

106: Middlebury loam

The Middlebury component makes up 85 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 flood plains on river valleys. The parent material consists of coarse-loamy alluvium. Depth to a root restrictive layer is greater than 60 inches.

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| Important farmland classification: Prime | Land capability: 2 w | Vermont Agricultural Value Group: 1 |
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Vermont Residential Onsite Waste Disposal Group and Subgroup: IIIb

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 hazard of flooding and the depth to the seasonal high water table are the major limitations. This unit is on floodplains and typically includes land in the floodway and the special flood hazard area. Consult flood hazard maps prepared by the Federal Emergency Management Agency (FEMA) in local town offices for more information. Wastewater systems must be located, designed and constructed in a manner that avoids impairment to the system and contamination from the system due to flooding. A detailed, site-specific analysis with groundwater level monitoring and determination of induced groundwater mounding may be required to establish the suitability of this unit. Mound system construction and other site modifications are often necessary.

| 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 |
| Middlebury | 0-12 | L | 5-18 | 5.6 - 7.3 | 0.6-2 | 3.0-7.0 | .32 | .32 | 5 |
| | 12-24 | L | 5-18 | 5.6 - 7.3 | 0.6-2 | 0.5-2.0 | .43 | .43 | |
| | 24-60 | FSL | 1-10 | 5.6 - 7.3 | 2-20 | 0.0-0.5 | .37 | .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 | | |
| Middlebury | B/D | 0.5-2.0 | Occasional | Brief (2 to 7 days) | None | | No | --- |

| LAND USE LIMITATIONS | | | | AGRICULTURAL YIELD DATA | |
|----------------------|---------------------------|--------------|-----------|-------------------------|--------------|
| Soil name | Land use | Rating | Reason ** | Crop name | Yield / acre |
| Middlebury | Dwellings with basements: | Very limited | Flooding | Grass-legume hay | 3.5 Tons |
| Middlebury | Pond reservoir areas: | Very limited | Seepage | Alfalfa hay | 4.5 Tons |
| | | | | Grass-clover | 5.6 AUM |
| | | | | Grass hay | 3.5 Tons |
| | | | | Corn silage | 26 Tons |

| WOODLAND MANAGEMENT | | | | |
|---------------------|----------------------------|---------------|----------|---|
| Soil name | Management concern | Rating | Reason | Vermont natural communities |
| Middlebury | Harvest equip operability: | Well suited | | Silver Maple-Sensitive Fern Riverine Floodplain Forest, River Mud Shore, Successional Floodplain Forest Variant |
| Middlebury | Road suitability: | Poorly suited | Flooding | |
| Middlebury | Erosion hazard (off-road): | Slight | | |