

## SUPPLEMENTAL MATERIALS

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# Relationship between Groundwater Nitrate Concentration and Density of Onsite Wastewater Treatment Systems: Role of Soil Parent Material and Impact on Pollution Risk

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**Table S1.** Soil series corresponding to till and glacial fluvial parent material

Soil parent material	Soil series	Symbol	C Horizon Ksat ( $\mu\text{m/s}$ ) <sup>a</sup>	Drainage class <sup>a</sup>
<b>Till</b>	Canton-Urban land complex	CB	42-141	Well drained
	Canton and Charlton very stony fine sandy loams 3 – 8% slopes	ChB	42-141	Well drained
	Canton and Charlton very stony fine sandy loams 8 -15% slopes	ChC	4.0-141	Well drained
	Gloucester-Hinckley very stony sandy loams, rolling	GhC	42-703	Excessively drained
	Gloucester-Hinckley very stony sandy loams, hilly	GhD	42-703	Excessively drained
	Ridgebury, Whitman, and Leicester extremely stony fine sandy loams	Rf	0.01-141	Poorly to V. poorly drained
	Bridgehampton- Charlton complex, very stony, 0 – 8% slopes	BnB	4.0-42	Well to Mod. well drained
	Wapping very stony silt loam, 0 – 8% slopes	WcB	14-141	Mod. well drained
<b>Glacial fluvial</b>	Enfield silt loam, 0 – 3% slopes (EfA)	EfA	42-703	Well drained
	Freetown mucky peat, 0 – 2% slopes	FeA	Mod. high-high	Very poorly drained
	Hinckley-Enfield complex, rolling	HnC	42-703	Excessively drained
	Hooksan sand 3 – 8% slopes	HsB	Very high	Very poorly drained
	Matunuck mucky peat	Mk	14-705	Very poorly drained

Merrimac sandy loam 3 – 8% slopes	MmB	42-703	Somewhat excessively drained
Merrimac sandy loam 0 – 3% slopes	MmA	42-703	Somewhat excessively drained
Merrimac- Urban land complex	MU	42-703	Somewhat excessively drained
Scarboro mucky sandy loam	Sb	42-703	Very poorly drained
Sudbury sandy loam	Ss	42-703	Moderately well drained
Swansea, mucky peat 0 – 2% slopes	SwA	Mod. high-high	Very poorly drained
Tisbury silt loam	Tb	42-703	Moderately well drained
Udorthents - Urban land complex	UD	Not applicable	Not applicable

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Source: Data from Soil Survey Staff (2023).

<sup>a</sup> Saturated hydraulic conductivity (Ksat) values and drainage class from Soil Survey of Rhode Island (1981).

## Reference

Soil Survey Staff. 2023. Soil Survey Staff, Natural Resources Conservation Service, UnitedStates Department of Agriculture. Web Soil Survey. Available online at: <http://websoilsurvey.sc.egov.usda.gov/>. Accessed July 25, 2023.