

ARTICLE XIII
WETLANDS CONSERVATION OVERLAY DISTRICT

F.
Special Provisions

:

(1)
No septic tank or leach field may be constructed or enlarged closer than 100 feet to any Wetland whenever excessively well-drained soils with rapid permeability are encountered, otherwise 75 feet shall govern.

New Hampshire Soil Data Dictionary

Revised March 18, 2013



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United States Department of Agriculture**

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Index 2 - Selected Definitions

Drainage Class

Drainage classes are inferred through observations of landscape position and soil morphology. In many soils, the depth and duration of wetness are related to the quantity, nature, and pattern of redoximorphic features (*National Soil Survey Handbook*). Natural drainage class refers to the frequency and duration of wet periods under conditions similar to those under which the soil developed. Alteration of the water regime by people, either through drainage or irrigation, is not a consideration unless the alterations have significantly changed the morphology of the soil. The following definitions from the *Field Book for Describing and Sampling Soils* are the traditional, national criteria for Natural Soil Drainage Classes.

excessively

Water moves through the soil very rapidly. Internal free water commonly is very rare or very deep. The soils are commonly coarse-textured, have very high saturated hydraulic conductivity, and lack redoximorphic features.

somewhat excessively

Water moves through the soil rapidly. Internal free water commonly is very rare or very deep. The soils are commonly coarse-textured, have high saturated hydraulic conductivity, and lack redoximorphic features.

well

Water moves through the soil readily, but not rapidly. Internal free-water commonly is deep or very deep; annual duration is not specified. Water is available to plants in humid regions during much of the growing season. Wetness does not inhibit growth of roots for significant periods during most growing seasons. The soil is deep to, or lacks redoximorphic features.

moderately well

Water moves through the soil slowly during some periods of the year. Internal free water commonly is moderately deep and may be transitory or permanent. The soil is wet for only a short time within the rooting depth during the growing season. The soil commonly has a moderately low, or lower, saturated hydraulic conductivity class within 1 meter of the surface, or periodically receives high rainfall, or both.

somewhat poorly

The soil is wet at a shallow depth for significant periods during the growing season. Internal freewater is commonly shallow to moderately deep and transitory to permanent. Unless the soil is artificially drained, the growth of most mesophytic plants is markedly restricted. The soil commonly has a low or very low saturated hydraulic conductivity class, or a high water table, or receives water from lateral flow, or persistent rainfall, or some combination of these factors.

poorly

The soil is wet at shallow depths periodically during the growing season or remains wet for long periods. Internal free-water is shallow or very shallow and common or persistent. Unless the soil is artificially drained, most mesophytic crops cannot be grown. The soil, however, is not continuously wet directly below plow depth. The water table is commonly the result of low or very low saturated hydraulic conductivity class or persistent rainfall, or a combination of both factors.

very poorly

Water is at or near the soil surface during much of the growing season. Internal free-water is shallow and persistent or permanent. Unless the soil is artificially drained, most mesophytic crops cannot be grown. Commonly, the soil occupies a depression or is level. If rainfall is persistent or high, the soil can be sloping.

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New Hampshire Drainage Class Interpretative Limits

Drainage class interpretive limits have been developed in New Hampshire to be used as a tool in documenting observable soil properties that meet the definition of each drainage class for use in complying with state and town land use regulations and administrative rules. These interpretive limits are abridged from the *Site Specific Mapping Standards for New Hampshire and Vermont*. For full definitions and clarification, please refer to this document.

Excessively Drained Soils:

Soils with textures of very fine sand or coarser in all horizons within the control section.

Somewhat Excessively Drained Soils:

Soils that have textures in any horizon within the particle size control section of loamy very fine sand or finer; and have moderately rapid to rapid permeability in some portion of the control section or are shallow to bedrock.

Well Drained Soils:

Soils that have textures in any horizon within the particle size control section of loamy very fine sand or finer, and have moderate permeability.

Moderately Well Drained Soils:

Soils that have distinct or prominent redoximorphic features that are not relict features, between a depth of 15 inches and 40 inches below the soil surface.

Somewhat Poorly Drained Soils:

Soils that have common distinct or prominent redoximorphic features, that are not relict features, at a depth less than 15 inches below the soil surface.

Poorly Drained Soils:

Soils that have a depleted or gleyed matrix within 10 inches of the top of the mineral layer and directly underlying an A or Ap horizon.

or

Soils that have a depleted matrix within 20 inches of the top of the mineral layer and directly underlying a thick or very thick, dark A or Ap horizon is a horizon that is 4 inches or more thick.

For more information see: The *Site Specific Soil Standards for New Hampshire and Vermont*.

Very Poorly Drained Soils:

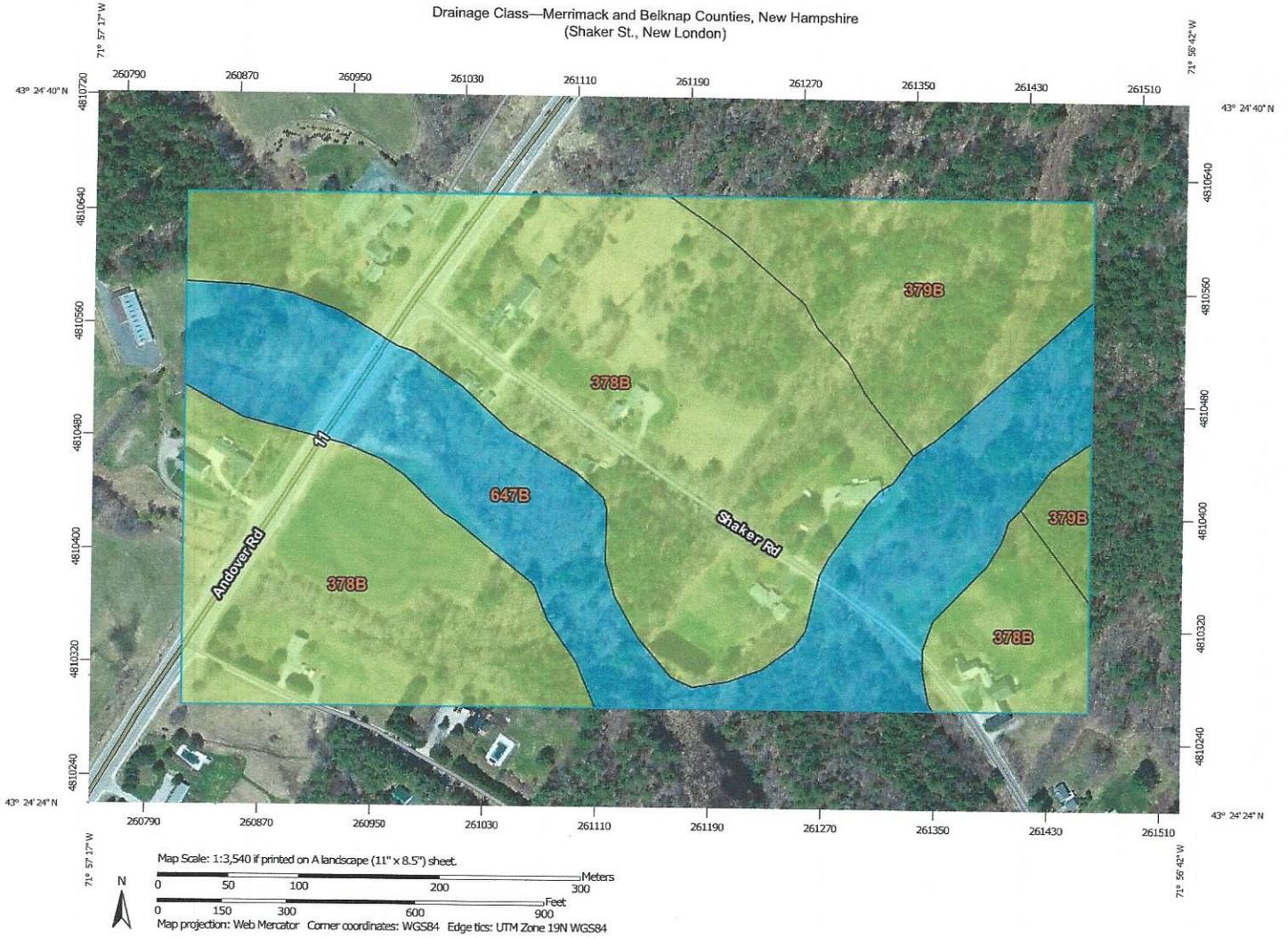
Soils having organic soil materials at or near the soil surface that are greater than 4 inches thick and are directly underlain by a horizon with a depleted or gleyed matrix.

or

Soils that are flooded daily by tides.

For more information see: The *Site Specific Soil Standards for New Hampshire and Vermont*.

Drainage Class—Merrimack and Belknap Counties, New Hampshire
(Shaker St., New London)



Drainage Class

Drainage Class— Summary by Map Unit — Merrimack and Belknap Counties, New Hampshire (NH609)				
Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
378B	Peru fine sandy loam, 3 to 8 percent slopes	Moderately well drained	35.1	60.5%
379B	Peru fine sandy loam, 0 to 8 percent slopes, very stony	Moderately well drained	8.1	14.0%
647B	Pillsbury fine sandy loam, 0 to 8 percent slopes, very stony	Poorly drained	14.8	25.5%
Totals for Area of Interest			58.0	100.0%

Description

"Drainage class (natural)" refers to the frequency and duration of wet periods under conditions similar to those under which the soil formed. Alterations of the water regime by human activities, either through drainage or irrigation, are not a consideration unless they have significantly changed the morphology of the soil. Seven classes of natural soil drainage are recognized—excessively drained, somewhat excessively drained, well drained, moderately well drained, somewhat poorly drained, poorly drained, and very poorly drained. These classes are defined in the "Soil Survey Manual."

Rating Options

Aggregation Method: Dominant Condition

Component Percent Cutoff: None Specified

Tie-break Rule: Higher