

HYDRIC SOIL INTERPRETATIONS
HYDRIC SOILS LIST
Wells 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.

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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
ArA: ARVILLA SANDY LOAM, LEVEL	ARVILLA	No	---	---	---	---	---
	RENSHAW SIOUX	No No	---	---	---	---	---
ArB: ARVILLA SANDY LOAM, GENTLY SLOPING	ARVILLA	No	---	---	---	---	---
	SIOUX TONKA	No Yes	---	---	---	---	---
	RENSHAW	No	depression	2B3,3	YES	NO	YES
BaC: BARNES LOAM, ROLLING	BARNES	No	---	---	---	---	---
	BUSE	No	---	---	---	---	---
	SVEA	No	---	---	---	---	---
	TONKA	Yes	depression	2B3,3	YES	NO	YES
BaC2: BARNES LOAM, ROLLING, ERODED	BARNES	No	---	---	---	---	---
	BUSE	No	---	---	---	---	---
	SVEA	No	---	---	---	---	---
	TONKA	Yes	depression	2B3,3	YES	NO	YES
BbD: BARNES-BUSE LOAMS, HILLY	BARNES	No	---	---	---	---	---
	BUSE	No	---	---	---	---	---
	SVEA	No	---	---	---	---	---
	PARNELL TONKA	Yes Yes	depression depression	2B3,3 3,2B3	YES YES	NO NO	YES YES
Be: BARNES STONY LOAM	BARNES	No	---	---	---	---	---
	TONKA	Yes	depression	2B3,3	YES	NO	YES
	PARNELL	Yes	depression	2B3,3	YES	NO	YES
	SVEA	No	---	---	---	---	---
BnA: BARNES-SVEA LOAMS, LEVEL	BARNES	No	---	---	---	---	---
	SVEA	No	---	---	---	---	---
	HAMERLY	No	---	---	---	---	---
	TONKA	Yes	depression	2B3,3	YES	NO	YES
	PARNELL	Yes	depression	3,2B3	YES	NO	YES
	VALLERS	Yes	flat	2B3	YES	NO	NO
BnB: BARNES-SVEA LOAMS, UNDULATING	BARNES	No	---	---	---	---	---
	SVEA	No	---	---	---	---	---
	HAMERLY	No	---	---	---	---	---
	TONKA	Yes	depression	2B3,3	YES	NO	YES
	PARNELL	Yes	depression	2B3,3	YES	NO	YES
	VALLERS	Yes	flat	2B3	YES	NO	NO
Bp: BEARDEN-PERELLA SILT LOAMS	BEARDEN	No	---	---	---	---	---
	PERELLA	Yes	---	---	---	---	---
	BORUP	Yes	depression	2B3	YES	NO	NO
	COLVIN	Yes	lake plain	2B3	YES	NO	NO
	TONKA	Yes	depression	2B3,3	YES	NO	YES
Br: BENOIT LOAM	BENOIT	Yes	flat	2B3	YES	NO	NO
	BORUP	Yes	depression	2B3	YES	NO	NO
	PARNELL	Yes	depression	2B3,3	YES	NO	YES
	COLVIN	Yes	flat	2B3	YES	NO	NO

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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
Bt: BENOIT LOAM, VERY POORLY DRAINED	BENOIT	Yes	depression	2B3,3	YES	NO	YES
	PARNELL	Yes	depression	2B3,3	YES	NO	YES
	BORUP PD	Yes	depression	2B3,3	YES	NO	YES
	COLVIN, WET	Yes	flat	2B3,3	YES	NO	YES
Bu: BORUP LOAM	BORUP	Yes	depression	2B3	YES	NO	NO
	COLVIN	Yes	flat	2B3	YES	NO	NO
	MARYSLAND	Yes	flat	2B3	YES	NO	NO
	DIVIDE	No	---	---	---	---	---
	FRAM	No	---	---	---	---	---
BvE: BUSE-BARNES LOAMS, STEEP	BUSE	No	---	---	---	---	---
	BARNES	No	---	---	---	---	---
	LADELLE	No	---	---	---	---	---
Ca: COLVIN-LAMOURE COMPLEX	EMB DEN	No	---	---	---	---	---
	LAMOURE	Yes	flood plain	2B3	YES	NO	NO
	COLVIN	Yes	depression	2B3	YES	NO	NO
	BORUP	Yes	depression	2B3	YES	NO	NO
Cp: COLVIN AND LAPRAIRIE SOILS	MARYSLAND	Yes	flat	2B3	YES	NO	NO
	COLVIN, SALINE	Yes	flat	2B3	YES	NO	NO
	LAPRAIRIE	No	---	---	---	---	---
	COLVIN	Yes	drainageway	2B3	YES	NO	NO
	LAPRAIRIE	No	---	---	---	---	---
Cs: COLVIN SOILS, VERY POORLY DRAINED	LAMOURE CHANNEL	Yes	flood plain	2B3	YES	NO	NO
	MARYSLAND	Yes	flat	2B3	YES	NO	NO
	BORUP	Yes	depression	2B3,3	YES	NO	YES
	COLVIN	Yes	depression	2B3,3	YES	NO	YES
Dc: DIMMICK CLAY	DIMMICK	Yes	depression	2B3,3	YES	NO	YES
	PARNELL	Yes	depression	2B3,3	YES	NO	YES
	DIMMICK, WET	Yes	depression	2B3,3	YES	NO	YES
Dd: DIVIDE LOAM	PARNELL	Yes	depression	2B3,3	YES	NO	YES
	DIVIDE	No	---	---	---	---	---
	MARYSLAND	Yes	flat	2B3	YES	NO	NO
	RENSHAW	No	---	---	---	---	---
Dp: DUMPS AND PITS	ARVESON	Yes	depression	2B3	YES	NO	NO
	DUMPS	No	---	---	---	---	---
EdC: EGELAND FINE SANDY LOAM, TILL SUBSTRATUM, ROLLING	PITS	No	---	---	---	---	---
	EGELAND	No	---	---	---	---	---
	ESMOND	No	---	---	---	---	---
	EMB DEN	No	---	---	---	---	---
	HECLA	No	---	---	---	---	---

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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
EeB: EGELAND-EMBDEN FINE SANDY LOAMS, TILL UNDULATING	EGELAND	No	---	---	---	---	---
	EMBDEN	No	---	---	---	---	---
	HECLA	No	---	---	---	---	---
	HAMAR	No	---	---	---	---	---
	ECKMAN	No	---	---	---	---	---
	MADDOCK	No	---	---	---	---	---
Efb: EGELAND-EMBDEN FINE SANDY LOAMS, TILL SUBSTRATUM, UNDULATING	EGELAND	No	---	---	---	---	---
	EMBDEN	No	---	---	---	---	---
	HECLA	No	---	---	---	---	---
	MADDOCK	No	---	---	---	---	---
EgA: EMBDEN-EGELAND FINE SANDY LOAMS, LEVEL	EMBDEN	No	---	---	---	---	---
	EGELAND	No	---	---	---	---	---
	HECLA	No	---	---	---	---	---
	HAMAR	No	---	---	---	---	---
	MADDOCK	No	---	---	---	---	---
Ela: EMBDEN-EGELAND FINE SANDY LOAMS, TILL SUBSTRATUM, LEVEL	EMBDEN	No	---	---	---	---	---
	EGELAND	No	---	---	---	---	---
	SWENODA	No	---	---	---	---	---
	FORMAN	No	---	---	---	---	---
	ARVESON	Yes	depression	2B3	YES	NO	NO
	HECLA	No	---	---	---	---	---
	TIFFANY	Yes	depression	2B3,3	YES	NO	YES
	---	---	---	---	---	---	---
Em: EMRICK-LARSON LOAMS	EMRICK	No	---	---	---	---	---
	LARSON	No	---	---	---	---	---
	HEIMDAL	No	---	---	---	---	---
	MIRANDA	No	---	---	---	---	---
	EXLINE	No	---	---	---	---	---
	TONKA	Yes	depression	2B3,3	YES	NO	YES
Er: ERODED SANDY LAND	ERODED SANDY LAND	No	---	---	---	---	---
	MADDOCK	No	---	---	---	---	---
	HAMAR LS	Yes	depression	2B2	YES	NO	NO
	HECLA	No	---	---	---	---	---
	DICKEY	No	---	---	---	---	---
Ex: EXLINE SOILS	EXLINE	No	---	---	---	---	---
	ABERDEEN	No	---	---	---	---	---
	HEIMDAL	No	---	---	---	---	---
	EMRICK	No	---	---	---	---	---
	LARSON	No	---	---	---	---	---
Fa: FARGO-ABERDEEN COMPLEX	FARGO	Yes	lake plain	2B3	YES	NO	NO
	ABERDEEN	No	---	---	---	---	---
	OVERLY	No	---	---	---	---	---
	FORMAN	No	---	---	---	---	---
	NUTLEY	No	---	---	---	---	---
	DIMMICK	Yes	depression	2B3,3	YES	NO	YES

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				Hydric criteria code	Meets saturation criteria	Meets flooding criteria	Meets ponding criteria
Fc: FARGO SILTY CLAY	FARGO	Yes	lake plain	2B3	YES	NO	NO
	DIMMICK	Yes	depression	3,2B3	YES	NO	YES
	OVERLY	No	---	---	---	---	---
	FORMAN	No	---	---	---	---	---
FoA: FORMAN CLAY LOAM, NEARLY LEVEL	NUTLEY	No	---	---	---	---	---
	FORMAN	No	---	---	---	---	---
	NUTLEY	No	---	---	---	---	---
	FARGO	Yes	lake plain	2B3	YES	NO	NO
FoB: FORMAN CLAY LOAM, UNDULATING	TONKA	Yes	depression	3,2B3	YES	NO	YES
	FORMAN	No	---	---	---	---	---
	NUTLEY	No	---	---	---	---	---
	FARGO	Yes	lake plain	2B3	YES	NO	NO
Fr: FRAM LOAM	TONKA	Yes	depression	2B3,3	YES	NO	YES
	PARNELL	Yes	depression	2B3,3	YES	NO	YES
	FRAM	No	---	---	---	---	---
	EMRICK	No	---	---	---	---	---
Ge: GARDENA-ECKMAN LOAMS	BORUP	Yes	flat	2B3	YES	NO	NO
	TONKA	Yes	depression	3,2B3	YES	NO	YES
	GARDENA	No	---	---	---	---	---
	ECKMAN	No	---	---	---	---	---
Ha: HAMERLY LOAM	FRAM	No	---	---	---	---	---
	BORUP	Yes	flat	2B3	YES	NO	NO
	GLYNDON	No	---	---	---	---	---
	HAMERLY	No	---	---	---	---	---
Hd: HECLA-MADDOCK LOAMY FINE SANDS	TONKA	Yes	depression	3,2B3	YES	NO	YES
	VALLERS	Yes	flat	2B3	YES	NO	NO
	PARNELL	Yes	depression	3,2B3	YES	NO	YES
	HECLA	No	---	---	---	---	---
HeA: HEIMDAL-EMRICK LOAMS, LEVEL	MADDOCK	No	---	---	---	---	---
	EMBDEN	No	---	---	---	---	---
	EGELAND	No	---	---	---	---	---
	HEIMDAL	No	---	---	---	---	---
HeB: HEIMDAL-EMRICK LOAMS, UNDULATING	EMRICK	No	---	---	---	---	---
	FRAM	No	---	---	---	---	---
	TONKA	Yes	depression	2B3,3	YES	NO	YES
	PARNELL	Yes	depression	2B3,3	YES	NO	YES
H1B: HEIMDAL-LARSON LOAMS, GENTLY SLOPING	HEIMDAL	No	---	---	---	---	---
	EMRICK	No	---	---	---	---	---
	FRAM	No	---	---	---	---	---
	PARNELL	Yes	depression	2B3,3	YES	NO	YES
	TONKA	Yes	depression	3,2B3	YES	NO	YES
	LARSON	No	---	---	---	---	---
	EMRICK	No	---	---	---	---	---
	FRAM	No	---	---	---	---	---
	PARNELL	Yes	depression	2B3,3	YES	NO	YES
	EXLINE	No	---	---	---	---	---
	MIRANDA	No	---	---	---	---	---
	TONKA	Yes	depression	2B3,3	YES	NO	YES

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				Hydric criteria code	Meets saturation criteria	Meets flooding criteria	Meets ponding criteria
Hr: HARRIET LOAM, 0 TO 1 PERCENT SLOPES	HARRIET	Yes	flat, flood plain	2B3	YES	NO	NO
	HEIL	Yes	depression	3,2B3	YES	NO	YES
	MARYSLAND	Yes	flat	2B3	YES	NO	NO
	COLVIN	Yes	drainageway	4,2B3	YES	YES	NO
	NOONAN	No	---	---	---	---	---
	STIRUM	Yes	depression, flood plain	2B3	YES	NO	NO
	EASBY	Yes	flat	2B3	YES	NO	NO
	HAMERLY	No	flat, till plain	---	---	---	---
	TONKA	Yes	depression	3,2B3	YES	NO	YES
	LaA: LADELLE SILT LOAM, LEVEL	LADELLE	No	---	---	---	---
LAMOURE		Yes	channel	2B3	YES	NO	NO
MARYSLAND		Yes	flat	2B3	YES	NO	NO
LaB: LADELLE SILT LOAM, GENTLY SLOPING	COLVIN	Yes	flat	2B3	YES	NO	NO
	LADELLE	No	---	---	---	---	---
	LAMOURE	Yes	flood plain	2B3	YES	NO	NO
Ld: LAMOURE AND DIVIDE SOILS, CHANNELED	CHANNEL	---	---	---	---	---	---
	LAMOURE	Yes	channel	2B3	YES	NO	NO
	DIVIDE	No	---	---	---	---	---
	COLVIN	Yes	flat	2B3	YES	NO	NO
	LADELLE	No	---	---	---	---	---
Le: LAMOURE-EXLINE COMPLEX	MARYSLAND	Yes	flat	2B3	YES	NO	NO
	LAMOURE	Yes	flood plain	2B3	YES	NO	NO
	EXLINE	No	---	---	---	---	---
	LADELLE	No	---	---	---	---	---
	DIVIDE	No	---	---	---	---	---
LhB: LARSON-HEIMDAL LOAMS, GENTLY SLOPING	COLVIN	Yes	flat	2B3	YES	NO	NO
	LAPRAIRIE	No	---	---	---	---	---
	LARSON	No	---	---	---	---	---
	HEIMDAL	No	---	---	---	---	---
	EMRICK	No	---	---	---	---	---
Lm: LARSON-MIRANDA COMPLEX	MIRANDA	No	---	---	---	---	---
	HEIMDAL	No	---	---	---	---	---
	EMRICK	No	---	---	---	---	---
	TONKA	Yes	depression	2B3,3	YES	NO	YES
	EXLINE	No	---	---	---	---	---
Ln: LETCHER FINE SANDY LOAM	LETCHER	No	---	---	---	---	---
	EXLINE	No	---	---	---	---	---
	LARSON	No	---	---	---	---	---
	EGELAND	No	---	---	---	---	---
	EMBDEN	No	---	---	---	---	---

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				Hydric criteria code	Meets saturation criteria	Meets flooding criteria	Meets ponding criteria
Lo: WAMDUSKA-MAUVAIS COMPLEX, 1 TO 9 PERCENT SLOPES	WAMDUSKA	No	---	---	---	---	---
	MAUVAIS	No	---	---	---	---	---
	COE	No	---	---	---	---	---
	LALLIE, SALINE	Yes	lake plain	2B3	YES	NO	NO
	MINNEWAUKAN	Yes	beach	2B2	YES	NO	NO
	BUSE	No	---	---	---	---	---
	GLYNDON	No	---	---	---	---	---
M-W: MISCELLANEOUS WATER	HAMERLY	No	---	---	---	---	---
	MISCELLANEOUS WATER	Yes	depression	3,2B3	YES	NO	YES
Mr: MIRANDA-LARSON COMPLEX	MIRANDA	No	---	---	---	---	---
	LARSON	No	---	---	---	---	---
	EXLINE	No	---	---	---	---	---
	FRAM	No	---	---	---	---	---
	TONKA	Yes	depression	3,2B3	YES	NO	YES
	EMRICK	No	---	---	---	---	---
	PARNELL	Yes	depression	2B3,3	YES	NO	YES
Nu: NUTLEY SILTY CLAY	NUTLEY	No	---	---	---	---	---
	FARGO SIC	Yes	lake plain	2B3	YES	NO	NO
Ov: OVERLY SILTY CLAY LOAM	OVERLY	No	---	---	---	---	---
	NUTLEY	No	---	---	---	---	---
	ECKMAN	No	---	---	---	---	---
Pa: PARNELL SILTY CLAY LOAM	PARNELL	Yes	depression	3,2B3	YES	NO	YES
	DIMMICK	Yes	depression	2B3,3	YES	NO	YES
	COLVIN, WET	Yes	depression	2B3,3	YES	NO	YES
Pd: PITS, GRAVEL AND SAND	PITS, SAND AND GRAVEL	No	---	---	---	---	---
	SIOUX	No	---	---	---	---	---
	ARVILLA	No	---	---	---	---	---
	WATER	Yes	depression	3,2B3	YES	NO	YES
ReA: RENSHAW LOAM, LEVEL	RENSHAW	No	---	---	---	---	---
	SIOUX	No	---	---	---	---	---
	ARVILLA	No	---	---	---	---	---
	DIVIDE	No	---	---	---	---	---
ReB: RENSHAW LOAM, GENTLY SLOPING	RENSHAW	No	---	---	---	---	---
	SIOUX	No	---	---	---	---	---
	ARVILLA	No	---	---	---	---	---
	DIVIDE	No	---	---	---	---	---
	TONKA	Yes	depression	2B3,3	YES	NO	YES
Sa: EASBY CLAY LOAM, 0 TO 1 PERCENT SLOPES	EASBY	Yes	flat	2B3	YES	NO	NO
	HAMERLY	No	---	---	---	---	---
	TONKA	Yes	depression	3,2B3	YES	NO	YES
	PARNELL	Yes	depression	3,2B3	YES	NO	YES
	MANFRED	Yes	depression	2B3,3	YES	NO	YES
	VALLERS	Yes	flat	2B3	YES	NO	NO
	SALINE	---	---	---	---	---	---
	---	---	---	---	---	---	---

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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
So: SIOUX-ARVILLA SANDY LOAMS	SIOUX	No	---	---	---	---	---
	ARVILLA DIVIDE	No	---	---	---	---	---
	RENSHAW	No	---	---	---	---	---
Sr: SIOUX-BARNES COMPLEX, STONY	SIOUX	No	---	---	---	---	---
	BARNES	No	---	---	---	---	---
	SVEA	No	---	---	---	---	---
	RENSHAW DIVIDE	No	---	---	---	---	---
	BUSE	No	---	---	---	---	---
St: LARSON-LOWE COMPLEX, 0 TO 1 PERCENT SLOPES, VERY STONY	Larson	No	---	---	---	---	---
	Lowe	Yes	flood plain	2B3	YES	NO	NO
	Fram	No	---	---	---	---	---
	Manfred	Yes	depression	2B3, 3	YES	NO	YES
	Playmoor	Yes	flat	2B3	YES	NO	NO
	Rauville	Yes	oxbow	4, 2B3	YES	YES	NO
	Ryan	Yes	flood plain	2B3	YES	NO	NO
	Divide	No	---	---	---	---	---
Su: SOUTHAM SOILS, 0 TO 1 PERCENT SLOPES	SOUTHAM SOILS	Yes	depression	3, 2B3	YES	NO	YES
	To: TONKA SILT LOAM	TONKA	Yes	depression	2B3, 3	YES	NO
VALLERS		Yes	flat	2B3	YES	NO	NO
BORUP		Yes	flat	2B3	YES	NO	NO
FRAM		No	---	---	---	---	---
HAMERLY		No	---	---	---	---	---
Uh: ULEN AND HAMAR FINE SANDY LOAMS	PARNELL	Yes	depression	2B3, 3	YES	NO	YES
	ULEN	No	---	---	---	---	---
	HAMAR	Yes	---	---	---	---	---
	FOSSUM	Yes	flat	2B3	YES	NO	NO
Va: VALLERS LOAM	WYRENE	No	---	---	---	---	---
	HECLA	No	---	---	---	---	---
	VALLERS	Yes	flat	2B3	YES	NO	NO
	HAMERLY	No	---	---	---	---	---
	TONKA	Yes	depression	2B3, 3	YES	NO	YES
W: WATER	VALLERS, SALINE	Yes	flat	2B3	YES	NO	NO
	PARNELL	Yes	depression	3, 2B3	YES	NO	YES
	WATER	Yes	depression	3, 2B3	YES	NO	YES

HYDRIC SOIL INTERPRETATIONS
 HYDRIC SOILS LIST
 Wells County, North Dakota

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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 Folistis, 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.

