

Hunter Report Highlights

This report investigates Centre Wellington's water system. The township will be challenged to be ready for the 22,000 new residents and new industry as mandated by the Provincial and County growth plans. Further, private large-scale water extraction at the west side of Elora is expected to negatively impact the municipal water system.

1. Capacity of the water system.

This study shows that the average day water use from the existing municipal wells cannot exceed 54% of the allotted volume permitted by the Ministry in the township's Permit to Take Water. The individual wells are simply not capable of pumping to that volume.

The township is required to be able to provide water for maximum day use, which is approximately 1.5 times average day water use. In addition, the township is required to provide contingencies for out-of-service wells for maintenance or contamination.

Centre Wellington's Director of Infrastructure indicated that we need a new well fairly soon. This report shows that, in fact, we are on borrowed time; we need new wells now. There is no room for growth here, especially in Elora.

2. Other water system challenges:

- Private wells – the 1 in 8 urban homes on private wells restrict new well sites
- Well interference – this restricts the volume some municipal wells can pump
- TCE contamination – township cannot increase pumping at some wells
- Quality issues at F6 – decommissioning of this well is recommended
- Low pressure zones – realignment of pressure zones is recommended

3. Water supply system improvements The Township identified conservation within the water system to increase available water as the efficient path forward. This report presents conservation recommendations and an implementation plan to improve the existing water system, including:

- System leakage reduction
- Improved Fergus and Elora system integration

These improvements, by 2041, could save the equivalent capacity of 2 wells. Upgrades

will require time and financing, although it is recommended they be paid for from development charges. Regardless, this won't happen immediately. It will take years. The alternative is that additional new greenfield wells will be funded from development charges, while perpetuating system inefficiencies financed by water rates.

4. New municipal wells In addition to system improvements three new wells are required by 2041 to accommodate anticipated growth. The Township's current Official Plan shows no designated future water supply areas that have not already been used or are compromised. The Hunter report identifies six candidate new well locations, two of them west of Elora. These candidate sites are very close to proposed new well sites announced in the Water Supply Master Plan's January 10 update, sites that were based on Tier 3 modeling. These could also service the Salem population, now entirely on private wells, and which both Hunter and WSMP advise be connected to the municipal system. This increases water demand on the west side of Elora.

With growth it is increasingly difficult to find new well sites. Consultant reports conclude that in this area a minimum 2 km separation distance is required between high capacity wells. The WSMP update also advised that wells must be spaced far apart.

Centre Wellington's Tier 3 groundwater study indicated that the township wells and the Middlebrook well are all hydraulically connected. Further, hydraulic conductivity values are greatest to the west of Elora and northwest of Salem. Water moves easily through the bedrock here. The Middlebrook well west of Elora has a capacity two to three times the capacity of any municipal well. This source area would appear to have the best potential for future municipal water compared to other areas.

5. The Middlebrook well Commercial large-scale groundwater extraction at Middlebrook effectively eliminates from the equation the prime area on the west side of Elora as a site for a new township well.

Hunter concludes: "The issuance of a future private Permit to Take Water for the Middlebrook Artesian Well...will sterilize the prime water deep aquifer quantity and quality area immediately west of Elora for municipal water production." Further, "...it will reduce the finite quantity of water available in the deep hydraulically connected production aquifers required to support population growth as mandated through the County and Provincial Growth Plan."

The proposed water taking at the Middlebrook well will obstruct the efficient development of the township's water system that is needed for this municipality to grow and prosper.