**Groton Sewer Districts Expansion Policy**

This policy applies to the Groton Center Sewer District and the Four Corners Sewer District.

**Background**

The Groton Sewer Commission is responsible for two sewer districts – Groton Center Sewer District and Four Corners Sewer District. These are distinct districts with unique collection areas and treatment facilities.

The Center Sewer District was established in 1985 with an inter-municipal agreement (IMA) with the Town of Pepperell for wastewater treatment, which was adopted in 1987. The Center Sewer System service area is Groton Center, the Partridgeberry Woods subdivision and the Groton-Dunstable High School (on a dedicated service line). Various extensions to the district have been approved by town meeting. The Groton Center System and Pepperell wastewater treatment plant are both located in the Nashua River basin.

The Four Corners Sewer District was established in 2019, using a MassWorks Development Grant. A prior initiative to provide sewer services to the Lost Lake residential area failed at town meeting. The Town of Groton received a permit for the transfer of wastewater from the Merrimack basin to the Nashua Basin (i.e. Inter-Basin Transfer) from the Water Resources Commission (WRC) in order to sewer the Lost Lake Area of Groton. Subsequently, the Town successfully petitioned the WRC in order to sewer a portion of Four Corners for economic development and housing. This allocation is limited in scope and sewer flows. The Four Corners system serves the business area and a small new residential development located adjacent to the business district (i.e. Rocky Hill subdivision). An inter-municipal agreement has been entered with the Town of Ayer for wastewater treatment in 2019. The Four Corners Sewer District is located in the Merrimack River basin. The Town of Ayer wastewater treatment facility is located in the Nashua River basin.

**Status**

The Four Corners Sewer System does not have any immediate capacity restrictions as of 2023. The Four Corners Sewer District was permitted in 2012 to transfer 125,000 gallons per day into the Nashua River basin, under the Interbasin Transfer Act. This 125,00 gallons per day transfer is determined to be “insignificant” by the Massachusetts Water Resources Commission[[1]](#footnote-1). However, the IMA with Ayer for wastewater treatment limits capacity to 40,050 gallons per day.

Under the IMA with the Town of Pepperell, the Center Sewer System is allowed to send 275,000 gallons per day of wastewater flow, averaged monthly, to the Pepperell Wastewater Treatment Plant. Significant development is planned to occur in the Center Sewer District in the next several years. The physical capacities of the Nod Road pump station pumps and force main line to Pepperell are being challenged as the estimated maximum monthly flow of 236,000 gallons per day (including estimates of planned development) approaches the IMA agreement of 275,000 maximum monthly gallons per day, and reach 90% of the optimal pumping capacity. The Nod Road pumps were last upgraded in 2013. Since then, the rotating assemblies have worn, reducing performance as of 2023.[[2]](#footnote-2)

**Increasing Flow Capacity for Groton Center Sewer District**

The options to increase capacity flow for the Groton Center Sewer District include upgrading the Nod Road pumps, upgrading the pump station and outflow line to Pepperell and potentially purchasing additional capacity at the Pepperell Wastewater Treatment Plant.

Upgrading Nod Road Pumps

The pumps at the Nod Road Pump Station are approaching end of life, expected in the next several years. To address the expected demands of the sewer system created by proposed development, these pumps will need to be upgraded somewhat sooner than anticipated. There are two pump upgrade scenarios:

* Scenario 1: Upgrade the pumps to meet optimum flow with the existing outflow pipes:

This scenario would replace the existing suction-lift pumps with more efficient technology. New pumps would be sized to match the maximum capacity of the force main that connects the Groton system to the Pepperell Wastewater Treatment Plant. An engineering and cost analysis of this scenario is being performed in early 2023. This scenario provides a minimal system flow increase, but would be expected to accommodate known proposed development. Preliminary cost estimates are $450,000.

* Scenario 2: Upgrade the pumps and pump station to meet large future demands:

This scenario would involve replacing the Nod Road pumps with higher capacity flooded-suction pumps. Due to the physical limitations of the existing pump station, a new station would be required. \*Very\* preliminary costs estimates for this option are in the $6 million dollar range.

* Scenario 2A: Under the Scenario 2 upgraded pump station, pumping capacity would exceed the flow capacity of the outflow pipes connecting the Groton system to Pepperell. If actual demand exceeded the capacity of the outflow, the pipes would need to be upgraded, at significant cost. If actual demand exceeded the IMA wastewater treatment limits, additional wastewater plant treatment capacity would need to be purchased. The purchase of this additional capacity could trigger an interbasin transfer review. The costs of an interbasin review can be significant, and approval of increased transfer limits would not be a foregone conclusion. It is likely that any approval would impose new significant conditions upon both sewer and water services.

In March, 2023, The Groton Sewer Commission has awarded a contract to specify requirements for Scenario 1.

**Policy**

The Groton Sewer Commission’s goal is to accommodate sewer connection requests to satisfy public health requirements and to promote economic development as possible within each district. However, with limited “upside” system capacity, the Sewer Commission has taken the position not to expand the sewer districts.

Effective April 19, 2023, the Groton Sewer Commission is instituting the following policies:

* Aggressively monitor and eliminate “inflow and infiltration” in the sewer system so as to reclaim available capacity.
* Service the needs of the in-district facilities as best possible.
* Consider sewer district expansion to properties only to service a failed septic system with no economically feasible replacement option.

**Approved:** The Groton Sewer DistrictsExpansion Policy was approved by the Board of Sewer Commissioners on April 19, 2023, with an effective date of April 19, 2023.

1. Environmental Partners, July 29, 2015 [↑](#footnote-ref-1)
2. Environmental Partners, August 31, 2021; Page 6 [↑](#footnote-ref-2)