Affordable Housing - Rural Areas: Septic Systems

Firstly, update and modernize Section 8 of the Building Code (Septic System Design requirements). Rural septic system designs were created long before low flow toilets (4/6 litre toilets vs 13 litre toilets), faucet aerators, low flow showers, low water usage dishwashers, front loading low water washing machines, etc. The plumbing fixture flow rates have not been updated to reflect the water saving devices found in homes today. The water rates per fixture have not changed to reflect today's plumbing fixtures. As a result, septic systems today are over designed vs the actual flows going into them. As a safety margin, the Building Code asks as much as double what would work. It's time to reconsider if doubling the sizing is necessary or if 1.2x or 1.5x is sufficient.

New rural area homes must install massive, costly septic beds. Before Covid, septic systems are costing between \$20,000 to \$30,000 CND, now post Covid, prices have risen to \$35,000 to \$40,000. Whereas in the USA, their cost is \$8,000 to \$10,000 CND for a septic system. Even if the USA septic system failed 3 times (3x), it would still be cheaper and more affordable. The high price of septic installation is the oversized weeping beds and special sand required (finding material and trucking costs). Its time for the Ontario Government to update the septic system design criteria and allow for smaller septic systems which reflect today's water saving plumbing fixtures. If Ontario updates Section 8 of the Code, the result will be:1. Less land required for septic systems:

- 2. Smaller, more affordable rural lots,
- 3. Less valuable land being used for housing; Higher density, smaller footprints and less impact on climate change.
- 4. Smaller weeping beds, resulting in lower septic installation costs, thereby more affordable housing.
- 5. Hopefully, less profit taking by septic installers.

Secondly, reduce the effluent requirements for non-conventional septic systems to be closer to those of conventional septic systems. Current effluent requirements are upwards of 3x more stringent than conventional septic systems.

Reference on septic costs:

Septic Systems and What You Need to Know Before You Buy - Team Realty

How Much Does A Septic System Cost In Ontario | Allto Construction

South Nation Conservation Authority, Chief Building Official - Part 8, 2022 cost data