63E: Monadnock and Berkshire soils, 35 to 60 percent slopes, very stony

The Berkshire, very stony component makes up 40 percent of the map unit. Slopes are 35 to 60 percent. This component is on mountains on glaciated uplands, hills on glaciated uplands. The parent material consists of loamy supraglacial meltout till derived from phyllite and/or granite and gneiss and/or mica schist. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches (or restricted depth) is high. 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 11 percent. Nonirrigated land capability classification is 7s. This soil does not meet hydric criteria.

The Monadnock, very stony component makes up 45 percent of the map unit. Slopes are 35 to 60 percent. This component is on mountains on glaciated uplands, hills on glaciated uplands. The parent material consists of loamy supraglacial meltout till derived from phyllite and/or granite and gneiss and/or mica schist over sandy and gravelly supraglacial meltout till derived from phyllite and/or granite and gneiss and/or mica schist. Depth to a root restrictive layer, strongly contrasting textural stratification, is 18 to 36 inches (depth from the mineral surface is 17 to 31 inches). The natural drainage class is well drained. Water movement in the most restrictive layer is moderately high. 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 2 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: IIf

This unit is moderately 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. Slopes greater than 20 percent are the primary concern. Cut and fill site modifications may produce an acceptable area within the unit. An erosion prevention and sediment control plan is required by the State for construction on sites over 20 percent slope.

	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
Monadnock, very stony	0-3	MPM	---	3.5 - 5.5	1-14	35-95	---	---	3
	3-8	FSL	1-10	3.5 - 6.0	0.1-14	1.0-4.0	.37	.37	
	8-10	FSL	1-10	3.5 - 6.0	0.1-14	2.0-20	.32	.32	
	10-12	FSL	1-10	3.5 - 6.0	0.1-14	2.0-10	.32	.32	
	12-22	GR-FSL	1-10	3.5 - 6.0	0.1-14	1.0-6.0	.24	.43	
	22-25	GR-FSL	1-10	3.5 - 6.0	0.1-14	0.0-2.0	.24	.43	
	25-45	GR-LS	0-1	3.5 - 6.0	1-100	0.0-1.0	.17	.32	
	45-65	GR-LS	0-1	3.5 - 6.0	1-100	0.0-1.0	.17	.32	
Berkshire, very stony	0-2	SPM	---	3.5 - 5.5	1-14	35-95	---	---	5
	2-4	FSL	1-10	3.5 - 6.0	0.1-14	5.0-15	.32	.32	
	4-5	FSL	1-10	3.5 - 6.0	0.1-14	1.0-5.0	.37	.37	
	5-7	FSL	1-10	3.5 - 6.0	0.1-14	2.0-20	.32	.32	
	7-13	FSL	1-10	3.5 - 6.0	0.1-14	2.0-10	.32	.32	
	13-21	FSL	1-10	3.5 - 6.0	0.1-14	1.0-6.0	.43	.43	
	21-28	FSL	1-10	3.5 - 6.0	0.1-14	0.0-3.0	.49	.49	
	28-33	FSL	1-10	3.5 - 6.0	0.1-14	0.0-2.0	.49	.49	
	33-65	FSL	1-10	3.5 - 6.0	0.1-14	0.0-1.0	.55	.55	

		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		
Monadnock, very stony	B	---	None		None		No	
Berkshire, very stony	B	---	None		None		No	

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

WOODLAND MANAGEMENT				
Soil name	Management concern	Rating	Reason	Vermont natural communities
Berkshire	Harvest equip operability:	Poorly suited	Slope	Northern Hardwood Forest, Mesic Red Oak-Northern Hardwood Forest, Beech-Red Maple-Hemlock-Northern Hardwood Forest Variant, Hemlock Forest
Monadnock	Harvest equip operability:	Poorly suited	Slope	
Berkshire	Road suitability:	Poorly suited	Slope	
Monadnock	Road suitability:	Poorly suited	Slope	
Berkshire	Erosion hazard (off-road):	Severe	Slope/erodibility	
Monadnock	Erosion hazard (off-road):	Very severe	Slope/erodibility	