LyE: Lyman-Marlow complex, 30 to 60 percent slopes, very rocky

The Marlow, very stony component makes up 23 percent of the map unit. Slopes are 30 to 60 percent. This component is on hills on glaciated uplands, mountains on glaciated uplands. The parent material consists of loamy lodgment till derived from granite and/or loamy lodgment till derived from mica schist and/or loamy lodgment till derived from phyllite. Depth to a root restrictive layer, densic material, is 20 to 41 inches (depth from the mineral surface is 20 to 39 inches). The natural drainage class is well drained. Water movement in the most restrictive layer is moderately low. Available water to a depth of 60 inches (or restricted depth) is moderate. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 85 percent. Below this thin organic horizon the organic matter content is about 13 percent. Nonirrigated land capability classification is 7s. This soil does not meet hydric criteria.

The Lyman, very stony component makes up 65 percent of the map unit. Slopes are 30 to 60 percent. This component is on hills on glaciated uplands, mountains on glaciated uplands. The parent material consists of loamy supraglacial till derived from granite and gneiss and/or loamy supraglacial till derived from phyllite and/or loamy supraglacial till derived from mica schist. Depth to a root restrictive layer, bedrock, lithic, is 11 to 24 inches (depth from the mineral surface is 10 to 20 inches). The natural drainage class is somewhat excessively drained. Water movement in the most restrictive layer is low. Available water to a depth of 60 inches (or restricted depth) is low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 85 percent. Below this thin organic horizon the organic matter content is about 8 percent. Nonirrigated land capability classification is 7s. This soil does not meet hydric criteria.

Important farmland classification: NPSL	Land capability: 7 s	Vermont Agricultural Value Group: 11

Vermont Residential Onsite Waste Disposal Group and Subgroup: IVb

This unit is generally not suited as a site for soil-based residential wastewater disposal systems, based on a review by the Natural Resources Conservation Service of criteria set forth in the Vermont 2007 Environmental Protection Rules. Steep slopes in association with the depth to bedrock is the limiting condition. Cut and fill site modifications that reduce the slope gradient are difficult to achieve due to the depth to bedrock.

	PHYSICAL and CHEMICAL PROPERTIES						EROSION FACTORS		
Soil name	Depth (In)	Typical texture	Clay (Pct)	Soil reaction (pH)	Permeability (In/Hr)	Organic matter (Pct)	Kw	Kf	T
Lyman, very stony	0-1	MPM	---	3.5 - 5.5	1-14	35-95	---	---	1
	1-3	L	1-10	3.5 - 6.0	0.1-14	4.0-20	.32	.32	
	3-5	FSL	1-10	3.5 - 6.0	0.1-14	1.4-5.7	.37	.37	
	5-7	L	1-10	3.5 - 6.0	0.1-14	3.1-25	.32	.32	
	7-11	L	1-10	3.5 - 6.0	0.1-14	2.2-18	.32	.32	
	11-18	CN-L	1-10	3.5 - 6.0	0.1-14	2.2-7.0	.24	.32	
	18-28	BR	---	---	0.001-14	---	---	---	
Marlow, very stony	0-2	SPM	---	3.5 - 5.5	1-14	35-95	---	---	3
	2-5	FSL	1-10	3.5 - 6.0	0.1-14	5.0-25	.28	.28	
	5-8	FSL	1-10	3.5 - 6.0	0.1-14	1.0-4.0	.37	.37	
	8-15	FSL	1-10	3.5 - 6.0	0.1-14	3.0-12	.28	.28	
	15-19	FSL	1-10	3.5 - 6.0	0.1-14	1.0-8.0	.37	.37	
	19-33	GR-FSL	1-10	3.5 - 6.0	0.1-14	0.5-2.0	.28	.43	
	33-65	FSL	1-10	3.5 - 6.0	0.01-1	0.0-1.0	.49	.49	

	WATER FEATURES						SOIL FEATURES	
Soil name	Hydrologic group	Depth to seasonal high water table (Feet)	Flooding		Ponding		Hydric soil?	Depth to bedrock (range in inches)
			Frequency	Duration	Frequency	Duration		
Lyman, very stony	D	---	None		None		No	11-24
Marlow, very stony	C	---	None		None		No	20-41

LAND USE LIMITATIONS				AGRICULTURAL YIELD DATA	
Soil name	Land use	Rating	Reason **	Crop name	Yield / acre
Marlow, very stony	Dwellings with basements:	Very limited	Slope		

Lyman, very stony	Dwellings with basements:	Very limited	Slope
Marlow, very stony	Pond reservoir areas:	Very limited	Slope
Lyman, very stony	Pond reservoir areas:	Very limited	Slope

WOODLAND MANAGEMENT

Soil name	Management concern	Rating	Reason	Vermont natural communities
Marlow	Harvest equip operability:	Poorly suited	Slope	Hemlock-Northern Hardwood Forest, Northern Hardwood Forest, Mesic Red Oak-Northern Hardwood Forest, Hemlock Forest, Red Pine Forest or Woodland
Lyman	Harvest equip operability:	Poorly suited	Slope	
Marlow	Road suitability:	Poorly suited	Slope	
Lyman	Road suitability:	Poorly suited	Slope	
Marlow	Erosion hazard (off-road):	Severe	Slope/erodibility	
Lyman	Erosion hazard (off-road):	Very severe	Slope/erodibility	