

SIE63: Monadnock-Sunapee complex, 15 to 35 percent slopes, very stony

The Monadnock, very stony component makes up 64 percent of the map unit. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately high. This component is on moraines. The parent material consists of sandy and gravelly ablation till. Depth to a root restrictive layer is greater than 60 inches.

The Sunapee, very stony component makes up 19 percent of the map unit. The natural drainage class is moderately well drained. Water movement in the most restrictive layer is moderately high. This component is on moraines. The parent material consists of loamy ablation till. Depth to a root restrictive layer is greater than 60 inches.

Important farmland classification: NPSL

Land capability: 6 s

Vermont Agricultural Value Group: 10

Vermont Residential Onsite Waste Disposal Group and Subgroup: IIIe

This unit is marginally 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. The depth to the seasonal high water table and slopes greater than 20 percent in some areas are the major limitations. A detailed, site-specific analysis is generally required. On-site groundwater level monitoring and determination of induced groundwater mounding is often necessary to establish the suitability of this unit. Curtain drains may help lower the water table to an acceptable level. There may be less-sloping areas within the unit that are suitable for siting a septic system, or, if feasible, 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	0-1	MPM	---	3.5 - 5.5	2-6	35-100	---	---	4
	1-5	FSL	1-15	3.5 - 6.0	0.6-2	2.0-13	.28	.28	
	5-22	FSL	1-15	3.5 - 6.0	0.6-2	0.5-5.5	.37	.37	
	22-65	GRV-LCOS	1-5	3.5 - 6.0	2-6	0.0-1.5	.05	.15	
Sunapee, very stony	0-2	MPM	---	3.5 - 5.5	2-6	35-100	---	---	5
	2-6	FSL	2-12	3.5 - 5.5	0.6-2	2.0-13	.24	.24	
	6-38	FSL	1-12	3.5 - 5.5	0.6-2	0.2-4.5	.37	.37	
	38-65	GR-LFS	0-10	3.5 - 6.0	0.6-6	0.0-1.5	.24	.37	

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	---
Sunapee, very stony	B/D	1.5-3.0	None		None		No	---

LAND USE LIMITATIONS				AGRICULTURAL YIELD DATA	
Soil name	Land use	Rating	Reason **	Crop name	Yield / acre
Sunapee, very stony	Dwellings with basements:	Very limited	Slope	Grass-legume hay	3 Tons
Monadnock, very stony	Dwellings with basements:	Very limited	Slope	Grass-clover	4.7 AUM
				Grass hay	2.5 Tons
Sunapee, very stony	Pond reservoir areas:	Very limited	Slope	Corn silage	14 Tons
Monadnock, very stony	Pond reservoir areas:	Very limited	Seepage	Alfalfa hay	3.5 Tons
				Pasture	2.8 AUM

WOODLAND MANAGEMENT				
Soil name	Management concern	Rating	Reason	Vermont natural communities
Sunapee	Harvest equip operability:	Moderately suited	0.1 to 3% surface cover fragments >=600mm (r bouldery)	Northern Hardwood Forest, Mesic Red Oak-Northern Hardwood Forest, Beech-Red Maple-Hemlock-Northern Hardwood Forest Variant, Hemlock Forest

Monadnock	Harvest equip operability:	Moderately suited	0.1 to 3% surface cover fragments >=600mm (r bouldery)
Sunapee	Road suitability:	Poorly suited	Slope
Monadnock	Road suitability:	Poorly suited	Slope
Sunapee	Erosion hazard (off-road):	Moderate	Slope/erodibility
Monadnock	Erosion hazard (off-road):	Moderate	Slope/erodibility