

HYDRIC SOIL INTERPRETATIONS  
HYDRIC SOILS LIST  
SARGENT COUNTY, NORTH DAKOTA

In this section, hydric soils are defined and described and the hydric soils in the survey area are listed. 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 each 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 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, 1995). These criteria are used to identify a phase of a soil series that normally is associated with wetlands. The criteria used are selected estimated soil properties that are described in "Soil Taxonomy" (USDA, 1999) and "Keys to Soil Taxonomy" (USDA, 1998) and in the "Soil Survey Manual" (USDA, 1993).

If soils are wet enough for a long enough period 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 in this survey area are specified in "Field Indicators of Hydric Soils in the United States" (Hurt and others, 1996).

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 in the Hydric Soil Interpretations table meet the definition of hydric soils and, in addition, have at least one of the hydric soil indicators. 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, 1996).

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

These map units, in general, do not meet the definition of hydric soils because they do not have one of the hydric soil indicators. A portion of these map units, however, may include hydric soils. Onsite investigation is recommended to determine whether hydric soils occur and the location of the included hydric soils.

HYDRIC SOIL INTERPRETATIONS  
HYDRIC SOILS LIST  
SARGENT COUNTY, NORTH DAKOTA

All mapunits are displayed regardless of hydric status and are listed in alpha-numeric order by mapunit symbol. The "Hydric Soils Criteria" columns indicate the conditions that caused the mapunit component to be classified as "Hydric" or "Non-Hydric". These criteria are defined in "Hydric Soils of the United States" (USDA Miscellaneous Publication No. 1491, June, 1991). See the "Criteria for Hydric Soils" endnote to determine the meaning of these columns. Spot symbols are footnoted at the end of the table.

Map symbol and map unit name	Component	Hydric	Local landform	Hydric soils criteria			
				Hydric criteria code	Meets saturation criteria	Meets flooding criteria	Meets ponding criteria
Aa: AASTAD CLAY LOAM	AASTAD	No	---	---	---	---	---
	HAMERLY	No	---	---	---	---	---
	TONKA	Yes	depression	2B3,3	YES	NO	YES
	PARNELL	Yes	depression	2B3,3	YES	NO	YES
Ab: AASTAD LOAM	AASTAD	No	---	---	---	---	---
	HAMERLY	No	---	---	---	---	---
	TONKA	Yes	depression	2B3,3	YES	NO	YES
	PARNELL	Yes	depression	2B3,3	YES	NO	YES
Ac: AASTAD-CRESBARD LOAMS	AASTAD	No	---	---	---	---	---
	CRESBARD	No	---	---	---	---	---
	TONKA	Yes	depression	2B3,3	YES	NO	YES
Ad: ABERDEEN SILT LOAM	ABERDEEN	No	---	---	---	---	---
	GARDENA	No	---	---	---	---	---
	PERELLA	Yes	depression	2B3,3	YES	NO	YES
Ae: ABERDEEN-EXLINE SILTY CLAY LOAMS	ABERDEEN	No	---	---	---	---	---
	EXLINE PERELLA	No Yes	--- depression	--- 2B3,3	--- YES	--- NO	--- YES
An: ARVESON FINE SANDY LOAM	ARVESON	Yes	depression	2B3	YES	NO	NO
	BbC: BARNES-BUSE LOAMS, ROLLING	BARNES	No	---	---	---	---
BbC2: BARNES-BUSE LOAMS, ROLLING, ERODED	BUSE	No	---	---	---	---	---
	SVEA	No	---	---	---	---	---
	PARNELL	Yes	depression	3,2B3	YES	NO	YES
	TONKA	Yes	depression	2B3,3	YES	NO	YES
Bc: BARNES-BUSE STONY LOAMS	BARNES	No	---	---	---	---	---
	BUSE	No	---	---	---	---	---
	SVEA	No	---	---	---	---	---
	PARNELL TONKA	Yes Yes	depression depression	2B3,3 2B3,3	YES YES	NO NO	YES YES
BdB: BARNES-SVEA LOAMS, UNDULATING	BARNES	No	---	---	---	---	---
	SVEA	No	---	---	---	---	---
	HAMERLY	No	---	---	---	---	---
	TONKA PARNELL	Yes Yes	depression depression	3,2B3 2B3,3	YES YES	NO NO	YES YES
BdB2: BARNES-SVEA LOAMS, UNDULATING, ERODED	BARNES	No	---	---	---	---	---
	SVEA	No	---	---	---	---	---
	HAMERLY	No	---	---	---	---	---
	BUSE	No	---	---	---	---	---
	TONKA	Yes	depression	2B3,3	YES	NO	YES
	PARNELL	Yes	depression	2B3,3	YES	NO	YES

HYDRIC SOIL INTERPRETATIONS  
HYDRIC SOILS LIST  
SARGENT COUNTY, NORTH DAKOTA

All mapunits are displayed regardless of hydric status and are listed in alpha-numeric order by mapunit symbol. The "Hydric Soils Criteria" columns indicate the conditions that caused the mapunit component to be classified as "Hydric" or "Non-Hydric". These criteria are defined in "Hydric Soils of the United States" (USDA Miscellaneous Publication No. 1491, June, 1991). See the "Criteria for Hydric Soils" endnote to determine the meaning of these columns. Spot symbols are footnoted at the end of the table.

Map symbol and map unit name	Component	Hydric	Local landform	Hydric soils criteria			
				Hydric criteria code	Meets saturation criteria	Meets flooding criteria	Meets ponding criteria
Bf: BEARDEN SILTY CLAY LOAM	BEARDEN	No	---	---	---	---	---
	OVERLY TONKA	No Yes	---	---	---	---	---
Bk: BEARDEN-TETONKA SILT LOAMS	BEARDEN	No	depression	2B3,3	YES	NO	YES
	TETONKA OVERLY	Yes No	depression ---	2B3,3 ---	YES ---	NO ---	YES ---
Br: BORUP, COLVIN, AND PERELLA SOILS	BORUP	Yes	flat	2B3	YES	NO	NO
	COLVIN PERELLA	Yes Yes	flat depression	2B3 3,2B3	YES YES	NO NO	NO YES
BvD: BUSE-BARNES LOAMS, STRONGLY ROLLING	BUSE	No	---	---	---	---	---
	BARNES SVEA	No No	---	---	---	---	---
	LAMOURE TONKA	Yes Yes	drainageway depression	2B3 2B3,3	YES YES	NO NO	NO YES
	BUSE	No	---	---	---	---	---
BvD2: BUSE-BARNES LOAMS, STRONGLY ROLLING, ERODED	BARNES LANGHEI	No No	---	---	---	---	---
	SVEA LAMOURE	No Yes	---	---	---	---	---
	TONKA	Yes Yes	drainageway depression	2B3 2B3,3	YES YES	NO NO	NO YES
	BUSE	No	---	---	---	---	---
Cp: COLVIN AND PERELLA SOILS, SALINE	COLVIN	Yes	flat	2B3	YES	NO	NO
	PERELLA	Yes	depression	2B3	YES	NO	NO
Dc: DIMMICK CLAY	DIMMICK	Yes	depression	2B3,3	YES	NO	YES
Dm: DIMMICK CLAY, BASINS	DIMMICK	Yes	depression	2B3,3	YES	NO	YES
	GRANO	Yes	depression	2B3,3	YES	NO	YES
Dv: DIVIDE LOAM	DIVIDE	No	---	---	---	---	---
	MARYSLAND	Yes	depression	2B3	YES	NO	NO
EcA: ECKMAN SILT LOAM, NEARLY LEVEL	ECKMAN	No	---	---	---	---	---
	GARDENA	No	---	---	---	---	---
EcB: ECKMAN SILT LOAM, UNDULATING	ECKMAN	No	---	---	---	---	---
	GARDENA ZELL	No No	---	---	---	---	---
EmB: ECKMAN AND MADDOCK LOAMS, UNDULATING	ECKMAN	No	---	---	---	---	---
	MADDOCK	No	---	---	---	---	---
EmC: ECKMAN AND MADDOCK LOAMS, ROLLING	ECKMAN	No	---	---	---	---	---
	MADDOCK	No	---	---	---	---	---
Ex: EXLINE COMPLEX	EXLINE	No	---	---	---	---	---
	ABERDEEN	No	---	---	---	---	---
	BEARDEN	No	---	---	---	---	---

HYDRIC SOIL INTERPRETATIONS  
HYDRIC SOILS LIST  
SARGENT COUNTY, NORTH DAKOTA

All mapunits are displayed regardless of hydric status and are listed in alpha-numeric order by mapunit symbol. The "Hydric Soils Criteria" columns indicate the conditions that caused the mapunit component to be classified as "Hydric" or "Non-Hydric". These criteria are defined in "Hydric Soils of the United States" (USDA Miscellaneous Publication No. 1491, June, 1991). See the "Criteria for Hydric Soils" endnote to determine the meaning of these columns. Spot symbols are footnoted at the end of the table.

Map symbol and map unit name	Component	Hydric	Local landform	Hydric soils criteria			
				Hydric criteria code	Meets saturation criteria	Meets flooding criteria	Meets ponding criteria
Fc: FARGO CLAY	FARGO	Yes	lake plain	2B3	YES	NO	NO
	HEGNE	Yes	lake plain	2B3	YES	NO	NO
FoB: FORMAN-AASTAD LOAMS, UNDULATING	FORMAN	No	---	---	---	---	---
	AASTAD	No	---	---	---	---	---
	HAMERLY	No	---	---	---	---	---
	TONKA	Yes	depression	2B3,3	YES	NO	YES
	PARNELL	Yes	depression	2B3,3	YES	NO	YES
FoB2: FORMAN-AASTAD LOAMS, UNDULATING, ERODED	FORMAN	No	---	---	---	---	---
	AASTAD	No	---	---	---	---	---
	BUSE	No	---	---	---	---	---
	HAMERLY	No	---	---	---	---	---
	TONKA	Yes	depression	2B3,3	YES	NO	YES
	PARNELL	Yes	depression	2B3,3	YES	NO	YES
Fs: FORMAN-AASTAD STONY LOAMS	FORMAN	No	---	---	---	---	---
	AASTAD	No	---	---	---	---	---
	BUSE	No	---	---	---	---	---
	HAMERLY	No	---	---	---	---	---
	TONKA	Yes	depression	2B3,3	YES	NO	YES
	PARNELL	Yes	depression	2B3,3	YES	NO	YES
FvC: FORMAN-BUSE LOAMS, ROLLING	FORMAN	No	---	---	---	---	---
	BUSE	No	---	---	---	---	---
	AASTAD	No	---	---	---	---	---
	HAMERLY	No	---	---	---	---	---
	TONKA	Yes	depression	3,2B3	YES	NO	YES
	PARNELL	Yes	depression	2B3,3	YES	NO	YES
FvC2: FORMAN-BUSE LOAMS, ROLLING, ERODED	FORMAN	No	---	---	---	---	---
	BUSE	No	---	---	---	---	---
	AASTAD	No	---	---	---	---	---
	HAMERLY	No	---	---	---	---	---
	TONKA	Yes	depression	3,2B3	YES	NO	YES
	PARNELL	Yes	depression	2B3,3	YES	NO	YES
Fw: SOUTHAM SOILS	SOUTHAM SOILS	Yes	depression	2B3,3	YES	NO	YES
Ga: GANNETT LOAMY FINE SAND	GANNETT	Yes	depression	2B2	YES	NO	NO
GgA: GARDENA-GLYNDON LOAMS, SANDY SUBSTRATUM, NEARLY LEVEL	GARDENA	No	---	---	---	---	---
	GLYNDON	No	---	---	---	---	---
	TIFFANY	Yes	depression	3,2B3	YES	NO	YES
GmA: GARDENA-GLYNDON SILT LOAMS, NEARLY LEVEL	GARDENA	No	---	---	---	---	---
	GLYNDON	No	---	---	---	---	---
	TIFFANY	Yes	depression	2B3,3	YES	NO	YES
GoA: GLYNDON LOAM, SANDY SUBSTRATUM, NEARLY LEVEL	GLYNDON	No	---	---	---	---	---
	GARDENA	No	---	---	---	---	---
	ARVESON	Yes	flat	2B3	YES	NO	NO
	STIRUM	Yes	flat	2B3	YES	NO	NO

HYDRIC SOIL INTERPRETATIONS  
HYDRIC SOILS LIST  
SARGENT COUNTY, NORTH DAKOTA

All mapunits are displayed regardless of hydric status and are listed in alpha-numeric order by mapunit symbol. The "Hydric Soils Criteria" columns indicate the conditions that caused the mapunit component to be classified as "Hydric" or "Non-Hydric". These criteria are defined in "Hydric Soils of the United States" (USDA Miscellaneous Publication No. 1491, June, 1991). See the "Criteria for Hydric Soils" endnote to determine the meaning of these columns. Spot symbols are footnoted at the end of the table.

Map symbol and map unit name	Component	Hydric	Local landform	Hydric soils criteria			
				Hydric criteria code	Meets saturation criteria	Meets flooding criteria	Meets ponding criteria
GsA: GLYNDON SILT LOAM, NEARLY LEVEL	GLYNDON	No	---	---	---	---	---
	GARDENA	No	---	---	---	---	---
Ha: HAMAR FINE SANDY LOAM	HAMAR	No	---	---	---	---	---
	HAMAR	Yes	flat	2B3	YES	NO	NO
	HECLA	No	---	---	---	---	---
Hb: HAMERLY COMPLEX	HAMERLY	No	---	---	---	---	---
	AASTAD	No	---	---	---	---	---
	TONKA	Yes	depression	2B3,3	YES	NO	YES
	PARNELL	Yes	depression	3,2B3	YES	NO	YES
Hf: HAMERLY-AASTAD LOAMS	HAMERLY	No	---	---	---	---	---
	AASTAD	No	---	---	---	---	---
	TONKA	Yes	depression	2B3,3	YES	NO	YES
	PARNELL	Yes	depression	2B3,3	YES	NO	YES
HfA: HEGNE-FARGO CLAYS	HEGNE	Yes	lake plain	2B3	YES	NO	NO
	FARGO	Yes	lake plain	2B3	YES	NO	NO
	DOVRAY	Yes	depression	2B3,3	YES	NO	YES
Hh: HAMERLY-SVEA LOAMS	HAMERLY	No	---	---	---	---	---
	SVEA	No	---	---	---	---	---
	TONKA	Yes	depression	3,2B3	YES	NO	YES
	PARNELL	Yes	depression	2B3,3	YES	NO	YES
Hkx: HECLA FINE SAND	HECLA	No	---	---	---	---	---
HlAx: HECLA FINE SANDY LOAM, NEARLY LEVEL	HECLA	No	---	---	---	---	---
	HAMAR	Yes	depression	2B3	YES	NO	NO
HlBx: HECLA FINE SANDY LOAM, UNDULATING	HECLA	No	---	---	---	---	---
	HAMAR	Yes	depression	2B3	YES	NO	NO
HmA: HECLA FINE SANDY LOAM, MODERATELY SHALLOW, NEARLY LEVEL	HECLA	No	---	---	---	---	---
	KRATKA	Yes	flat	2B3	YES	NO	NO
HnAx: HECLA LOAMY FINE SAND, NEARLY LEVEL	HECLA	No	---	---	---	---	---
	HAMAR	Yes	depression	2B2	YES	NO	NO
HoA: HECLA LOAMY FINE SAND, MODERATELY SHALLOW, NEARLY LEVEL	HECLA	No	---	---	---	---	---
	HAMAR	Yes	depression	2B2	YES	NO	NO
	KRATKA	Yes	depression	2B3	YES	NO	NO
Hwx: HECLA-MADDOCK LOAMY FINE SANDS	HECLA	No	---	---	---	---	---
	MADDOCK	No	---	---	---	---	---
	HAMAR	Yes	depression	2B2	YES	NO	NO
Hz: HEGNE CLAY	HEGNE	Yes	lake plain	2B3	YES	NO	NO
	FARGO	Yes	lake plain	2B3	YES	NO	NO
La: LAMOURE SILTY CLAY LOAM	LAMOURE	Yes	flood plain	2B3	YES	NO	NO

HYDRIC SOIL INTERPRETATIONS  
HYDRIC SOILS LIST  
SARGENT COUNTY, NORTH DAKOTA

All mapunits are displayed regardless of hydric status and are listed in alpha-numeric order by mapunit symbol. The "Hydric Soils Criteria" columns indicate the conditions that caused the mapunit component to be classified as "Hydric" or "Non-Hydric". These criteria are defined in "Hydric Soils of the United States" (USDA Miscellaneous Publication No. 1491, June, 1991). See the "Criteria for Hydric Soils" endnote to determine the meaning of these columns. Spot symbols are footnoted at the end of the table.

Map symbol and map unit name	Component	Hydric	Local landform	Hydric soils criteria			
				Hydric criteria code	Meets saturation criteria	Meets flooding criteria	Meets ponding criteria
Lf: LA PRAIRIE AND FAIRDALE SOILS	CHANNELED	Yes	---	3	NO	NO	YES
	FAIRDALE	No	---	---	---	---	---
	LA PRAIRIE	No	---	---	---	---	---
	LAMOURE	Yes	flood plain	4,2B3	YES	YES	NO
Lp: LA PRAIRIE SILT LOAM	LA PRAIRIE	No	---	---	---	---	---
	LAMOURE	Yes	flood plain	2B3	YES	NO	NO
M-W: MISCELLANEOUS WATER	MISCELLANEOUS WATER	Yes	depression	2B3,3	YES	NO	YES
MdBx: MADDOCK LOAMY FINE SAND, UNDULATING	MADDOCK	No	---	---	---	---	---
MdC: MADDOCK LOAMY FINE SAND, ROLLING	MADDOCK	No	---	---	---	---	---
MkAx: MADDOCK FINE SANDY LOAM, MODERATELY SHALLOW, NEARLY LEVEL	MADDOCK	No	---	---	---	---	---
MkBx: MADDOCK FINE SANDY LOAM, MODERATELY SHALLOW, UNDULATING	MADDOCK	No	---	---	---	---	---
MkCx: MADDOCK FINE SANDY LOAM, MODERATELY SHALLOW, ROLLING	MADDOCK	No	---	---	---	---	---
OaA: OVERLY SILT LOAM, NEARLY LEVEL	OVERLY	No	---	---	---	---	---
OcB: OVERLY SILTY CLAY LOAM, UNDULATING	OVERLY	No	---	---	---	---	---
Os: OVERLY-AASTAD SILT LOAMS	OVERLY	No	---	---	---	---	---
	AASTAD TONKA	No Yes	---	---	---	---	---
			depression	2B3,3	YES	NO	YES
OvC: OVERLY AND BARNES SILT LOAMS, ROLLING	OVERLY	No	---	---	---	---	---
	BARNES BUSE TONKA	No No Yes	---	---	---	---	---
			depression	2B3,3	YES	NO	YES
OyA: OVERLY-BEARDEN SILTY CLAY LOAMS, NEARLY LEVEL	OVERLY	No	---	---	---	---	---
	BEARDEN PERELLA	No Yes	---	---	---	---	---
			depression	2B3,3	YES	NO	YES
Pa: PARNELL SOILS	PARNELL	Yes	depression	3,2B3	YES	NO	YES
Pe: PERELLA SILTY CLAY LOAM	PERELLA	Yes	depression	3,2B3	YES	NO	YES
Pg: PITS, gravel and sand	PITS RENSCHAW SIOUX	No No No	---	---	---	---	---
Ra: RAUVILLE SOILS	RAUVILLE	Yes	oxbow	2B3,4	YES	YES	NO

HYDRIC SOIL INTERPRETATIONS  
HYDRIC SOILS LIST  
SARGENT COUNTY, NORTH DAKOTA

All mapunits are displayed regardless of hydric status and are listed in alpha-numeric order by mapunit symbol. The "Hydric Soils Criteria" columns indicate the conditions that caused the mapunit component to be classified as "Hydric" or "Non-Hydric". These criteria are defined in "Hydric Soils of the United States" (USDA Miscellaneous Publication No. 1491, June, 1991). See the "Criteria for Hydric Soils" endnote to determine the meaning of these columns. Spot symbols are footnoted at the end of the table.

Map symbol and map unit name	Component	Hydric	Local landform	Hydric soils criteria			
				Hydric criteria code	Meets saturation criteria	Meets flooding criteria	Meets ponding criteria
RhA: RENSHAW LOAM, NEARLY LEVEL	RENSHAW	No	---	---	---	---	---
	SIOUX	No	---	---	---	---	---
RhB: RENSHAW LOAM, UNDULATING	RENSHAW	No	---	---	---	---	---
	SIOUX	No	---	---	---	---	---
Ro: RENSHAW AND SIOUX SOILS	RENSHAW	No	---	---	---	---	---
	SIOUX	No	---	---	---	---	---
SpA: SPOTTSWOOD-WESSINGTON LOAMS, NEARLY LEVEL	SPOTTSWOOD	No	---	---	---	---	---
	WESSINGTON	No	---	---	---	---	---
	RENSHAW	No	---	---	---	---	---
St: STIRUM AND ARVESON LOAMS	STIRUM	Yes	flat	2B3	YES	NO	NO
	ARVESON	Yes	flat	2B3	YES	NO	NO
Sv: SVEA LOAM	SVEA	No	---	---	---	---	---
	BARNES	No	---	---	---	---	---
	HAMERLY	No	---	---	---	---	---
	TONKA	Yes	depression	2B3,3	YES	NO	YES
Tk: TETONKA SILT LOAM	TETONKA	Yes	depression	2B3,3	YES	NO	YES
Tp: TETONKA AND PARNELL SOILS	PARNELL	Yes	depression	2B3,3	YES	NO	YES
	TETONKA	Yes	depression	2B3,3	YES	NO	YES
Un: ULEN FINE SANDY LOAM, MODERATELY SHALLOW	ULEN	No	---	---	---	---	---
	HAMAR	Yes	depression	2B3	YES	NO	NO
VaD: VALENTINE FINE SAND, HILLY	VALENTINE	No	---	---	---	---	---
VhC: VALENTINE-HECLA FINE SANDS, HUMMOCKY	VALENTINE	No	---	---	---	---	---
	HECLA	No	---	---	---	---	---
	MADDOCK	No	---	---	---	---	---
	HAMAR	Yes	depression	2B2	YES	NO	NO
W: WATER	WATER	Yes	depression	2B3,3	YES	NO	YES
ZmC: ZELL SILT LOAM, ROLLING	ZELL	No	---	---	---	---	---
	ECKMAN	No	---	---	---	---	---
ZmD: ZELL SILT LOAM, HILLY	ZELL	No	---	---	---	---	---

HYDRIC SOIL INTERPRETATIONS  
 HYDRIC SOILS LIST  
 SARGENT COUNTY, NORTH DAKOTA

All mapunits are displayed regardless of hydric status and are listed in alpha-numeric order by mapunit symbol. The "Hydric Soils Criteria" columns indicate the conditions that caused the mapunit component to be classified as "Hydric" or "Non-Hydric". These criteria are defined in "Hydric Soils of the United States" (USDA Miscellaneous Publication No. 1491, June, 1991). See the "Criteria for Hydric Soils" endnote to determine the meaning of these columns. Spot symbols are footnoted at the end of the table.

Map symbol and map unit name	Component	Hydric	Local landform	Hydric soils criteria			
				Hydric criteria code	Meets saturation criteria	Meets flooding criteria	Meets ponding criteria

FOOTNOTE: There may be small areas of included soils or miscellaneous areas that are significant to use and management of the soil; yet are too small to delineate on the soil map at the map's original scale. These may be designated as spot symbols and are defined in the published Soil Survey Report or the USDA-NRCS Technical Guide, Part II.

Areas mapped as water or any map unit that contains one of the following conventional symbols is considered a hydric soil map unit: marshes or swamps; wet spots; depressions; streams, lakes and ponds.

1. All Histosols except Folists, or
2. Soils in Aquic suborders, great groups, or subgroups, Albolls suborder, Aquisalids, Pachic subgroups, or Cumulic subgroups that are:
  - a. Somewhat poorly drained with a water table equal to 0.0 foot (ft) from the surface during the growing season, or
  - b. poorly drained or very poorly drained and have either:
    - (1) water table equal to 0.0 ft during the growing season if textures are coarse sand, sand, or fine sand in all layers within 20 inches (in), or for other soils
    - (2) water table at less than or equal to 0.5 ft from the surface during the growing season if permeability is equal to or greater than 6.0 in/hour (h) in all layers within 20 in, or
    - (3) water table at less than or equal to 1.0 ft from the surface during the growing season if permeability is less than 6.0 in/h in any layer within 20 in, or
3. Soils that are frequently ponded for long duration or very long duration during the growing season, or
4. Soils that are frequently flooded for long duration or very long duration during the growing season.

