

*This is the second article submitted by the Route 20 Sewer Technical Advisory Committee examining a proposal to improve wastewater treatment along the commercial corridor along Boston Post Road.*

Our last article described what a decentralized wastewater treatment system was within the Sudbury context. This article will get into some of the details about why Sudbury needs wastewater treatment.

### *How can a Decentralized Wastewater Treatment System Address Environmental Challenges?*

Reliance on on-site septic systems in Sudbury's commercial corridor has created an environmental challenge for the town. Continued on-site septic use will allow environmental risks to continue. These risks are linked to soils along the corridor and the groundwater underneath it. Soil plays a critical role in treating wastewater as it leaches back into the groundwater aquifer. Septic systems require sufficiently permeable soil for water to move through and back to the groundwater aquifer. Adequate depth of soil ensures the wastewater is in contact with soil material for a sufficient period of time for treatment to take place.

Unfortunately, the soils along Boston Post Road have moderate to severe limitations for on-site septic treatment, which makes systems more prone to failure. Additionally, the water table is high in this area, which increases the chance of on-site septic system failure by reducing the depth of soil needed for treatment to take place. According to the Sudbury Health Director, 20% of the businesses along Route 20 have repaired or replaced their septic systems in the last 10 years. These repairs provide only a stop gap measure to the problem, and will require additional repairs and replacements in future years. Many of our most viable businesses and plazas are affected, including Sudbury Farms, Shaw's Plaza, Mill Village, Dunkin Donuts, McKinnon's Plaza, Lotus Blossom, Rossini's Plaza, Next Generation Children's Center, Millbrook Condos, Sudbury Coffee Works, and Friendly's.

All of Sudbury receives its drinking water from underground aquifers situated in various locations throughout the Town. The majority of the Boston Post Road corridor identified to be serviced by sewer sits above the Raymond Road Aquifer, which provides almost 60% of Sudbury's drinking water. Inadequate septic systems along the corridor pose a potential threat to public drinking water supplies in this area.

Installing a decentralized wastewater treatment system to service the commercial properties will address environmental issues associated with the area's poor soils and the area's role in providing public drinking water. It will accomplish this by aggregating wastewater from multiple commercial properties, conveying it to a treatment facility where it is treated and then allowed to percolate back into the groundwater aquifer in an area of the Town that is not designated for wellhead protection.

### *What are the Potential Economic Benefits of Installing a Decentralized Wastewater Treatment System?*

Currently, most commercial properties along Route 20 cannot expand due to septic system limitations. Reliance on on-site septic systems severely limits the ability for property owners

along the corridor to attract new tenants particularly restaurants and food services like grocery stores. Restaurants create significant amounts of wastewater but are a critical component of successful retail/commercial areas. Additionally, costly repairs and maintenance of septic systems hurts the bottom line of businesses. Commercial property owners in the Route 20 area have spent over \$3 million repairing or replacing their septic systems over the past 10 years, and will be faced with similar costs over the next decade.

Installing a decentralized wastewater treatment system along the corridor would eliminate the costly financial burden of frequent septic system repairs, create opportunities for new tenants, allow property owners to reinvest and redevelop their properties knowing that potential increased wastewater will be managed effectively, and allow the corridor to better compete with surrounding commercial areas, particularly the new Wayland Town Center.

*What Does the Town Envision for Route 20 in the Future? Will Sudbury's Commercial Corridor be Able to Grow After Sewers are Installed?*

Soon after Town Meeting concludes the Town will initiate a public process involving residents and businesses to begin planning for the future of Route 20 with decentralized wastewater. A Citizens Advisory Committee (CAC) will be formed, which will include subcommittees on creating a vision for Route 20, writing zoning bylaws, preparing bylaws and regulations for the sewer district, planning for other Route 20 streetscape improvements to be executed during the construction period, etc. The CAC will be the catalyst for zoning changes directed by the residents and businesses. There are many good examples in Massachusetts of successful mixed use business districts and corridors, and studying these examples will be the cornerstone of this effort. Preserving the character of Sudbury and creating development opportunities without allowing overdevelopment is of utmost concern, therefore adopting proper zoning controls needs to be carefully studied and executed.

Even without any zoning changes at all, the proposed wastewater system will be designed and constructed to handle approximately 50% additional flow from the existing properties in the service area. This will allow additional restaurants to locate in the existing shopping plazas, accommodate the renovation of vacant 2<sup>nd</sup> floor office space into residential units and allow for expansion of existing properties where all other zoning bylaws are complied with.

Questions regarding this project can be sent to Technical Advisory Committee at [sewertech@sudbury.ma.us](mailto:sewertech@sudbury.ma.us)