

Hydric Soils

Hyde County, North Carolina

[This report lists only those map unit components that are rated as hydric. Dashes (---) in any column indicate that the data were not included in the database. Definitions of hydric criteria codes are included at the end of the report]

Map symbol and map unit name	Map unit hydric component	Percent of map unit	Landform	Hydric rating	Hydric criteria
AcA:					
Acredale silt loam, 0 to 2 percent slopes, rarely flooded	Acredale, drained	80	Broad interstream divides	Yes	2
	Acredale, undrained	10	Broad interstream divides	Yes	2
ArA:					
Argent loam, 0 to 2 percent slopes, rarely flooded	Argent, drained	80	Flats	Yes	2
	Argent, undrained	10	Flats	Yes	2
BaA:					
Backbay mucky peat, 0 to 1 percent slopes, very frequently flooded	Backbay, tidal	90	Tidal marshes	Yes	2, 4
BcA:					
Beaches	Beaches	95	Barrier beaches	Yes	2
BeE:					
Beaches-Newhan complex, 3 to 50 percent slopes, flooded	Beaches	45	Barrier beaches	Yes	2
BmA:					
Belhaven muck, 0 to 2 percent slopes, rarely flooded	Belhaven, drained	80	Pocosins	Yes	1
	Belhaven, undrained	10	Pocosins	Yes	1
BnA:					
Belhaven muck, 0 to 2 percent slopes, frequently flooded	Belhaven, undrained	90	Pocosins	Yes	1, 4
BoA:					
Bolling loamy fine sand, 0 to 3 percent slopes, rarely flooded	Yonges, undrained	5	Flats, Marine terraces	Yes	2
	Dorovan, undrained	2	Flood plains	Yes	1, 4
BrA:					
Brookman loam, 0 to 2 percent slopes, rarely flooded	Brookman, drained	80	Depressions	Yes	2
	Brookman, undrained	10	Depressions	Yes	2
CaA:					
Carteret sand, low, 0 to 1 percent slopes, very frequently flooded	Carteret, tidal	90	Tidal marshes	Yes	2
CbA:					
Carteret sand, high, 0 to 1 percent slopes, very frequently flooded	Carteret, storm tidal	90	Tidal marshes	Yes	2

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CeA: Carteret sand, 0 to 3 percent slopes, occasionally flooded	Carteret, storm tidal	90	Tidal marshes	Yes	2
ChA: Chapanoke silt loam, 0 to 2 percent slopes, rarely flooded	Acredale, undrained	3	Broad interstream divides	Yes	2
	Argent, undrained	2	Flats	Yes	2
	Roanoke, undrained	1	Depressions, Marine terraces	Yes	2
CoA: Conaby muck, 0 to 2 percent slopes, rarely flooded	Conaby, drained	80	Pocosins	Yes	2
	Conaby, undrained	10	Pocosins	Yes	2
CrB: Corolla sand, 0 to 6 percent slopes, rarely flooded	Duckston	5	Depressions	Yes	2
	Carteret, high	2	Tidal marshes	Yes	2
DeA: Delway muck, 0 to 1 percent slopes, very frequently flooded	Delway, tidal	95	Tidal marshes	Yes	1, 4
DoA: Dorovan muck, 0 to 1 percent slopes, frequently flooded	Dorovan, undrained	90	Flood plains	Yes	1, 4
	Chowan, undrained	4	Flood plains	Yes	2, 4
	Belhaven, undrained	3	Pocosins	Yes	1
DuA: Duckston sand, 0 to 2 percent slopes, rarely flooded	Duckston	90	Depressions	Yes	2
DwB: Duckston-Corolla complex, 0 to 6 percent slopes, rarely flooded	Duckston	45	Depressions	Yes	2
EaA: Engelhard loamy very fine sand, 0 to 2 percent slopes, rarely flooded	Engelhard, drained	80	Lakeshores	Yes	2
	Engelhard, undrained	10	Lakeshores	Yes	2
EnA: Engelhard loamy very fine sand, 0 to 2 percent slopes, frequently flooded	Engelhard, undrained	90	Lakeshores	Yes	2, 4

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FkA: Fork fine sandy loam, 0 to 2 percent slopes, rarely flooded	Yonges, undrained	5	Flats, Marine terraces	Yes	2
FoA: Fortescue silt loam, 0 to 2 percent slopes, rarely flooded	Fortescue, drained	80	Lakeshores	Yes	2
	Fortescue, undrained	10	Lakeshores	Yes	2
GuA: Gullrock muck, 0 to 2 percent slopes, rarely flooded	Gullrock, drained	80	Flats	Yes	2
	Gullrock, undrained	10	Flats	Yes	2
HyA: Hydeland silt loam, 0 to 2 percent slopes, rarely flooded	Hydeland, drained	80	Flats	Yes	2
	Hydeland, undrained	10	Flats	Yes	2
LfA: Longshoal mucky peat, 0 to 1 percent slopes, very frequently flooded	Longshoal, tidal	90	Tidal marshes	Yes	1
NaD: Newhan fine sand, 6 to 25 percent slopes, rarely flooded	Duckston	5	Depressions	Yes	2
NcC: Newhan-Corolla complex, 0 to 15 percent slopes, rarely flooded	Duckston	5	Depressions	Yes	2
NeA: Newholland mucky loamy sand, 0 to 2 percent slopes, rarely flooded	Newholland, drained	80	Flats, Marine terraces	Yes	2
	Newholland, undrained	10	Flats, Marine terraces	Yes	2
NhA: Newholland mucky loamy sand, 0 to 2 percent slopes, frequently flooded	Newholland, undrained	90	Flats, Marine terraces	Yes	2, 4
PaA: Pasquotank silt loam, 0 to 2 percent slopes, rarely flooded	Pasquotank, drained	80	Flats, Marine terraces	Yes	2
	Pasquotank, undrained	10	Flats, Marine terraces	Yes	2
PeA: Pettigrew muck, 0 to 2 percent slopes, rarely flooded	Pettigrew, drained	80	Depressions, Flats, Pocosins	Yes	2
	Pettigrew, undrained	10	Depressions, Flats, Pocosins	Yes	2

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PnA:					
Ponzer muck, 0 to 2 percent slopes, rarely flooded	Ponzer, drained	80	Pocosins	Yes	1
	Ponzer, undrained	10	Pocosins	Yes	1
PoA:					
Portsmouth mucky sandy loam, 0 to 2 percent slopes, rarely flooded	Portsmouth, drained	80	Flats, Marine terraces	Yes	2
	Portsmouth, undrained	10	Flats, Marine terraces	Yes	2
PuA:					
Pungo muck, 0 to 2 percent slopes, rarely flooded	Pungo, undrained	60	Pocosins	Yes	1
	Pungo, drained	30	Pocosins	Yes	1
RoA:					
Roper muck, 0 to 2 percent slopes, rarely flooded	Roper, drained	80	Depressions, Flats, Marine terraces	Yes	2
	Roper, undrained	10	Depressions, Flats, Marine terraces	Yes	2
ScA:					
Scuppernong muck, 0 to 2 percent slopes, rarely flooded	Scuppernong, drained	80	Pocosins	Yes	1
	Scuppernong, undrained	10	Pocosins	Yes	1
SeA:					
Seabrook fine sand, 0 to 3 percent slopes, rarely flooded	Portsmouth, undrained	3	Flats, Marine terraces	Yes	2
	Stockade, undrained	3	Flats, Marine terraces	Yes	2
	Newholland, undrained	2	Flats, Marine terraces	Yes	2
StA:					
Stockade mucky sandy loam, 0 to 2 percent slopes, rarely flooded	Stockade, drained	80	Flats, Marine terraces	Yes	2
	Stockade, undrained	10	Flats, Marine terraces	Yes	2
WaA:					
Wasda muck, 0 to 2 percent slopes, rarely flooded	Wasda, drained	80	Flats, Marine terraces	Yes	2
	Wasda, undrained	10	Flats, Marine terraces	Yes	2

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WeA:					
Weeksville loam, 0 to 2 percent slopes, rarely flooded	Weeksville, drained	80	Depressions, Marine terraces	Yes	2
	Weeksville, undrained	10	Depressions, Marine terraces	Yes	2
WkA:					
Weeksville loam, 0 to 2 percent slopes, frequently flooded	Weeksville, undrained	90	Depressions, Marine terraces	Yes	2, 4
WyA:					
Wysocking very fine sandy loam, 0 to 3 percent slopes, rarely flooded	Wysocking, drained	80	Lakeshores	Yes	2
	Wysocking, undrained	10	Lakeshores	Yes	2
YeA:					
Yeopim silt loam, 0 to 3 percent slopes, rarely flooded	Acredale, undrained	3	Broad interstream divides	Yes	2
YoA:					
Yonges loam, 0 to 2 percent slopes, rarely flooded	Yonges, drained	80	Flats, Marine terraces	Yes	2
	Yonges, undrained	10	Flats, Marine terraces	Yes	2

Hydric Soils

This table lists the map unit components that are rated as hydric soils in the survey area. This list can help in planning land uses; however, onsite investigation is recommended to determine the hydric soils on a specific site (National Research Council, 1995; Hurt and others, 2002).

The three essential characteristics of wetlands are hydrophytic vegetation, hydric soils, and wetland hydrology (Cowardin and others, 1979; U.S. Army Corps of Engineers, 1987; National Research Council, 1995; Tiner, 1985). Criteria for all of the characteristics must be met for areas to be identified as wetlands. Undrained hydric soils that have natural vegetation should support a dominant population of ecological wetland plant species. Hydric soils that have been converted to other uses should be capable of being restored to wetlands.

Hydric soils are defined by the National Technical Committee for Hydric Soils (NTCHS) as soils that formed under conditions of saturation, flooding, or ponding long enough during the growing season to develop anaerobic conditions in the upper part (Federal Register, 1994). These soils, under natural conditions, are either saturated or inundated long enough during the growing season to support the growth and reproduction of hydrophytic vegetation.

The NTCHS definition identifies general soil properties that are associated with wetness. In order to determine whether a specific soil is a hydric soil or nonhydric soil, however, more specific information, such as information about the depth and duration of the water table, is needed. Thus, criteria that identify those estimated soil properties unique to hydric soils have been established (Federal Register, 2002). These criteria are used to identify map unit components that normally are associated with wetlands. The criteria used are selected estimated soil properties that are described in "Soil Taxonomy" (Soil Survey Staff, 1999) and "Keys to Soil Taxonomy" (Soil Survey Staff, 2003) and in the "Soil Survey Manual" (Soil Survey Division Staff, 1993).

If soils are wet enough for a long enough period of time to be considered hydric, they should exhibit certain properties that can be easily observed in the field. These visible properties are indicators of hydric soils. The indicators used to make onsite determinations of hydric soils are specified in "Field Indicators of Hydric Soils in the United States" (Hurt and others, 2002).

Hydric soils are identified by examining and describing the soil to a depth of about 20 inches. This depth may be greater if determination of an appropriate indicator so requires. It is always recommended that soils be excavated and described to the depth necessary for an understanding of the redoximorphic processes. Then, using the completed soil descriptions, soil scientists can compare the soil features required by each indicator and specify which indicators have been matched with the conditions observed in the soil. The soil can be identified as a hydric soil if at least one of the approved indicators is present.

Map units that are dominantly made up of hydric soils may have small areas, or inclusions, of nonhydric soils in the higher positions on the landform, and map units dominantly made up of nonhydric soils may have inclusions of hydric soils in the lower positions on the landform.

The criteria for hydric soils are represented by codes in the table (for example, 2B3). Definitions for the codes are as follows:

1. All Histels except for Folistels, and Histosols except for Folist.
2. Soils in Aquic suborders, great groups, or subgroups, Albolls suborder, Historthels great group, Histoturbels great group, Pachic subgroups, or Cumulic subgroups that:
 - A. are somewhat poorly drained and have a water table at the surface (0.0 feet) during the growing season, or
 - B. are poorly drained or very poorly drained and have either:
 - 1) a water table at the surface (0.0 feet) during the growing season if textures are coarse sand, sand, or fine sand in all layers within a depth of 20 inches, or
 - 2) a water table at a depth of 0.5 foot or less during the growing season if permeability is equal to or greater than 6.0 in/hr in all layers within a depth of 20 inches, or
 - 3) a water table at a depth of 1.0 foot or less during the growing season if permeability is less than 6.0 in/hr in any layer within a depth of 20 inches.
3. Soils that are frequently ponded for long or very long duration during the growing season.
4. Soils that are frequently flooded for long or very long duration during the growing season.

References:

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- National Research Council. 1995. Wetlands: Characteristics and boundaries.
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