



Location of Proposed Development,
Part of Lot 3, Concession 3, Town of Orangeville.
in relation to Aquifer Vulnerability,
Pullen Well

File No's S1-18 & OPZ 1-18 File No's S2-18 & OPZ 2-18

The development (indicated in black, above) is situated entirely on the Pullen Well's *Wellhead Protection Area Zones*, occupying around 20% of the aquifer's *Medium Vulnerability* area, on top of one *High Vulnerability* spot, and adjacent to three *High Vulnerability* spots.

Karey Shinn 42 John Street, Orangeville, L9W 2P3 November 28, 2020

Re: Town of Orangeville Council Meeting
November 30th, 2020
Public Meeting for Applications for a Plan of Subdivision, Official Plan Amendment and
Zoning By-Law Amendment
File No's S1-18 & OPZ 1-18
File No's S2-18 & OPZ 2-18

Areas shown on the two maps for these development lands, except for the southern point in File No's S2-18 & OPZ 2-18, are identified as having high and next to high vulnerability to our drinking water aquifer. Notably Wellhead Protection Area Zones for Wells 12, 8 and 8 C. and the new Pullen Well.

See: Figure 5.2 Updated Aquifer Vulnerability Pullen Well, Town of Amaranth FINAL prepared by R.J. Burnside& Associates Limited, 2010.

Clearly, it is in the interests of developers to privilege Part 1 of the Ontario Planning Act (OPA) over Part 2. But Part 2 is the indispensible part of the OPA. This addresses the situations that require different planning and unique sustainability issues, like the need to establish a sustainable water supply, to be addressed before development is approved.

The current Environmental Assessment for the Pullen Well noted that when the Pullen Well is operational it would likely draw down some of the nearby wells such as WHPA Well 12 and 8 and 8C. Therefore the water from the Pullen Well will mix with the vulnerable wells nearby. These proposed developments effectively invade the well vulnerability zones, therefore affecting drinking water quality and quantity parameters for future water supply, from the Pullen Well as well as nearby Wells.

## My concern is:

These two large subdivisions, combined with the massive construction disturbance to excavate for a new sewer system plus excavation and construction of many housing units, paved parking and roads, will not just provide a pathway to further pollute the aquifer — also, the aquifer will be deprived of the rain water that now freely enters the water supply from this large remaining greenfield site in Orangeville.

Until the Pullen Well is operational it is just best guessing what will happen underground to a very significant quantity of our drinking water supply. If we get this wrong there would never be the money to put the aquifer right again.

Engineering reports continue to conclude that they can only use best estimates. Real time movements of water underground are very difficult, I say impossible, to depend on in advance of the Pullen Well being operational, to have any merit.

Well 12 already has a burden of pollutants, they arrive from near and far.

Currently, after treatment, 44 organic chemicals are detected in Well 12 such as

1,4-Dichlorobenzene, 2,3,4,6-Tetrachlorophenol, Alachlor, Benzene and Trichloroethylene to name a few, of the many man-made and car related contaminants. Yes the reports claim there is no exceedance of the drinking water regulations but we will drink this water every day for many years. For some of these chemicals there is no safe limit.

There may need to be more Amendments to the Orangeville Official Plan and Zoning By-Law Amendments in the future to ensure no negative impact on the new and current water supply to the Town of Orangeville.

At this time it is premature to move forward with these 2 subdivisions on land designated as Wellhead Vulnerability Zones.

A new suite of Official Plan Amendments may need to follow the Pullen Well operation after a two year period or more, to better guide any type of development on these Wellhead Protection Areas Zones, if indeed any development other than a drinking water reservoir and water tower are appropriate.

Karey Shinn Orangeville