

## 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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- Soil Survey Staff. 2006. Keys to soil taxonomy. 10th edition. U.S. Department of Agriculture, Natural Resources Conservation Service.
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- Tiner, R.W., Jr. 1985. Wetlands of Delaware. U.S. Fish and Wildlife Service and Delaware Department of Natural Resources and Environmental Control, Wetlands Section.
- United States Army Corps of Engineers, Environmental Laboratory. 1987. Corps of Engineers wetlands delineation manual. Waterways Experiment Station Technical Report Y-87-1.

## Report—Hydric Soils

Hydric Soils--Gulf County, Florida				
Map symbol and map unit name	Component	Percent of map unit	Landform	Hydric criteria
2--Albany sand				
	Plummer	4	Flats on marine terraces	2
3--Alapaha loamy fine sand				
	Alapaha	85	Drainageways on marine terraces, flats on marine terraces, depressions on marine terraces	2
	Pelham	5	Flats on marine terraces	2
4--Aquents, gently undulating				
	Aquents	100	Depressions on marine terraces	2
5--Bladen fine sandy loam				
	Bladen	90	Flats on marine terraces	2
	Pelham	2	Flats on marine terraces	2
	Pantego, depressional	2	Depressions on marine terraces	2, 3
	Rains	2	Flats on marine terraces	2
	Surrency, depressional	2	Depressions on marine terraces	2, 3
7--Bayvi and Dirego soils, frequently flooded				
	Bayvi	45	Tidal marshes on marine terraces	2, 4
	Dirego	40	Tidal marshes on marine terraces	1, 4
	Duckston	10	Flats on marine terraces, swales on marine terraces, depressions on marine terraces	2
8--Beaches				
	Duckston	2	Flats on marine terraces, swales on marine terraces, depressions on marine terraces	2
9--Ridgewood fine sand				
	Plummer	2	Flats on marine terraces	2
10--Corolla fine sand, 1 to 5 percent slopes				
	Duckston	3	Flats on marine terraces, swales on marine terraces, depressions on marine terraces	2
12--Dothan-Fuquay complex, 5 to 8 percent slopes				
	Rains	2	Depressions on marine terraces	2

Hydric Soils--Gulf County, Florida				
Map symbol and map unit name	Component	Percent of map unit	Landform	Hydric criteria
13—Dorovan-Croatan complex, depressional				
	Dorovan	50	Depressions on marine terraces	1, 3
	Croatan	40	Depressions on marine terraces	1
	Surrency	5	Flood plains on marine terraces	2, 4
	Pantego, depressional	5	Depressions on marine terraces	2, 3
14—Duckston-Duckston depressional complex, frequently flooded				
	Duckston	60	Depressions on marine terraces, swales on marine terraces, flats on marine terraces	2
	Duckston, depressional	35	Depressions on marine terraces, swales on marine terraces, flats on marine terraces	2, 3
15—Wahee fine sandy loam				
	Bladen	5	Flats on marine terraces	2
16—Ortega fine sand, 0 to 5 percent slopes				
	Lynn haven, depressional	3	Depressions on marine terraces	2, 3
20—Lynn Haven fine sand				
	Lynn haven	95	Flats on marine terraces	2
	Rutlege, depressional	3	Depressions on marine terraces	2, 3
	Pickney, depressional	2	Depressions on marine terraces	2, 3
21—Leefield loamy fine sand				
	Pelham	5	Flats on marine terraces	2
22—Leon fine sand, 0 to 2 percent slopes				
	Lynn haven	5	Depressions on marine terraces	2
	Sapelo, hydric	5	Flats on marine terraces	2
23—Maurepas muck, frequently flooded				
	Maurepas	90	Flood plains on marine terraces	1, 3
	Bayvi	5	Tidal marshes on marine terraces	2, 4
	Pickney	5	Flood plains on marine terraces	2, 3, 4

Hydric Soils--Gulf County, Florida				
Map symbol and map unit name	Component	Percent of map unit	Landform	Hydric criteria
25—Meggett fine sandy loam, occasionally flooded				
	Meggett	95	Flood plains on marine terraces	2
	Brickyard	3	Flood plains on marine terraces	2, 4
26—Ocilla loamy fine sand, overwash, occasionally flooded				
	Rains	5	Flats on marine terraces	2
27—Pelham loamy fine sand				
	Pelham	88	Flats on marine terraces	2
	Plummer	5	Flats on marine terraces	2
	Pantego, depressional	2	Depressions on marine terraces	2, 3
28—Plummer fine sand				
	Plummer	88	Flats on marine terraces	2
	Pelham	5	Flats on marine terraces	2
	Surrency, depressional	2	Depressions on marine terraces	2, 3
30—Pantego and Bayboro soils, depressional				
	Pantego, depressional	50	Depressions on marine terraces	2, 3
	Bayboro, depressional	30	Depressions on marine terraces	2, 3
	Rains	10	Flats on marine terraces	2
	Bladen	10	Flats on marine terraces	2
31—Pickney-Pamlico complex, depressional				
	Pickney, depressional	50	Depressions on marine terraces	2, 3
	Pamlico, depressional	35	Depressions on marine terraces	1, 3
	Lynn haven	8	Flats on marine terraces	2
32—Rains fine sandy loam				
	Rains	88	Flats on marine terraces	2
	Pantego, depressional	5	Depressions on marine terraces	2, 3
	Surrency, depressional	5	Depressions on marine terraces	2, 3
	Plummer	2	Flats on marine terraces	2

Hydric Soils--Gulf County, Florida				
Map symbol and map unit name	Component	Percent of map unit	Landform	Hydric criteria
34—Pickney and Rutlege soils, depressional				
	Pickney, depressional	40	Depressions on marine terraces	2, 3
	Rutlege, depressional	35	Depressions on marine terraces	2, 3
	Pottsburg	10	Flats on marine terraces	2
	Lynn haven	10	Flats on marine terraces	2
36—Sapelo sand				
	Pelham	5	Flats on marine terraces	2
	Plummer	5	Flats on marine terraces	2
37—Scranton fine sand, 0 to 2 percent slopes				
	Scranton, slough	10	Sloughs on marine terraces	2
	Rutlege	3	Flats on marine terraces	2
38—Meadowbrook fine sand, occasionally flooded				
	Meadowbrook	88	Flood plains on marine terraces	2
	Pelham	6	Flats on marine terraces	2
39—Surrency mucky fine sand, depressional				
	Surrency, depressional	88	Depressions on marine terraces	2, 3
	Pelham	6	Flats on marine terraces	2
	Plummer	6	Flats on marine terraces	2
40—Brickyard silty clay, frequently flooded				
	Brickyard	85	Flood plains on marine terraces	2, 4
	Bladen	5	Flats on marine terraces	2
41—Brickyard, Chowan, and Kenner soils, frequently flooded				
	Brickyard	30	Flood plains on marine terraces	2, 4
	Chowan	25	Flood plains on marine terraces	2, 4
	Kenner	25	Flood plains on marine terraces	1, 3, 4

Hydric Soils--Gulf County, Florida				
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42--Pottsborg fine sand				
	Pottsborg	90	Flats on marine terraces	2
	Rutlege, depressional	5	Depressions on marine terraces	2, 3
	Pickney, depressional	5	Depressions on marine terraces	2, 3
44--Pamlico-Pickney complex, frequently flooded				
	Pamlico	55	Flood plains on marine terraces	1, 3, 4
	Pickney	40	Flood plains on marine terraces	2, 3, 4
	Lynn haven	3	Flats on marine terraces	2
	Plummer	2	Flats on marine terraces	2
45--Croatan-Surrency complex, frequently flooded				
	Croatan	45	Flood plains on marine terraces	1, 4
	Surrency	35	Flood plains on marine terraces	2, 4
	Plummer	10	Flats on marine terraces	2
	Pelham	10	Flats on marine terraces	2
46--Corolla-Duckston complex, gently undulating, flooded				
	Duckston	40	Flats on marine terraces, swales on marine terraces, depressions on marine terraces	2
	Bayvi	5	Tidal marshes on marine terraces	2, 4
47--Newhan-Corolla complex, rolling				
	Duckston	3	Depressions on marine terraces, swales on marine terraces, flats on marine terraces	2
	Duckston, depressional	2	Depressions on marine terraces, swales on marine terraces, flats on marine terraces	2, 3

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Map symbol and map unit name	Component	Percent of map unit	Landform	Hydric criteria
48--Kureb-Corolla complex, rolling				
	Duckston	3	Flats on marine terraces, swales on marine terraces, depressions on marine terraces	2
	Duckston, depressional	2	Flats on marine terraces, swales on marine terraces, depressions on marine terraces	2, 3
49--Quartzipsamments, undulating				
	Duckston	5	Depressions on marine terraces, swales on marine terraces, flats on marine terraces	2
50--Wahee-Mantachie-Ochlockonee complex, commonly flooded				
	Wahee	45	Stream terraces on marine terraces	4
	Meggett	5	Flood plains on marine terraces	2
	Brickyard	5	Flood plains on marine terraces	2, 4

## Data Source Information

Soil Survey Area: Gulf County, Florida  
 Survey Area Data: Version 10, Sep 26, 2014