

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--Polk County, Florida				
Map symbol and map unit name	Component	Percent of map unit	Landform	Hydric criteria
5—EauGallie fine sand				
	Eaugallie, hydric	20	Flats on marine terraces	2
	Malabar	4	Drainageways on marine terraces, flats on marine terraces	2
	Felda	4	Drainageways on marine terraces	2
6—Eaton mucky fine sand, depressional				
	Eaton, depressional	80	Depressions on marine terraces	2, 3
	Chobee, depressional	4	Depressions on marine terraces	2, 3
	Felda, depressional	4	Depressions on marine terraces	2, 3
	Holopaw, depressional	3	Depressions on marine terraces	2, 3
	Kaliga	3	Depressions on marine terraces	1, 3
	Winder, depressional	3	Depressions on marine terraces	2, 3
	Floridana, depressional	3	Depressions on marine terraces	2, 3
7—Pomona fine sand				
	Pomona, hydric	20	Flats on marine terraces	2
8—Hydraquents, clayey				
	Hydraquents, clayey	95	Depressions on marine terraces	2, 3
9—Lynne sand				
	Lynne, hydric	20	Flats on marine terraces	2
	Felda	3	Drainageways on marine terraces	2
10—Malabar fine sand				
	Malabar	80	Drainageways on marine terraces, flats on marine terraces	2
	Holopaw, depressional	4	Depressions on marine terraces	2, 3
	Eaugallie, hydric	4	Flats on marine terraces	2
	Valkaria	4	Drainageways on marine terraces	2
	Felda	4	Drainageways on marine terraces	2
11—Arents-Water complex				
	Aquents	5	Depressions	2, 3

Hydric Soils--Polk County, Florida				
Map symbol and map unit name	Component	Percent of map unit	Landform	Hydric criteria
12--Neilhurst sand, 1 to 5 percent slopes				
	Haplaquents, clayey	5	Depressions, marine terraces	2, 3
13--Samsula muck				
	Samsula	80	Depressions on marine terraces	1, 3
	Hontoon	10	Depressions on marine terraces	1, 3
	Placid, depressional	10	Depressions on marine terraces	2, 3
17--Smyrna and Myakka fine sands				
	Smyrna, hydric	15	Flats on marine terraces	2
	Basinger	2	Drainageways on marine terraces	2
19--Floridana mucky fine sand, depressional				
	Floridana, depressional	80	Depressions on marine terraces	2, 3
	Felda, depressional	5	Depressions on marine terraces	2, 3
	Chobee, depressional	5	Depressions on marine terraces	2, 3
	Kaliga	5	Depressions on marine terraces	1, 3
	Holopaw, depressional	5	Depressions on marine terraces	2, 3
21--Immokalee sand				
	Immokalee, hydric	10	Flats on marine terraces	2
	Basinger	5	Drainageways on marine terraces	2
23--Ona fine sand				
	Ona, hydric	10	Flats on marine terraces	2
	Basinger	3	Drainageways on marine terraces	2
24--Nittaw sandy clay loam, frequently flooded				
	Nittaw	85	Flood plains on marine terraces	2, 4
	Chobee	5	Flood plains on marine terraces	2, 4
	Kaliga	5	Depressions on marine terraces	1, 3
	Floridana, depressional	5	Depressions on marine terraces	2, 3

Hydric Soils--Polk County, Florida				
Map symbol and map unit name	Component	Percent of map unit	Landform	Hydric criteria
25—Placid and Myakka fine sands, depressional				
	Placid, depressional	60	Depressions on marine terraces	2, 3
	Myakka, depressional	30	Depressions on marine terraces	2, 3
	Ona, hydric	3	Flats on marine terraces	2
	Basinger, depressional	3	Depressions on marine terraces	2, 3
	Pomona, hydric	2	Flats on marine terraces	2
	St. Johns, hydric	2	Flats on marine terraces	2
30—Pompano fine sand				
	Pompano	85	Drainageways on marine terraces, flats on marine terraces	2
	Placid, depressional	5	Depressions on marine terraces	2, 3
	Basinger	5	Drainageways on marine terraces	2
	Anclote, depressional	5	Depressions on marine terraces	2, 3
31—Adamsville fine sand, 0 to 2 percent slopes				
	Basinger	2	Drainageways	2
32—Kaliga muck				
	Kaliga	85	Depressions on marine terraces	1, 3
	Samsula	5	Depressions on marine terraces	1, 3
	Placid, depressional	5	Depressions on marine terraces	2, 3
	Hontoon	5	Depressions on marine terraces	1, 3
33—Holopaw fine sand, depressional				
	Holopaw, depressional	70	Depressions on marine terraces	2, 3
	Felda, depressional	10	Depressions on marine terraces	2, 3
	Floridana, depressional	10	Depressions on marine terraces	2, 3
	Basinger, depressional	10	Depressions on marine terraces	2, 3

Hydric Soils--Polk County, Florida				
Map symbol and map unit name	Component	Percent of map unit	Landform	Hydric criteria
34—Anclote mucky fine sand, depressional				
	Anclote, depressional	80	Depressions on marine terraces	2, 3
	Floridana, depressional	7	Depressions on marine terraces	2, 3
	Basinger, depressional	7	Depressions on marine terraces	2, 3
	Samsula	6	Depressions on marine terraces	1, 3
35—Hontoon muck				
	Hontoon	80	Depressions on marine terraces	1, 3
	Kaliga	7	Depressions on marine terraces	1, 3
	Placid, depressional	7	Depressions on marine terraces	2, 3
	Samsula	6	Depressions on marine terraces	1, 3
36—Basinger mucky fine sand, depressional				
	Basinger, depressional	85	Depressions on marine terraces	2, 3
	Pompano	4	Drainageways on marine terraces, flats on marine terraces	2
	Placid, depressional	4	Depressions on marine terraces	2, 3
	Samsula	4	Depressions on marine terraces	1, 3
	St. Johns, hydric	3	Flats on marine terraces	2
37—Placid fine sand, frequently flooded				
	Placid	85	Flood plains on marine terraces	2
	Holopaw, depressional	3	Depressions on marine terraces	2, 3
	Basinger	3	Drainageways on marine terraces	2
	Pompano	3	Drainageways on marine terraces, flats on marine terraces	2
	Anclote, depressional	3	Depressions on marine terraces	2, 3
39—Arents, clayey substratum				
	Hydraquents, clayey	5	Depressions on marine terraces	2, 3

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Map symbol and map unit name	Component	Percent of map unit	Landform	Hydric criteria
40—Wauchula fine sand				
	Wauchula, hydric	15	Flats on marine terraces	2
	Pompano	7	Drainageways on marine terraces, flats on marine terraces	2
41—St. Johns sand				
	St. Johns, hydric	20	Flats on marine terraces	2
	Samsula	10	Depressions on marine terraces	1, 3
	Placid, depressional	10	Depressions on marine terraces	2, 3
	Basinger	10	Drainageways on marine terraces	2
42—Felda fine sand				
	Felda	80	Drainageways on marine terraces	2
	Bradenton, hydric	5	Flats on marine terraces	2
	Floridana, depressional	5	Depressions on marine terraces	2, 3
	Malabar	5	Drainageways on marine terraces, flats on marine terraces	2
43—Oldsmar fine sand				
	Oldsmar, hydric	20	Flats on marine terraces	2
44—Paisley fine sand				
	Paisley, hydric	20	Flats on marine terraces	2
	Felda	7	Drainageways on marine terraces	2
48—Chobee fine sandy loam, depressional				
	Chobee, depressional	85	Depressions on marine terraces	2, 3
	Nittaw	5	Flood plains on marine terraces	2, 4
	Eaton, depressional	5	Depressions on marine terraces	2, 3
	Floridana, depressional	5	Depressions on marine terraces	2, 3
51—Pomona-Urban land complex				
	Pomona, hydric	10	Flats on marine terraces	2

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Map symbol and map unit name	Component	Percent of map unit	Landform	Hydric criteria
53—Myakka-Immokolee-Urban land complex				
	Myakka, hydric	10	Flats on marine terraces	2
	Basinger	3	Drainageways on marine terraces	2
54—Pomello-Urban land complex				
	St. Johns, hydric	5	Flats on marine terraces	2
57—Haplaquents clayey				
	Haplaquents, clayey	95	Depressions, marine terraces	2, 3
62—Wabasso fine sand				
	Wabasso, hydric	10	Flats on marine terraces	2
	Felda	4	Drainageways on marine terraces	2
	Malabar	3	Drainageways on marine terraces, flats on marine terraces	2
	Holopaw, depressional	3	Depressions on marine terraces	2, 3
	Floridana, depressional	3	Depressions on marine terraces	2, 3
67—Bradenton fine sand				
	Bradenton, hydric	20	Flats on marine terraces	2
	Felda	7	Drainageways on marine terraces	2
	Chobee, depressional	7	Depressions on marine terraces	2, 3
72—Bradenton-Felda-Chobee association, frequently flooded				
	Bradenton	40	Flood plains on marine terraces	2
	Felda	30	Flood plains on marine terraces	2
	Chobee	20	Flood plains on marine terraces	2, 4
	Floridana, depressional	4	Depressions on marine terraces	2, 3
	Holopaw, depressional	3	Depressions on marine terraces	2, 3
	Pompano	3	Drainageways on marine terraces, flats on marine terraces	2

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Map symbol and map unit name	Component	Percent of map unit	Landform	Hydric criteria
75--Valkaria sand				
	Valkaria	80	Drainageways on marine terraces	2
	Felda	4	Drainageways on marine terraces	2
	Basinger	4	Drainageways on marine terraces	2
	Malabar	4	Drainageways on marine terraces, flats on marine terraces	2
77--Satellite sand				
	Pompano	2	Drainageways on marine terraces, flats on marine terraces	2
78--Paisley fine sand, stony subsurface				
	Paisley, hydric	20	Flats on marine terraces	2
	Felda	7	Drainageways on marine terraces	2
	Bradenton, hydric	7	Flats on marine terraces	2
80--Chobee fine sandy loam, frequently flooded				
	Chobee	90	Flood plains on marine terraces	2, 4
	Floridana, depressional	3	Depressions on marine terraces	2, 3
	Kaliga	3	Depressions on marine terraces	1, 3
	Paisley, hydric	2	Flats on marine terraces	2
	Nittaw	2	Flood plains on marine terraces	2, 4
81--St. Augustine sand				
	Kaliga	5	Depressions on marine terraces	1, 3
	Samsula	5	Depressions on marine terraces	1, 3
82--Felda fine sand, frequently flooded				
	Felda	80	Flood plains on marine terraces	2
	Floridana, depressional	10	Depressions on marine terraces	2, 3
	Holopaw, depressional	10	Depressions on marine terraces	2, 3

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Map symbol and map unit name	Component	Percent of map unit	Landform	Hydric criteria
85—Winder fine sand, depressional				
	Winder, depressional	85	Depressions on marine terraces	2, 3
	Floridana, depressional	4	Depressions on marine terraces	2, 3
	Felda, depressional	4	Depressions on marine terraces	2, 3
	Chobee, depressional	4	Depressions on marine terraces	2, 3
	Malabar	3	Drainageways on marine terraces, flats on marine terraces	2
86—Felda fine sand, depressional				
	Felda, depressional	85	Depressions on marine terraces	2, 3
	Floridana, depressional	5	Depressions on marine terraces	2, 3
	Eaton, depressional	5	Depressions on marine terraces	2, 3
	Holopaw, depressional	5	Depressions on marine terraces	2, 3
87—Basinger fine sand				
	Basinger	80	Drainageways on marine terraces	2
	Placid, depressional	4	Depressions on marine terraces	2, 3
	Myakka, depressional	4	Depressions on marine terraces	2, 3
	St. Johns, hydric	4	Flats on marine terraces	2

Data Source Information

Soil Survey Area: Polk County, Florida
 Survey Area Data: Version 9, Dec 19, 2013