

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, 2006) 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 Vasilas, 2006).

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, 2). Definitions for the codes are as follows:

1. All Histels except for Folistels, and Histosols except for Folists.
2. Soils in Aquic suborders, great groups, or subgroups, Albolls suborder, Historthels great group, Histoturbels great group, Pachic subgroups, or Cumulic subgroups that:
 - A. Based on the range of characteristics for the soil series, will at least in part meet one or more Field Indicators of Hydric Soils in the United States, or
 - B. Show evidence that the soil meets the definition of a hydric soil;
3. Soils that are frequently ponded for long or very long duration during the growing season.
 - A. Based on the range of characteristics for the soil series, will at least in part meet one or more Field Indicators of Hydric Soils in the United States, or
 - B. Show evidence that the soil meets the definition of a hydric soil;
4. Map unit components that are frequently flooded for long duration or very long duration during the growing season that:
 - A. Based on the range of characteristics for the soil series, will at least in part meet one or more Field Indicators of Hydric Soils in the United States, or
 - B. Show evidence that the soil meets the definition of a hydric soil;

Hydric Condition: Food Security Act information regarding the ability to grow a commodity crop without removing woody vegetation or manipulating hydrology.

References:

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Report—Hydric Soils

Hydric Soils--Duval County, Florida				
Map symbol and map unit name	Component	Percent of map unit	Landform	Hydric criteria
2—Albany fine sand, 0 to 5 percent slopes				
	Mascotte	4	Flats on marine terraces	2
	Pelham, hydric	3	Flats on marine terraces	2
12—Blanton fine sand, 0 to 6 percent slopes				
	Goldhead, wet	1	Seeps on marine terraces	2
	Surrency, flooded	1	Flood plains on marine terraces	2, 4
	Mascotte	1	Flats on marine terraces	2
14—Boulogne fine sand, 0 to 2 percent slopes				
	Lynn haven	2	Flats on marine terraces	2
	Wesconnett	1	Depressions on marine terraces	2, 3
19—Cornelia fine sand, 0 to 5 percent slopes				
	Leon, tidal	3	Tidal marshes on marine terraces	2, 4
22—Evergreen-Wesconnett complex, depressional, 0 to 2 percent slopes				
	Evergreen	63	Depressions on marine terraces	2, 3
	Wesconnett	33	Depressions on marine terraces	2, 3
	Lynn haven	1	Flats on marine terraces	2
	Pamlico	1	Depressions on marine terraces	1, 3
23—Fripp-Corolla, rarely flooded, complex, gently undulating to hilly				
	Lynn haven	1	Flats on marine terraces	2
24—Hurricane and Ridgewood soils, 0 to 5 percent slopes				
	Lynn haven	2	Flats on marine terraces	2
32—Leon fine sand, 0 to 2 percent slopes				
	Lynn haven	2	Flats on marine terraces	2
	Evergreen	2	Depressions on marine terraces	2, 3
	Wesconnett	1	Depressions on marine terraces	2, 3

Hydric Soils--Duval County, Florida				
Map symbol and map unit name	Component	Percent of map unit	Landform	Hydric criteria
33—Leon fine sand, 0 to 2 percent slopes, very frequently flooded				
	Leon, tidal	96	Tidal marshes on marine terraces	2, 4
	Tisonia	1	Tidal marshes on marine terraces	1
35—Lynn Haven fine sand, 0 to 2 percent slopes				
	Lynn haven	92	Flats on marine terraces	2
	Evergreen	2	Depressions on marine terraces	2, 3
	Wesconnett	2	Depressions on marine terraces	2, 3
36—Mandarin fine sand, 0 to 2 percent slopes				
	Leon	5	Flatwoods	2
	Rutlege	1	Depressions, drainageways	2
38—Mascotte fine sand, 0 to 2 percent slopes				
	Mascotte	91	Flats on marine terraces	2
	Pelham, hydric	2	Flats on marine terraces	2
	Surrency	2	Depressions on marine terraces	2, 3
	Yonges	1	Flats on marine terraces	2
40—Maurepas muck, 0 to 1 percent slopes, frequently flooded				
	Maurepas	90	Flood plains on marine terraces	1, 4
	Lynn haven	4	Flats on marine terraces	2
	Rutlege, flooded	3	Flood plains on marine terraces	2
	Tisonia	3	Tidal marshes on marine terraces	1
44—Mascotte-Pelham complex, 0 to 2 percent slopes				
	Mascotte	65	Flats on marine terraces	2
	Pelham, hydric	2	Flats on marine terraces	2
	Surrency	2	Depressions on marine terraces	2, 3

Hydric Soils--Duval County, Florida				
Map symbol and map unit name	Component	Percent of map unit	Landform	Hydric criteria
49—Pamlico muck, depressional, 0 to 1 percent slopes				
	Pamlico	91	Depressions on marine terraces	1, 3
	Evergreen	3	Depressions on marine terraces	2, 3
	Pelham, hydric	2	Flats on marine terraces	2
	Surrency	2	Depressions on marine terraces	2, 3
	Lynn haven	2	Flats on marine terraces	2
50—Pamlico muck, 0 to 2 percent slopes, frequently flooded				
	Pamlico	87	Flood plains on marine terraces	1, 4
	Dorovan, depressional	3	Depressions on marine terraces	1, 3
	Evergreen	2	Depressions on marine terraces	2, 3
	Maurepas	2	Flood plains on marine terraces	1, 4
	Lynn haven	2	Flats on marine terraces	2
	Pelham, hydric	2	Flats on marine terraces	2
	Surrency, flooded	2	Flood plains on marine terraces	2, 4
51—Pelham fine sand, 0 to 2 percent slopes				
	Pelham, hydric	37	Flats on marine terraces	2
	Mascotte	2	Flats on marine terraces	2
	Surrency	1	Depressions on marine terraces	2, 3
	Yonges	1	Flats on marine terraces	2
55—Pits				
	Pits, wet	25	Flats	2
	Pits, ponded	25	Depressions	2, 3
56—Pottsburg fine sand, 0 to 2 percent slopes				
	Lynn haven	2	Flats on marine terraces	2
	Evergreen	2	Depressions on marine terraces	2, 3
	Wesconnett	1	Depressions on marine terraces	2, 3

Hydric Soils--Duval County, Florida				
Map symbol and map unit name	Component	Percent of map unit	Landform	Hydric criteria
62—Rutlege mucky fine sand, 0 to 2 percent slopes, frequently flooded				
	Rutlege, flooded	90	Flood plains on marine terraces	2
	Evergreen	3	Depressions on marine terraces	2, 3
	Lynn haven	2	Flats on marine terraces	2
	Surrency, flooded	2	Flood plains on marine terraces	2, 4
63—Sapelo fine sand, 0 to 2 percent slopes				
	Yonges	2	Flats on marine terraces	2
	Surrency	2	Depressions on marine terraces	2, 3
	Pelham, hydric	2	Flats on marine terraces	2
66—Surrency loamy fine sand, depressional, 0 to 2 percent slopes				
	Surrency	92	Depressions on marine terraces	2, 3
	Lynn haven	2	Flats on marine terraces	2
	Pamlico	2	Depressions on marine terraces	1, 3
	Pelham, hydric	2	Flats on marine terraces	2
	Stockade	1	Depressions on marine terraces	2, 3
	Yonges	1	Flats on marine terraces	2
67—Surrency loamy fine sand, 0 to 2 percent slopes, frequently flooded				
	Surrency, flooded	93	Flood plains on marine terraces	2, 4
	Pelham, hydric	2	Flats on marine terraces	2
	Lynn haven	2	Flats on marine terraces	2
	Pamlico	2	Flood plains on marine terraces	1, 4
	Yonges	1	Flats on marine terraces	2
68—Tisonia mucky peat, 0 to 1 percent slopes, very frequently flooded				
	Tisonia	96	Tidal marshes on marine terraces	1
	Leon, tidal	1	Tidal marshes on marine terraces	2, 4
	Maurepas	1	Flood plains on marine terraces	1, 4

Hydric Soils--Duval County, Florida				
Map symbol and map unit name	Component	Percent of map unit	Landform	Hydric criteria
69—Urban land				
	Pelham, hydric	1	Flats on marine terraces	2
71—Urban land-Leon-Boulogne complex, 0 to 2 percent slopes				
	Lynn haven	2	Flats on marine terraces	2
	Rutlege, flooded	2	Flood plains on marine terraces	2
	Evergreen	2	Depressions on marine terraces	2, 3
	Wesconnett	2	Depressions on marine terraces	2, 3
73—Urban land-Mascotte-Sapelo complex, 0 to 2 percent slopes				
	Mascotte	30	Flats on marine terraces	2
	Pelham, hydric	3	Flats on marine terraces	2
	Surrency	2	Depressions on marine terraces	2, 3
74—Pelham-Urban land complex, 0 to 2 percent slopes				
	Pelham, hydric	25	Flats on marine terraces	2
	Mascotte	4	Flats on marine terraces	2
	Surrency	3	Depressions on marine terraces	2, 3
75—Urban land-Hurricane-Albany complex, 0 to 5 percent slopes				
	Lynn haven	2	Flats on marine terraces	2
	Mascotte	2	Flats on marine terraces	2
	Rutlege, flooded	1	Flood plains on marine terraces	2
78—Yonges fine sandy loam, 0 to 2 percent slopes				
	Yonges	88	Flats on marine terraces	2
	Yulee, depressional	4	Depressions on marine terraces	2, 3
	Pelham, hydric	4	Flats on marine terraces	2
79—Yulee clay, 0 to 2 percent slopes, frequently flooded				
	Yulee, frequently flooded	94	Flood plains on marine terraces	2, 4
	Surrency, flooded	3	Flood plains on marine terraces	2, 4
	Yonges	3	Flats on marine terraces	2

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Map symbol and map unit name	Component	Percent of map unit	Landform	Hydric criteria
80—Goldhead, Wet, and Lynn Haven soils, 2 to 5 percent slopes				
	Goldhead, wet	50	Seeps on marine terraces	2
	Lynn haven	40	Seeps on marine terraces	2
	Surrency, flooded	2	Flood plains on marine terraces	2, 4
	Mascotte	2	Flats on marine terraces	2
81—Stockade fine sandy loam, depressional, 0 to 2 percent slopes				
	Stockade	91	Depressions on marine terraces	2, 3
	Lynn haven	3	Flats on marine terraces	2
	Pelham, hydric	2	Flats on marine terraces	2
	Yulee, depressional	2	Depressions on marine terraces	2, 3
	Yonges	2	Flats on marine terraces	2
82—Pelham fine sand, ponded, 0 to 2 percent slopes				
	Pelham, ponded	96	Depressions, drainageways	2, 3
	Yonges	1	Flats on marine terraces	2
	Bayboro, ponded	1	Depressions	2, 3
86—Yulee clay, depressional, 0 to 2 percent slopes				
	Yulee, depressional	90	Depressions on marine terraces	2, 3
	Pelham, hydric	4	Flats on marine terraces	2
	Yonges	3	Flats on marine terraces	2
	Stockade	3	Depressions on marine terraces	2, 3
87—Dorovan muck, depressional, 0 to 2 percent slopes				
	Dorovan, depressional	87	Depressions on marine terraces	1, 3
	Evergreen	4	Depressions on marine terraces	2, 3
	Lynn haven	3	Flats on marine terraces	2
	Surrency	3	Depressions on marine terraces	2, 3
	Wesconnett	3	Depressions on marine terraces	2, 3

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Map symbol and map unit name	Component	Percent of map unit	Landform	Hydric criteria
88--Lynchburg fine sand, 0 to 2 percent slopes				
	Mascotte	3	Flats on marine terraces	2
	Yonges	2	Flats on marine terraces	2
	Surrency	2	Depressions on marine terraces	2, 3

Data Source Information

Soil Survey Area: Duval County, Florida
 Survey Area Data: Version 9, Sep 22, 2014