) on May 20 and 21, 2025.

Key Facts:

- There was – and continues to be – no risk to the safety of the City's drinking water.
- The drop in water level at the Dewitt/Ben Nevis reservoir was the result of the recommissioning plan for the City's largest watermain and could not have been prevented by the staff operating the Woodward Water Treatment Plant.
- The Ministry of Environment, Conservation and Parks (MECP) reviewed information from Hamilton Water regarding the water quality complaints and found no issues with regulatory compliance or public safety.
- Appendix A provides an overview of the areas being discussed in this update.

This update is intended to provide Council with information to help address constituent inquiries and emphasize the safety of the City's drinking water systems.

Background

In March 2025, the City's largest watermain (90-inch Woodward/Greenhill transmission main) was taken out of service for emergency repairs. During the decommissioning of this watermain, it was determined that one of the primary isolation valves was not fully closing; therefore, additional valves at the intersection of Barton and Nash also needed to be closed to completely isolate the main. This resulted in a significantly reduced water flow to the east end of pressure district one (Stoney Creek plateau area) for 70 days (March 13 through May 22).

The Stoney Creek plateau area is unique in the City as it sits approximately halfway up the escarpment. It is also home to the Dewitt/Ben Nevis Reservoir and Pumping Station. Under normal conditions, the reservoir is filled from the Woodward Water Treatment Plant through pressure district one, while the pumping station delivers water to pressure district four. Due to the reduced flow to Stoney Creek through pressure district one, a connecting valve (level valve) between pressure district one and pressure district four on Millen Road (see Appendix A) needed to be opened to transfer sufficient water into the Dewitt/Ben Nevis reservoir. In addition, the Stoney Creek plateau area also experienced reduced pressure because of its unique elevation. To address the low-pressure concerns, the pumps at the Dewitt/Ben Nevis pumping station were operated continuously to boost the pressure in this area. This operational strategy was maintained throughout the repair of the 90-inch watermain from March 13 to May 22, 2025.

Recommissioning of the 90-inch Woodward/Greenhill Transmission Main and Water Quality Concerns

Between May 20 and 21, 2025, the City received six low-pressure complaints and four water quality complaints from residents in the Stoney Creek plateau area.

These complaints stemmed from changes in the water distribution system during the recommissioning of the 90-inch Woodward/Greenhill Transmission Main, which had been out of service for significant repairs since March 2025.

Recommissioning of this large watermain was scheduled to begin on May 20, 2025. In preparation for this activity, water levels in the three reservoirs that service pressure district one (Kenilworth, Greenhill, and Dewitt/Ben Nevis) were all strategically lowered. The purpose of lowering the levels in these reservoirs was to promote the movement of fresh water throughout this large pressure district during the recommissioning process. This prevents water from aging in the system and minimizes the risk of water quality issues across the city.

At approximately 11:00 a.m. on May 20, 2025, the Dewitt/Ben Nevis reservoir level dropped to approximately 1.2 metres, at which point the pumps could no longer function properly and had to be shut down (see Appendix B). This caused the pressure in the Stoney Creek plateau area to drop to approximately 26 psi, where it remained until approximately 9:00 p.m. on May 20, 2025, at which time the reservoir level had increased sufficiently for the pumps to be restarted. After the pumps restarted, the pressure in the Stoney Creek plateau area increased to approximately 43 psi (see Appendix C).

Because the Stoney Creek plateau area has historically experienced frequent variations in water pressure, the City installed a permanent pressure monitor in this area in November 2020. Records from this pressure monitor confirms that while the water pressure did drop significantly, it was maintained at approximately 26 psi, and at no time was there a lack of water (see Appendix D).

The four water quality complaints received by the City were due to a sudden drop in water pressure that mobilized sediment which naturally accumulates in watermains and private plumbing pipes. While this sediment does raise aesthetic concerns, disturbance of this sediment does not pose any risk to human health and is not reportable under provincial regulations. These types of complaints are common during watermain breaks and water distribution system maintenance activities, where sudden changes in pressure or direction of flow can disturb this naturally accumulating sediment. Hamilton Water staff responded to the complaints by flushing the local watermains in the impacted areas and checking chlorine residuals to ensure proper disinfection. At no time was there any risk to the safety of the drinking water.

When recommissioning watermains after repairs, public notification is not typically required. In this case, the watermain being recommissioned serves the entire lower half of the City, from Bayfront Park to Fifty Road, and from Lake Ontario to the escarpment. There was no way to know for certain who, if anyone, in this large area may experience a temporary change in their water service (water pressure or water quality) during the work to recommission the 90-inch Woodward/Greenhill transmission main.

The drop in water level at the Dewitt/Ben Nevis reservoir was the result of the recommissioning plan for the City’s largest watermain and could not have been prevented by the staff operating the Woodward Water Treatment Plant.

Ministry of the Environment, Conservation & Parks Review

On May 28, 2025, Hamilton Water was contacted by the local district office of the Ministry of the Environment, Conservation & Parks (MECP), advising that they were looking into the May 20 and 21, 2025, water quality complaints from Stoney Creek as a result of local media coverage. To support the MECP review, information was provided

by Hamilton Water on May 28, June 1, and June 4, 2025. In addition, a meeting was held with the MECP at the request of Hamilton Water on June 3, 2025.

On June 13, 2025, the MECP provided a written notification to Hamilton Water advising that no issues of non-compliance were identified during their review. The MECP also provided some recommendations which focused on using lessons learned to inform future operational and emergency planning.

APPENDICES AND SCHEDULES ATTACHED

Appendix A: Map of the Areas Referenced in HW2504

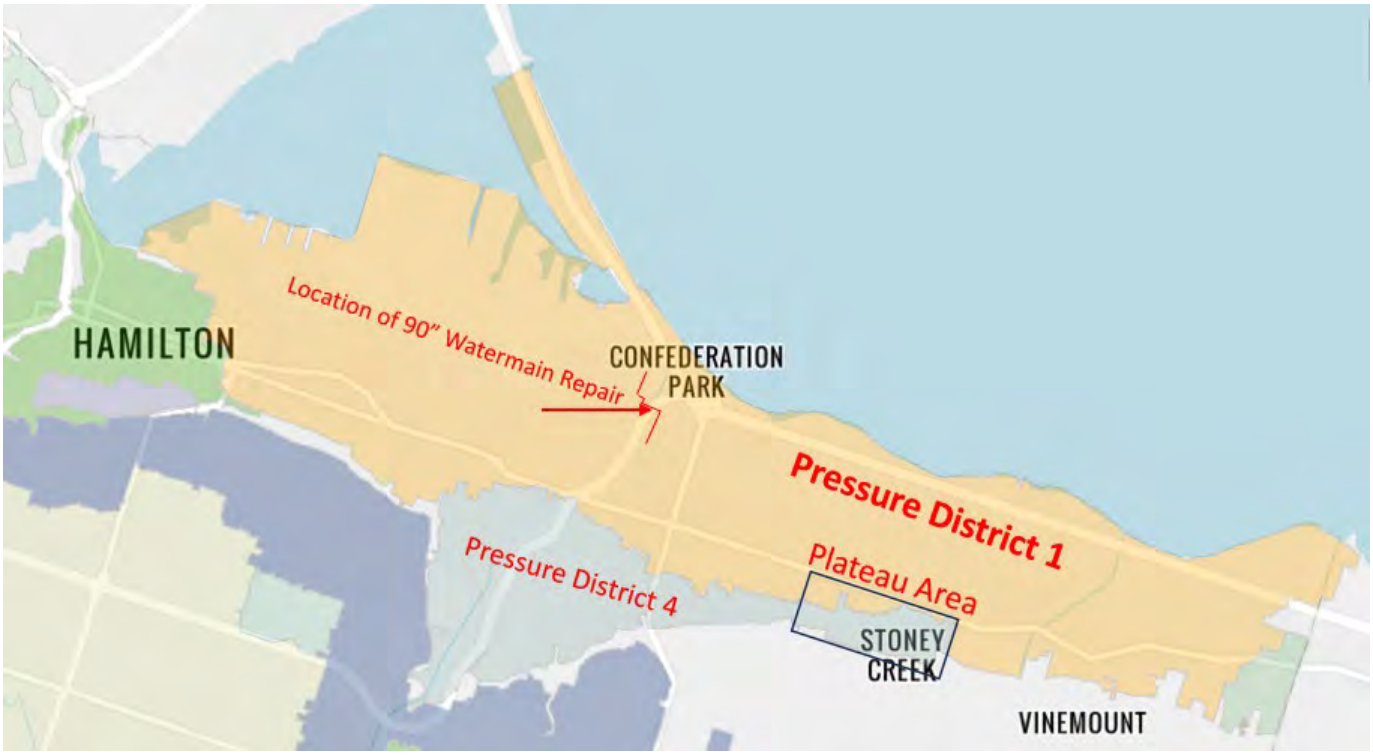
Appendix B: Reservoir Level Data for Recommissioning

Appendix C: Discharge Pressure Data for Recommissioning

Appendix D: Distribution System Pressure from the Permanent Pressure Monitor on the Stoney Creek plateau

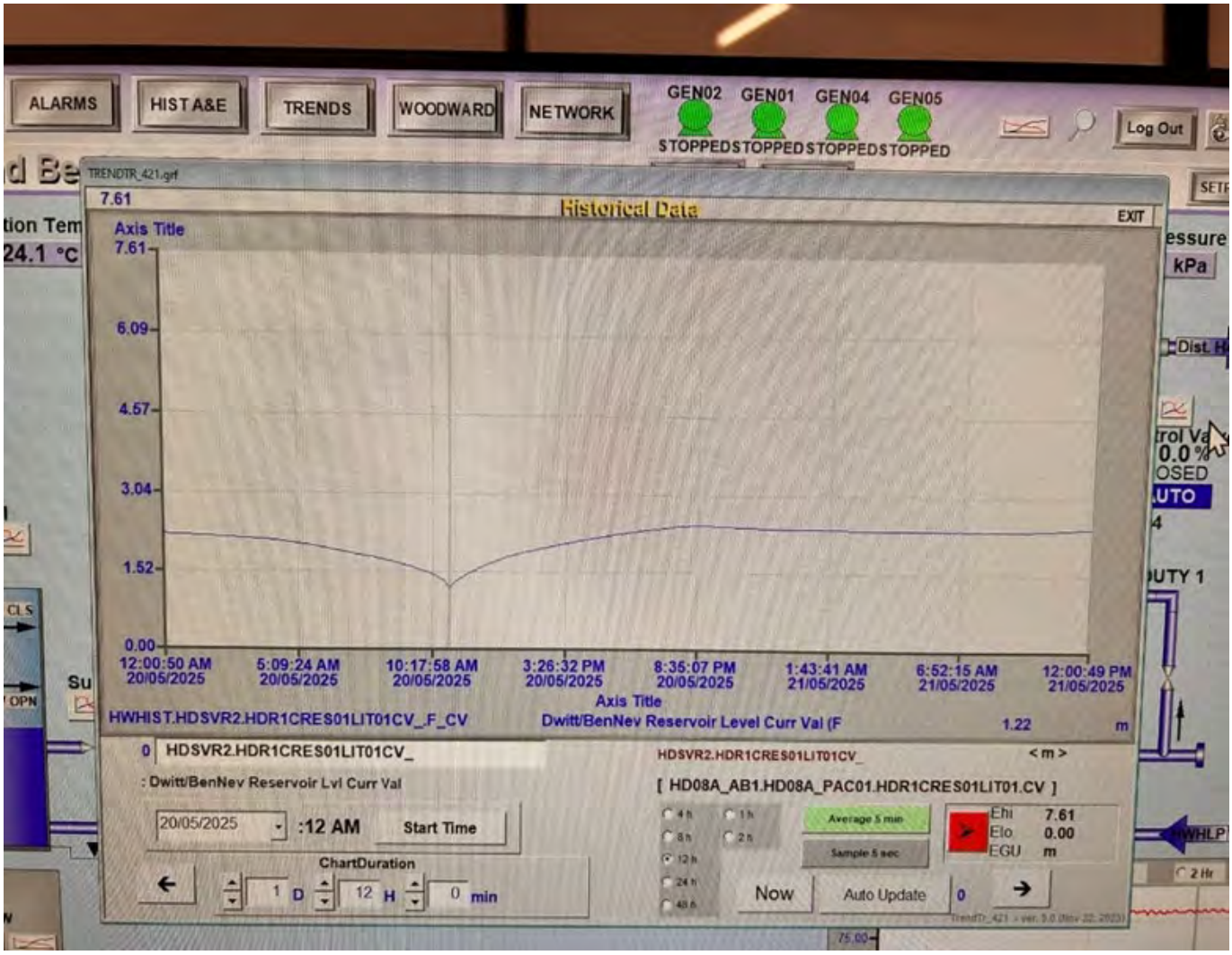
Map of the Areas

This map shows the boundaries of pressure district 1, which serves the entire lower half of the City, from Bayfront Park to Fifty Road, and from Lake Ontario to the Escarpment, the location of the 90-inch watermain that was being repaired, and the Stoney Creek Plateau area that experienced lower water pressure and four water quality complaints on May 20 and 21, 2025.



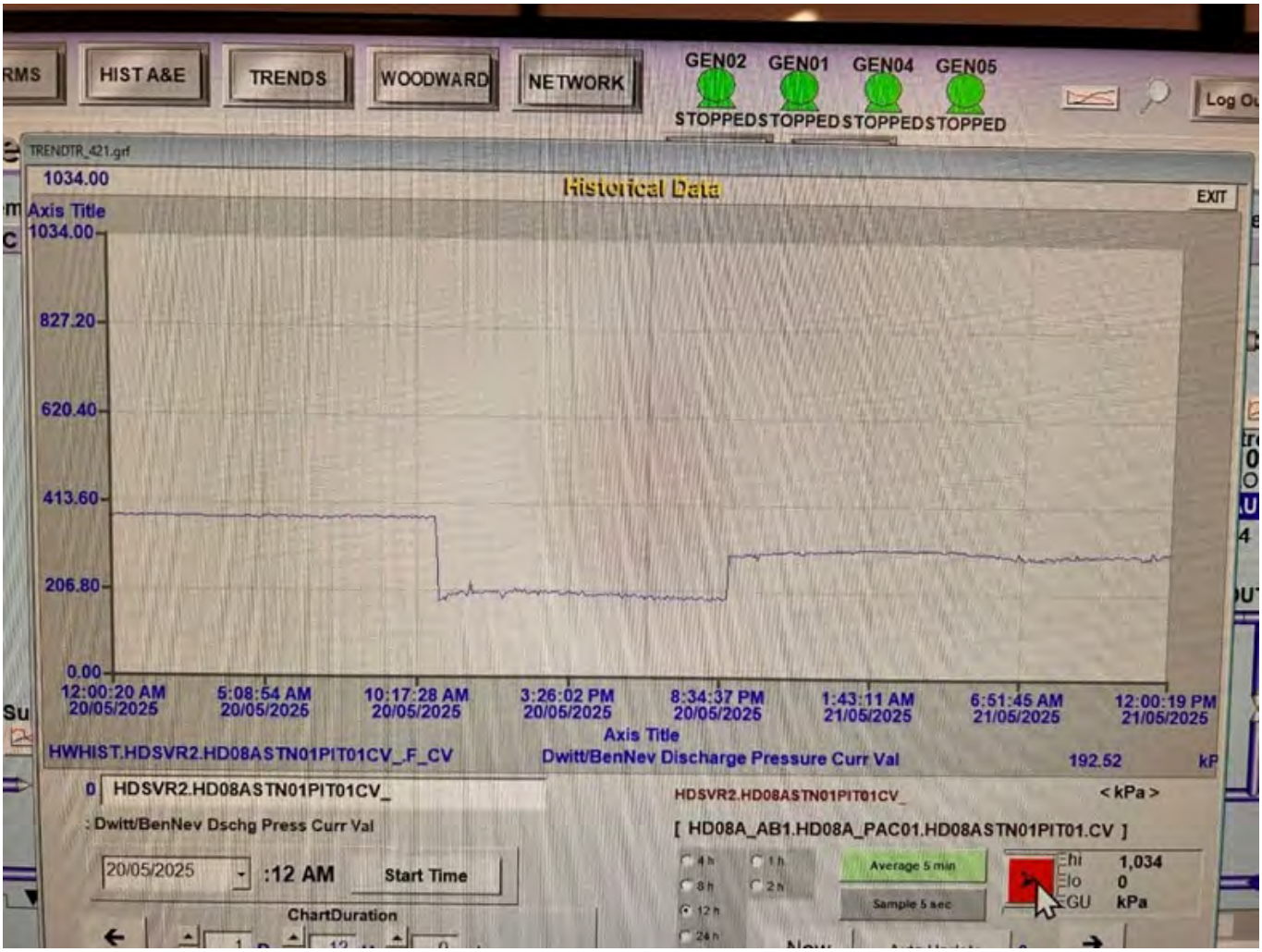
Reservoir Level Data for Recommissioning

This screenshot presents data from the City's SCADA control system, illustrating the level in the Dewitt/Ben Nevis Reservoir dropping to approximately 1.2 metres at around 11:00 am before beginning to climb again.



Discharge Pressure Data for Recommissioning

This screenshot presents data from the City's SCADA control system showing that the pressure from the Dewitt/Ben Nevis Pumping Station dropped to approximately 26 psi (179 kPa) at around 11:00 am, before returning to about 43 psi (296 kPa) around 9:00 pm.



Distribution System Pressure from the Permanent Pressure Monitor on the Stoney Creek Plateau

This screenshot shows data from the permanent pressure monitor located in the Stoney Creek Plateau area, confirming that pressure was maintained at approximately 26 psi (179 kPa) during the recommissioning period.