

SIE62 Monadnock-Sunapee-Colonel complex, 8 to 15 percent slopes

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The Monadnock component makes up 35 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 component makes up 31 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 sandy and gravelly ablation till. Depth to a root restrictive layer is greater than 60 inches.

The Colonel component makes up 21 percent of the map unit. The natural drainage class is somewhat poorly drained. Water movement in the most restrictive layer is moderately low. This component is on moraines. The parent material consists of loamy basal till. Depth to a root restrictive layer, densic material, is 10 to 20 inches.

Important farmland classification: Statewide

Land capability: 3 e

Vermont Agricultural Value Group: 7

Vermont Residential Onsite Waste Disposal Group and Subgroup: IIIId

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 is the major limitation. 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.

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	0-8	FSL	2-12	3.5 - 6.0	0.6-2	2.0-13	.28	.28	4
	8-22	FSL	1-12	3.5 - 6.0	0.6-2	0.5-4.5	.32	.32	
	22-65	GRV-LCOS	0-10	3.5 - 6.0	2-6	0.0-1.5	.05	.15	
Sunapee	0-8	FSL	2-12	3.5 - 5.5	0.6-2	2.0-15	.24	.24	5
	8-38	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	
Colonel	0-6	FSL	1-15	3.5 - 6.5	0.6-2	2.0-12	.32	.32	2
	6-14	GR-FSL	1-15	3.5 - 6.5	0.6-2	1.0-10	.24	.37	
	14-65	GR-SL	1-15	4.5 - 6.5	0.06-0.6	0.0-0.3	.28	.43	

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	B	---	None		None		No	---
Sunapee	B/D	1.5-3.0	None		None		No	---
Colonel	D	0.5-1.5	None		None		No	---

LAND USE LIMITATIONS				AGRICULTURAL YIELD DATA	
Soil name	Land use	Rating	Reason **	Crop name	Yield / acre
Colonel	Dwellings with basements:	Very limited	Depth to saturated zone	Pasture	10.5 AUM
Sunapee	Dwellings with basements:	Very limited	Depth to saturated zone	Grass-legume hay	4 Tons
Monadnock	Dwellings with basements:	Somewhat limited	Slope	Corn silage	18 Tons
Colonel	Pond reservoir areas:	Very limited	Slope	Pasture	2.8 AUM
Sunapee	Pond reservoir areas:	Very limited	Slope	Pasture	10.5 AUM
Monadnock	Pond reservoir areas:	Very limited	Seepage	Grass-legume hay	4 Tons
				Corn silage	18 Tons

Soil Fact Sheet - Continued

Essex County, Vermont

WOODLAND MANAGEMENT

Soil name	Management concern	Rating	Reason	Vermont natural communities
Colonel	Harvest equip operability:	Poorly suited	<30cm to water table for >=6mos	Northern Hardwood Forest, Mesic Red Oak-Northern Hardwood Forest, Beech-Red Maple-Hemlock-Northern Hardwood Forest Variant, Hemlock Forest
Sunapee	Harvest equip operability:	Moderately suited	30-60cm to water table for >=6mos	
Monadnock	Harvest equip operability:	Well suited		
Colonel	Road suitability:	Poorly suited	Wetness	
Sunapee	Road suitability:	Moderately suited	Slope	
Monadnock	Road suitability:	Moderately suited	Slope	
Colonel	Erosion hazard (off-road):	Slight		
Sunapee	Erosion hazard (off-road):	Slight		
Monadnock	Erosion hazard (off-road):	Slight		