

Sewage Disposal Onsite Septic Ratings (VT)

Caledonia County, Vermont

[These ratings are based on a review of criteria set forth in the Vermont 2002 Environmental Protection Rules]

| On-site class | Map symbol | Soil map unit name |
|---------------|------------|--|
| IVa | 3A | Charles silt loam, 0 to 2 percent slopes, frequently flooded |
| IVa | 4A | Medomak mucky silt loam, 0 to 2 percent slopes, frequently flooded |
| Ia | 6A | Adams loamy fine sand, 0 to 3 percent slopes |
| Ia | 6B | Adams loamy fine sand, 3 to 8 percent slopes |
| Ia | 6C | Adams loamy fine sand, 8 to 15 percent slopes |
| Ib | 6D | Adams loamy fine sand, 15 to 25 percent slopes |
| Ile | 6E | Adams loamy fine sand, 25 to 60 percent slopes |
| Ic | 7B | Salmon very fine sandy loam, 3 to 8 percent slopes |
| Ic | 7C | Salmon very fine sandy loam, 8 to 15 percent slopes |
| Id | 7D | Salmon very fine sandy loam, 15 to 25 percent slopes |
| IIf | 7E | Salmon very fine sandy loam, 25 to 50 percent slopes |
| IIh | 8A | Nicholville very fine sandy loam, 0 to 3 percent slopes |
| IIh | 8B | Nicholville very fine sandy loam, 3 to 8 percent slopes |
| IIh | 8C | Nicholville very fine sandy loam, 8 to 15 percent slopes |
| IIIe | 8D | Nicholville very fine sandy loam, 15 to 25 percent slopes |
| IVa | 9A | Roundabout silt loam, 0 to 3 percent slopes |
| IIh | 11A | Sheepscot gravelly fine sandy loam, 0 to 3 percent slopes |
| IIh | 11B | Sheepscot gravelly fine sandy loam, 3 to 8 percent slopes |
| IVa | 12A | Moosilauke very fine sandy loam, 0 to 3 percent slopes |
| IIc | 14B | Vershire-Lombard complex, 3 to 8 percent slopes, rocky |
| IIc | 14C | Vershire-Lombard complex, 8 to 15 percent slopes, rocky |
| IIId | 14D | Vershire-Lombard complex, 15 to 25 percent slopes, rocky |
| IVb | 14E | Vershire-Lombard complex, 25 to 35 percent slopes, rocky |
| Ic | 16B | Dummerston very fine sandy loam, 3 to 8 percent slopes |
| Ic | 16C | Dummerston very fine sandy loam, 8 to 15 percent slopes |
| Id | 16D | Dummerston very fine sandy loam, 15 to 25 percent slopes |
| IIf | 16E | Dummerston very fine sandy loam, 25 to 35 percent slopes |
| Ic | 17B | Dummerston very fine sandy loam, 3 to 8 percent slopes, very stony |
| Ic | 17C | Dummerston very fine sandy loam, 8 to 15 percent slopes, very stony |
| Id | 17D | Dummerston very fine sandy loam, 15 to 35 percent slopes, very stony |
| IIf | 17E | Dummerston very fine sandy loam, 35 to 60 percent slopes, very stony |
| IIIc | 20B | Buckland fine sandy loam, 3 to 8 percent slopes |
| IIId | 20C | Buckland fine sandy loam, 8 to 15 percent slopes |
| IIIe | 20D | Buckland fine sandy loam, 15 to 25 percent slopes |
| IIIc | 21B | Buckland fine sandy loam, 3 to 8 percent slopes, very stony |

Sewage Disposal Onsite Septic Ratings (VT)

Caledonia County, Vermont

| On-site class | Map symbol | Soil map unit name |
|---------------|------------|---|
| III d | 21C | Buckland fine sandy loam, 8 to 15 percent slopes, very stony |
| III e | 21D | Buckland fine sandy loam, 15 to 35 percent slopes, very stony |
| IV d | 21E | Buckland fine sandy loam, 35 to 60 percent slopes, very stony |
| IV a | 22B | Cabot silt loam, 3 to 8 percent slopes |
| III d | 22C | Cabot silt loam, 8 to 15 percent slopes |
| IV a | 23B | Cabot silt loam, 0 to 8 percent slopes, very stony |
| III d | 23C | Cabot silt loam, 8 to 15 percent slopes, very stony |
| IV a | 24A | Peacham muck, 0 to 3 percent slopes, very stony |
| IV a | 27A | Bucksport muck, 0 to 2 percent slopes |
| II g | 30A | Ondawa-Sunday complex, 0 to 2 percent slopes, occasionally flooded |
| III b | 31A | Podunk fine sandy loam, 0 to 2 percent slopes, occasionally flooded |
| I a | 32A | Colton-Duxbury complex, 0 to 3 percent slopes |
| I a | 32B | Colton-Duxbury complex, 3 to 8 percent slopes |
| I a | 32C | Colton-Duxbury complex, 8 to 15 percent slopes |
| I b | 32D | Colton-Duxbury complex, 15 to 25 percent slopes |
| II e | 32E | Colton-Duxbury complex, 25 to 60 percent slopes |
| II h | 38A | Croghan loamy fine sand, 0 to 3 percent slopes |
| II h | 38B | Croghan loamy fine sand, 3 to 8 percent slopes |
| IV a | 42A | Rumney fine sandy loam, 0 to 2 percent slopes, frequently flooded |
| III c | 46B | Lamoine silt loam, 3 to 8 percent slopes |
| III d | 46C | Lamoine silt loam, 8 to 15 percent slopes |
| III e | 46D | Lamoine silt loam, 15 to 25 percent slopes |
| IV d | 46E | Lamoine silt loam, 25 to 50 percent slopes |
| IV a | 47A | Scantic silt loam, 0 to 3 percent slopes |
| IV a | 50A | Wonsqueak and Pondicherry mucks, 0 to 2 percent slopes |
| II c | 56B | Vershire-Glover complex, 3 to 8 percent slopes, very rocky |
| II c | 56C | Vershire-Glover complex, 8 to 15 percent slopes, very rocky |
| II d | 56D | Vershire-Glover complex, 15 to 35 percent slopes, very rocky |
| IV b | 56E | Vershire-Glover complex, 35 to 60 percent slopes, very rocky |
| II c | 58B | Tunbridge-Lyman complex, 3 to 8 percent slopes, rocky |
| II c | 58C | Tunbridge-Lyman complex, 8 to 15 percent slopes, rocky |
| II d | 58D | Tunbridge-Lyman complex, 15 to 25 percent slopes, rocky |
| II c | 61B | Tunbridge-Lyman complex, 3 to 8 percent slopes, very rocky |
| II c | 61C | Tunbridge-Lyman complex, 8 to 15 percent slopes, very rocky |
| II d | 61D | Tunbridge-Lyman complex, 15 to 35 percent slopes, very rocky |
| IV b | 61E | Tunbridge-Lyman complex, 35 to 60 percent slopes, very rocky |

Sewage Disposal Onsite Septic Ratings (VT)

Caledonia County, Vermont

| On-site class | Map symbol | Soil map unit name |
|---------------|------------|--|
| IIc | 63B | Tunbridge-Monadnock complex, 3 to 8 percent slopes, rocky |
| IIc | 63C | Tunbridge-Monadnock complex, 8 to 15 percent slopes, rocky |
| IIId | 63D | Tunbridge-Monadnock complex, 15 to 25 percent slopes, rocky |
| IIIc | 72B | Colonel-Cabot complex, 3 to 8 percent slopes |
| IIIId | 72C | Colonel-Cabot complex, 8 to 15 percent slopes |
| IIIe | 72D | Colonel-Cabot complex, 15 to 25 percent slopes |
| IIIc | 73B | Colonel-Cabot complex, 3 to 8 percent slopes, very stony |
| IIIId | 73C | Colonel-Cabot complex, 8 to 15 percent slopes, very stony |
| IIIe | 73D | Colonel-Cabot complex, 15 to 35 percent slopes, very stony |
| Ic | 74B | Monadnock fine sandy loam, 3 to 8 percent slopes |
| Ic | 74C | Monadnock fine sandy loam, 8 to 15 percent slopes |
| Id | 74D | Monadnock fine sandy loam, 15 to 25 percent slopes |
| Ic | 75B | Monadnock fine sandy loam, 3 to 8 percent slopes, very stony |
| Ic | 75C | Monadnock fine sandy loam, 8 to 15 percent slopes, very stony |
| Id | 75D | Monadnock fine sandy loam, 15 to 35 percent slopes, very stony |
| IIIf | 75E | Monadnock fine sandy loam, 35 to 60 percent slopes, very stony |
| IVc | 81D | Ricker-Londonderry-Stratton complex, 15 to 35 percent slopes, very rocky |
| IVb | 81E | Ricker-Londonderry-Stratton complex, 35 to 60 percent slopes, very rocky |
| IVb | 82F | Ricker-Londonderry-Rock outcrop complex, 60 to 90 percent slopes |
| IIh | 85C | Dixfield sandy loam, 3 to 15 percent slopes, extremely bouldery |
| IIIe | 85D | Dixfield sandy loam, 15 to 35 percent slopes, extremely bouldery |
| IVd | 85E | Dixfield sandy loam, 35 to 60 percent slopes, extremely bouldery |
| IIIId | 86C | Cabot silt loam, 3 to 15 percent slopes, extremely bouldery |
| IIIId | 87C | Colonel-Cabot complex, 3 to 15 percent slopes, extremely bouldery |
| Ic | 88C | Houghtonville fine sandy loam, 8 to 15 percent slopes, very stony |
| IIIa | 92D | Hogback-Rawsonville complex, 15 to 35 percent slopes, very rocky |
| IVb | 92E | Hogback-Rawsonville complex, 35 to 60 percent slopes, very rocky |
| Id | 93E | Houghtonville fine sandy loam, 15 to 60 percent slopes, rubbly |
| Id | 94D | Houghtonville fine sandy loam, 15 to 35 percent slopes, very bouldery |
| V | 100 | Pits, sand and Pits, gravel |
| V | 102 | Pits, quarry-Dumps, mine complex |
| V | 104B | Urban land-Adams-Nicholville complex, 0 to 8 percent slopes |
| V | 104C | Urban land-Adams-Nicholville complex, 8 to 15 percent slopes |
| V | 104D | Urban land-Adams-Nicholville complex, 15 to 25 percent slopes |
| V | 104E | Urban land-Adams-Nicholville complex, 25 to 60 percent slopes |

Sewage Disposal Onsite Septic Ratings (VT)

Caledonia County, Vermont

| On-site class | Map symbol | Soil map unit name |
|---------------|------------|---|
| IVc | 105D | Lyman-Rock outcrop complex, 15 to 35 percent slopes, very stony |
| IVb | 105E | Lyman-Rock outcrop complex, 35 to 60 percent slopes, very stony |
| IVb | 105F | Lyman-Rock outcrop complex, 60 to 90 percent slopes, very stony |
| IVa | 120A | Moosilauke very fine sandy loam, 0 to 3 percent slopes, very stony |
| IIh | 159B | Dixfield sandy loam, 3 to 8 percent slopes |
| IIh | 159C | Dixfield sandy loam, 8 to 15 percent slopes |
| IIIe | 159D | Dixfield sandy loam, 15 to 25 percent slopes |
| IIh | 160B | Dixfield sandy loam, 3 to 8 percent slopes, very stony |
| IIh | 160C | Dixfield sandy loam, 8 to 15 percent slopes, very stony |
| IIIe | 160D | Dixfield sandy loam, 15 to 35 percent slopes, very stony |
| IVd | 160E | Dixfield sandy loam, 35 to 60 percent slopes, very stony |
| IIc | 163B | Tunbridge-Monadnock complex, 3 to 8 percent slopes, very stony |
| IIc | 163C | Tunbridge-Monadnock complex, 8 to 15 percent slopes, very stony |
| IIId | 163D | Tunbridge-Monadnock complex, 15 to 35 percent slopes, very stony |
| IVb | 163E | Tunbridge-Monadnock complex, 35 to 60 percent slopes, very stony |
| Ic | 175C | Monadnock fine sandy loam, 3 to 15 percent slopes, extremely bouldery |
| Id | 175D | Monadnock fine sandy loam, 15 to 35 percent slopes, extremely bouldery |
| IIIf | 175E | Monadnock fine sandy loam, 35 to 60 percent slopes, extremely bouldery |
| IIc | 207C | Salmon-Adamant complex, 8 to 15 percent slopes, very rocky |
| IIId | 207D | Salmon-Adamant complex, 15 to 25 percent slopes, very rocky |
| IVb | 207E | Salmon-Adamant complex, 25 to 50 percent slopes, very rocky |
| IIc | 214B | Vershire-Lombard complex, 3 to 8 percent slopes, very stony |
| IIc | 214C | Vershire-Lombard complex, 8 to 15 percent slopes, very stony |
| IIId | 214D | Vershire-Lombard complex, 15 to 35 percent slopes, very stony |
| IVb | 214E | Vershire-Lombard complex, 35 to 60 percent slopes, very stony |
| IIh | 250A | Irasburg loamy fine sand, 0 to 3 percent slopes |
| IIh | 250B | Irasburg loamy fine sand, 3 to 8 percent slopes |
| IIh | 250C | Irasburg loamy fine sand, 8 to 15 percent slopes |
| IIIe | 250D | Irasburg loamy fine sand, 15 to 25 percent slopes |
| IVd | 250E | Irasburg loamy fine sand, 25 to 50 percent slopes |
| V | 260F | Udorthents, 60 to 90 percent slopes, very rubbly |
| IVa | 270A | Bucksport peat, 0 to 2 percent slopes |
| IIIIf | 301C | Tunbridge-Dixfield complex, 3 to 15 percent slopes, extremely bouldery |
| IIIIf | 301D | Tunbridge-Dixfield complex, 15 to 35 percent slopes, extremely bouldery |
| IIIIf | 362B | Tunbridge-Dixfield complex, 3 to 8 percent slopes, rocky |
| IIIIf | 362C | Tunbridge-Dixfield complex, 8 to 15 percent slopes, rocky |

Sewage Disposal Onsite Septic Ratings (VT)

Caledonia County, Vermont

| On-site class | Map symbol | Soil map unit name |
|---------------|------------|---|
| III f | 362D | Tunbridge-Dixfield complex, 15 to 25 percent slopes, rocky |
| III f | 363B | Tunbridge-Dixfield complex, 3 to 8 percent slopes, very stony |
| III f | 363C | Tunbridge-Dixfield complex, 8 to 15 percent slopes, very stony |
| III f | 363D | Tunbridge-Dixfield complex, 15 to 35 percent slopes, very stony |
| IV b | 363E | Tunbridge-Dixfield complex, 35 to 60 percent slopes, very stony |
| V | 900 | Area not Surveyed, Access Denied |
| V | W | Water |

Sewage Disposal Onsite Septic Ratings (VT)

This table indicates the suitability of the soils in the survey area for residential onsite waste disposal systems. The ratings in the table are based on the 2002 Vermont Environmental Protection Rules (Vermont Department of Environmental Conservation, Agency of Natural Resources). This rating system replaces that in the publication "Ancillary Soil Interpretation Ratings for On-site Sewage Disposal in Vermont," published in January 1997 by the Natural Resources Conservation Service.

Included in onsite waste disposal systems are absorption fields, also known as leach fields, or trenches in which effluent from a septic tank is distributed into the soil through subsurface tiles or perforated pipe. There must be unsaturated soil material beneath the absorption field to filter the effluent effectively. Unsatisfactory performance, including excessively slow absorption of effluent, surfacing of effluent, and hillside seepage, can affect public health.

The ratings are represented by symbols for five interpretive groups and their subgroups. These groups and subgroups are described in the following paragraphs.

Group I soils are well suited to onsite waste disposal systems. Good performance and low maintenance can be expected. The soils in this group are sandy and gravelly soils that formed in outwash and that have rapid permeability in the substratum and well drained soils that formed in till and that have a friable substratum with moderate permeability. Slopes generally are less than 20 percent.

- Map units in subgroup Ia have rapid permeability and slopes of less than 20 percent.
- Map units in subgroup Ib have rapid permeability and have slopes that range to more than 20 percent.
- Map units in subgroup Ic have moderate permeability and slopes of less than 20 percent.
- Map units in subgroup Id have moderate permeability and have slopes that range to more than 20 percent.

Group II soils are moderately suited to onsite waste disposal systems. The group includes soils with moderately slow to very slow permeability; complexes in which one or more of the soils have bedrock at a moderate depth (20 to 40 inches); soils that would qualify for inclusion in group I but have slopes of more than 20 percent; soils that are subject to flooding; and soils that have a seasonal high water table at a depth of 18 inches or more.

- Map units in subgroup IIa have moderately slow to very slow permeability and slopes of less than 20 percent.
- Map units in subgroup IIb have moderately slow to very slow permeability and have slopes that range to more than 20 percent.
- Map units in subgroup IIc have bedrock at a moderate depth (20 to 40 inches) in some areas and have slopes of less than 20 percent.
- Map units in subgroup IId have bedrock at a moderate depth (20 to 40 inches) and have slopes that range to more than 20 percent.
- Map units in subgroup IIe have rapid permeability and have slopes of more than 20 percent.
- Map units in subgroup IIIf have moderate permeability and slopes of more than 20 percent.
- Map units in subgroup IIg are subject to flooding.
- Map units in subgroup IIh have a seasonal high water table at a depth of 18 inches or more and have slopes of less than 20 percent.

Group III map units are marginally suited to onsite waste disposal systems. Intensive onsite investigation may be needed to locate suitable areas, or special design, extra maintenance, or costly alteration may be needed to overcome the soil-related limitations. In areas where the water table is at a shallow depth, seasonal onsite monitoring of the water table may be needed to determine whether the site is suitable. Some areas of any of the map units in group III may not be suitable for onsite waste disposal systems.

- Map units in subgroup IIIa have bedrock at a depth of less than 10 inches in some areas. Some map units are limited by slopes that range to more than 20 percent.
- Map units in subgroup IIIb are subject to flooding and have a seasonal high water table at a moderate depth.
- Map units in subgroup IIIc have a seasonal high water table at a depth of 1 foot or less and have slopes of 8 percent or less.
- Map units in subgroup IIId have a seasonal high water table at a depth of 1 foot or less and have slopes of 8 to 20 percent.
- Map units in subgroup IIIe generally have a seasonal high water table within a depth of 2 feet and have slopes that range to more than 20 percent.
- Map units in subgroup IIIf have a seasonal high water table and limited depth to bedrock. Some map units have slopes that range to more than 20 percent.

Group IV map units are not suited to onsite waste disposal systems because of such limitations as wetness, depth to bedrock, restricted permeability, or slope.

- Map units in subgroup IVa are subject to excessive wetness.

Sewage Disposal Onsite Septic Ratings (VT)

- Map units in subgroup IVb are limited by the depth to bedrock and by slopes of more than 20 percent.
- Map units in subgroup IVc are not suited because of a very limited depth to bedrock and the slope.
- Map units in subgroup IVd have moderately slow to very slow permeability and have slopes of more than 20 percent. Some map units have a seasonal high water table.

Group V map units are not rated for onsite waste disposal systems. This group includes miscellaneous areas that have been filled, excavated, regraded, or otherwise disturbed by human activities; areas that are mapped above the series level, such as Udorthents; and areas of water. The miscellaneous areas and the areas mapped above the series level have a wide range of soil properties. Onsite investigation is needed to determine the suitability of these areas for onsite waste disposal.

The ratings in this report are based on the installation of a new septic system for a new single-family home on a lot subdivided on or after June 14, 2002, in a municipality that has planning and zoning bylaws. The ratings do not necessarily apply to the siting of a replacement system for an existing residence. The ratings for lots subdivided before June 14, 2002, are based on a slope limitation of 30 percent, whereas the ratings in this table are based on a slope limitation of 20 percent. The ratings in this table do not take into consideration some site factors that can affect the placement of septic systems, such as wellhead and source protection areas, isolation distances, and the size of the parcel.

This table is intended for general planning purposes only and is not intended to replace or supercede an onsite soil investigation. These ratings apply only to land within the State of Vermont.