

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--Pasco County, Florida				
Map symbol and map unit name	Component	Percent of map unit	Landform	Hydric criteria
1—Wauchula fine sand, 0 to 5 percent slopes				
	Wauchula, hydric	15	Flats on marine terraces	2
2—Pomona fine sand				
	Pomona, hydric	15	Flats on marine terraces	2
3—Pineda fine sand				
	Pineda	85	Flats on marine terraces	2
	Felda	8	Flats on marine terraces	2
4—Felda fine sand				
	Felda	80	Flats on marine terraces	2
	Pineda	10	Flats on marine terraces	2
5—Myakka fine sand				
	Myakka, hydric	20	Flats on marine terraces	2
8—Sellers mucky loamy fine sand				
	Sellers	95	Depressions on marine terraces, drainageways on marine terraces	2, 3
	Basinger, depressional	5	Depressions on marine terraces	2, 3
9—Ona fine sand				
	Ona, hydric	15	Flats on marine terraces	2
10—Wabasso fine sand				
	Wabasso, hydric	10	Flats on marine terraces	2
11—Adamsville fine sand, 0 to 2 percent slopes				
	Basinger	2	Drainageways	2
16—Zephyr muck				
	Zephyr	80	Depressions on marine terraces	2, 3
	Felda	10	Flats on marine terraces	2
	Anclote	10	Depressions on marine terraces	2, 3
17—Immokalee fine sand				
	Immokalee, hydric	15	Flats on marine terraces	2
20—Aripeka fine sand				
	Lacoochee	5	Tidal marshes on marine terraces	2
21—Smyrna fine sand				
	Smyrna, hydric	20	Flats on marine terraces	2

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Map symbol and map unit name	Component	Percent of map unit	Landform	Hydric criteria
22--Basinger fine sand				
	Basinger	85	Drainageways on marine terraces	2
	Pompano	5	Drainageways on marine terraces, flats on marine terraces	2
	Anclote	5	Depressions on marine terraces	2, 3
23--Basinger fine sand, depressional				
	Basinger, depressional	80	Depressions on marine terraces	2, 3
	Pompano	10	Drainageways on marine terraces, flats on marine terraces	2
	Anclote	10	Depressions on marine terraces	2, 3
27--Anclote fine sand, 0 to 2 percent slopes, ponded				
	Anclote	85	Depressions on marine terraces	2, 3
	Pompano	5	Drainageways on marine terraces, flats on marine terraces	2
	Sellers	5	Drainageways on marine terraces, depressions on marine terraces	2, 3
	Basinger	5	Drainageways on marine terraces	2
28--Pits				
	Aquents	15	Depressions	2, 3
29--Lacoochee complex				
	Lacoochee	90	Tidal marshes on marine terraces	2
	Homosassa	5	Tidal marshes on marine terraces	2
30--Okeelanta-Terra Ceia association				
	Okeelanta	60	Depressions on marine terraces	1, 3
	Terra ceia	30	Depressions on marine terraces	1, 3
	Basinger, depressional	5	Depressions on marine terraces	2, 3

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34--Pompano fine sand				
	Pompano	90	Drainageways on marine terraces, flats on marine terraces	2
	Basinger	3	Drainageways on marine terraces	2
	Anclote	3	Depressions on marine terraces	2, 3
35--EauGallie fine sand				
	Eaugallie, hydric	15	Flats on marine terraces	2
39--Chobee soils, frequently flooded				
	Chobee	75	Depressions on flood plains on marine terraces	2, 4
	Pineda	5	Flats on marine terraces	2
	Okeelanta	5	Depressions on marine terraces	1, 3
	Terra ceia	5	Depressions on marine terraces	1, 3
	Zephyr	5	Depressions on marine terraces	2, 3
40--Paisley fine sand				
	Paisley, hydric	30	Flats on marine terraces	2
41--Pits-Dumps complex				
	Aquents	10	Depressions	2, 3
47--Weekiwachee muck				
	Weekiwachee	85	Tidal marshes on marine terraces	1
	Homosassa	8	Tidal marshes on marine terraces	2
	Lacoochee	7	Tidal marshes on marine terraces	2
49--Blichton fine sand, 0 to 2 percent slopes				
	Blichton, hydric	20	Rises on marine terraces, flats on marine terraces	2
50--Blichton fine sand, 2 to 5 percent slopes				
	Blichton, hydric	20	Ridges on marine terraces, knolls on marine terraces	2
51--Blichton fine sand, 5 to 8 percent slopes				
	Blichton, hydric	20	Ridges on marine terraces, hillslopes on marine terraces	2

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Map symbol and map unit name	Component	Percent of map unit	Landform	Hydric criteria
52--Samsula muck				
	Samsula	80	Depressions on marine terraces	1, 3
	Sellers	10	Flats on marine terraces, depressions on marine terraces	2, 3
	Tomoka	10	Marshes on marine terraces	1, 3
55--Homosassa mucky fine sandy loam				
	Homosassa	60	Tidal marshes on marine terraces	2
	Weekiwachee	20	Tidal marshes on marine terraces	1
	Lacoochee	20	Tidal marshes on marine terraces	2
56--EauGallie-Urban land complex				
	Eaugallie, hydric	10	Flats on marine terraces	2
	Basinger	5	Drainageways on marine terraces	2
57--Wabasso Variant fine sand				
	Wabasso variant, hydric	20	Flats on marine terraces	2
58--Tomoka muck				
	Tomoka	90	Marshes on marine terraces	1, 3
	Sellers	5	Depressions on marine terraces, flats on marine terraces	2, 3
	Samsula	5	Depressions on marine terraces	1, 3
60--Palmetto-Zephyr-Sellers complex				
	Palmetto	60	Drainageways on marine terraces	2
	Sellers	15	Depressions on marine terraces, flats on marine terraces	2, 3
	Zephyr	15	Depressions on marine terraces	2, 3
	Basinger, depressional	10	Depressions on marine terraces	2, 3
61--Pompano fine sand, frequently flooded				
	Pompano	80	Flood plains on marine terraces	2
	Anclote, frequently flooded	10	Flood plains on marine terraces	2, 4
	Basinger, depressional	10	Depressions on marine terraces	2, 3

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63—Delray mucky fine sand				
	Delray	85	Depressions on marine terraces	2, 3
	Anclote	8	Depressions on marine terraces	2, 3
	Zephyr	7	Depressions on marine terraces	2, 3
67—Kanapaha fine sand, 0 to 5 percent slopes				
	Kanapaha, hydric	20	Marine terraces, flats	2
70—Placid fine sand				
	Placid	80	Drainageways on marine terraces	2
	Basinger	10	Drainageways on marine terraces	2
	Samsula	10	Depressions on marine terraces	1, 3
71—Anclote-Tavares-Pomello association, flooded				
	Anclote, frequently flooded	60	Flood plains on marine terraces	2, 4
76—Bessie muck				
	Bessie	100	Mangrove swamps on marine terraces	1

Data Source Information

Soil Survey Area: Pasco County, Florida
 Survey Area Data: Version 10, Dec 17, 2013