# HYDRIC SOIL INTERPRETATIONS
## HYDRIC SOILS LIST
## Walsh 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 east 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 |
| An: | | | | | | | |
| ANTLER STONY CLAY LOAM | ANTLER , STONY | No | --- | --- | --- | --- | --- |
| Ao: | | | | | | | |
| ANTLER CLAY LOAM | ANTLER | No | --- | --- | --- | --- | --- |
| As: | | | | | | | |
| ARVESON-FOSSUM FINE SANDY LOAMS | ARVESON | Yes | flat | 2B3 | YES | NO | NO |
| | FOSSUM | Yes | flat | 2B3 | YES | NO | NO |
| At: | | | | | | | |
| ARVESON-FOSSUM LOAMS | ARVESON | Yes | flat | 2B3 | YES | NO | NO |
| | FOSSUM | Yes | flat | 2B3 | YES | NO | NO |
| AuA: | | | | | | | |
| ARVILLA SANDY LOAM, NEARLY LEVEL | ARVILLA | No | --- | --- | --- | --- | --- |
| AuB: | | | | | | | |
| ARVILLA SANDY LOAM, GENTLY SLOPING | ARVILLA | No | --- | --- | --- | --- | --- |
| BaC: | | | | | | | |
| BARNES LOAM, ROLLING | BARNES | No | --- | --- | --- | --- | --- |
| BaC2: | | | | | | | |
| BARNES LOAM, ROLLING, ERODED | BARNES | No | --- | --- | --- | --- | --- |
| BbD2: | | | | | | | |
| BARNES-BUSE LOAMS, HILLY, ERODED | BARNES, ERODED | No | --- | --- | --- | --- | --- |
| | BUSE, ERODED | No | --- | --- | --- | --- | --- |
| Be: | | | | | | | |
| BARNES-BUSE STONY LOAMS | BARNES, STONY | No | --- | --- | --- | --- | --- |
| | BUSE, STONY | No | --- | --- | --- | --- | --- |
| BgC: | | | | | | | |
| BARNES-RENSHAW LOAMS, ROLLING | BARNES | No | --- | --- | --- | --- | --- |
| | RENSHAW | No | --- | --- | --- | --- | --- |
| BhD: | | | | | | | |
| BARNES-SIOUX COMPLEX, HILLY | BARNES | No | --- | --- | --- | --- | --- |
| | SIOUX | No | --- | --- | --- | --- | --- |
| BkB: | | | | | | | |
| BARNES-SVEA LOAMS, GENTLY UNDULATING | BARNES | No | --- | --- | --- | --- | --- |
| | SVEA | No | --- | --- | --- | --- | --- |
| BkB2: | | | | | | | |
| BARNES-SVEA LOAMS, GENTLY UNDULATING, ERODED | BARNES | No | --- | --- | --- | --- | --- |
| | SVEA | No | --- | --- | --- | --- | --- |
| BlA: | | | | | | | |
| BARNES-SVEA STONY LOAMS, NEARLY LEVEL | BARNES | No | --- | --- | --- | --- | --- |
| | SVEA | No | --- | --- | --- | --- | --- |
| BlC: | | | | | | | |
| BARNES-SVEA STONY LOAMS, ROLLING | BARNES | No | --- | --- | --- | --- | --- |
| | SVEA | No | --- | --- | --- | --- | --- |
| Bm: | | | | | | | |
| BEARDEN SILT LOAM | BEARDEN | No | --- | --- | --- | --- | --- |
| BnA: | | | | | | | |
| BEARDEN SILTY CLAY LOAM, LEVEL | BEARDEN | No | --- | --- | --- | --- | --- |
| BnC: | | | | | | | |
| BEARDEN SILTY CLAY LOAM, SLOPING | BEARDEN | No | --- | --- | --- | --- | --- |

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|---|---|---|---|---|---|---|---|
| | | | | Hydric criteria code | Meets saturation criteria | Meets flooding criteria | Meets ponding criteria |
| Bo: | | | | | | | |
| BEARDEN SILTY CLAY LOAM, FANS | BEARDEN | No | --- | --- | --- | --- | --- |
| Br: | | | | | | | |
| BEARDEN SILTY CLAY LOAM, SALINE | BEARDEN, SALINE | No | --- | --- | --- | --- | --- |
| Bs: | | | | | | | |
| BEARDEN SILTY CLAY LOAM, GRAVELLY SUBSTRATUM | BEARDEN | No | --- | --- | --- | --- | --- |
| Bt: | | | | | | | |
| BEARDEN SILTY CLAY | BEARDEN | No | --- | --- | --- | --- | --- |
| Bu: | | | | | | | |
| BENOIT LOAM | BENOIT, (MARYSLAND) | Yes | flat | 2B3 | YES | NO | NO |
| Bv: | | | | | | | |
| BORUP SILT LOAM | BORUP | Yes | flat | 2B3 | YES | NO | NO |
| BwB: | | | | | | | |
| BRANTFORD-VANG LOAMS, GENTLY SLOPING | BRANTFORD | No | --- | --- | --- | --- | --- |
| ByC: | | | | | | | |
| BUSE-BARNES LOAMS, ROLLING | BUSE | No | --- | --- | --- | --- | --- |
| | BARNES | No | --- | --- | --- | --- | --- |
| ByD: | | | | | | | |
| BUSE-BARNES LOAMS, HILLY | BUSE | No | --- | --- | --- | --- | --- |
| | BARNES | No | --- | --- | --- | --- | --- |
| ByE: | | | | | | | |
| BUSE-BARNES LOAMS, STEEP | BUSE | No | --- | --- | --- | --- | --- |
| | BARNES | No | --- | --- | --- | --- | --- |
| CaA: | | | | | | | |
| CASHEL SILTY CLAY, NEARLY LEVEL | CASHEL | No | --- | --- | --- | --- | --- |
| CaB: | | | | | | | |
| CASHEL SILTY CLAY, GENTLY SLOPING | CASHEL | No | --- | --- | --- | --- | --- |
| CcE: | | | | | | | |
| CASHEL SOILS, STEEP | CASHEL | No | --- | --- | --- | --- | --- |
| Cd: | | | | | | | |
| CAVOUR COMPLEX | CAVOUR | No | --- | --- | --- | --- | --- |
| Ce: | | | | | | | |
| COE SOILS | COE | No | --- | --- | --- | --- | --- |
| Cf: | | | | | | | |
| COLVIN SILT LOAM | COLVIN | Yes | flat | 2B3 | YES | NO | NO |
| Ch: | | | | | | | |
| COLVIN SILTY CLAY LOAM | COLVIN | Yes | flat | 2B3 | YES | NO | NO |
| Co: | | | | | | | |
| COLVIN SILTY CLAY LOAM, VERY WET | COLVIN, VERY WET | Yes | depression | 2B3,3 | YES | NO | YES |
| DdA: | | | | | | | |
| DIVIDE LOAM, LEVEL | DIVIDE | No | --- | --- | --- | --- | --- |
| Dp: | | | | | | | |
| DUMPS AND PITS | DUMPS | No | --- | --- | --- | --- | --- |
| | PITS | No | --- | --- | --- | --- | --- |
| EbA: | | | | | | | |
| EDGELEY LOAM, NEARLY LEVEL | EDGELEY | No | --- | --- | --- | --- | --- |
| EbB: | | | | | | | |
| EDGELEY LOAM, GENTLY UNDULATING | EDGELEY | No | --- | --- | --- | --- | --- |
| EbC: | | | | | | | |
| EDGELEY LOAM, UNDULATING | EDGELEY | No | --- | --- | --- | --- | --- |

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HYDRIC SOILS LIST
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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 |
| EmA: EMBDEN SANDY LOAM, LEVEL | EMBDEN | No | --- | --- | --- | --- | --- |
| EmB: EMBDEN SANDY LOAM, GENTLY UNDULATING | EMBDEN | No | --- | --- | --- | --- | --- |
| EmC: EMBDEN SANDY LOAM, SLOPING | EMBDEN | No | --- | --- | --- | --- | --- |
| EnA: EMBDEN LOAM, LEVEL | EMBDEN | No | --- | --- | --- | --- | --- |
| Fa: FAIRDALE SILT LOAM | FAIRDALE | No | --- | --- | --- | --- | --- |
| FaB: FAIRDALE SILT LOAM, GENTLY SLOPING | FAIRDALE | No | --- | --- | --- | --- | --- |
| Fd: FAIRDALE SILT LOAM, OCCASSIONALLY FLOODED | FAIRDALE | No | --- | --- | --- | --- | --- |
| Fe: FAIRDALE AND LAPRAIRIE SOILS, CHANNELED | CHANNEL | Yes | --- | 4 | NO | YES | NO |
| | FAIRDALE | No | --- | --- | --- | --- | --- |
| | LAPRAIRIE | No | --- | --- | --- | --- | --- |
| FfA: FARGO SILTY CLAY, NEARLY LEVEL | FARGO | Yes | lake plain | 2B3 | YES | NO | NO |
| Fg: FARGO SILTY CLAY, DEPRESSIONAL | FARGO, DEPRESSIONAL | Yes | depression | 3,2B3 | YES | NO | YES |
| FhA: FARGO-HEGNE SILTY CLAYS, LEVEL | FARGO | Yes | lake plain | 2B3 | YES | NO | NO |
| | HEGNE | Yes | lake plain | 2B3 | YES | NO | NO |
| FhB: FARGO-HEGNE SILTY CLAYS, GENTLY SLOPING | FARGO | Yes | lake plain | 2B3 | YES | NO | NO |
| | HEGNE | Yes | lake plain | 2B3 | YES | NO | NO |
| GaA: GARDENA SILT LOAM, NEARLY LEVEL | GARDENA | No | --- | --- | --- | --- | --- |
| GaB: GARDENA SILT LOAM, GENTLY SLOPING | GARDENA | No | --- | --- | --- | --- | --- |
| Gb: GILBY LOAM | GILBY | No | --- | --- | --- | --- | --- |
| Ge: GILBY LOAM, WET | GILBY | Yes | depression | 2B3 | YES | NO | NO |
| Gh: GILBY STONY LOAM | GILBY, STONY | No | --- | --- | --- | --- | --- |
| GlA: GLYNDON SILT LOAM, LEVEL | GLYNDON | No | --- | --- | --- | --- | --- |
| GlB: GLYNDON SILT LOAM, GENTLY SLOPING | GLYNDON | No | --- | --- | --- | --- | --- |
| Gm: GLYNDON SILT LOAM, MODERATELY SALINE | GLYNDON, MODERATELY SALINE | No | --- | --- | --- | --- | --- |
| Gr: GRANO SILTY CLAY, VERY WET | GRANO, VERY WET | Yes | depression | 2B3,3 | YES | NO | YES |

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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 |
| Gs: GRANO-HEGNE SILTY CLAYS | GRANO | Yes | depression | 2B3,3 | YES | NO | YES |
| | HEGNE | Yes | lake plain | 2B3 | YES | NO | NO |
| Ha: HAMAR AND ULEN LOAMY SANDS | HAMAR | No | --- | --- | --- | --- | --- |
| | ULEN | No | --- | --- | --- | --- | --- |
| Hd: HAMAR AND ULEN SANDY LOAMS | HAMAR | Yes | depression | 2B3 | YES | NO | NO |
| | ULEN | No | --- | --- | --- | --- | --- |
| He: HAMERLY-CRESBARD LOAMS | HAMERLY | No | --- | --- | --- | --- | --- |
| | CRESBARD | No | --- | --- | --- | --- | --- |
| HgA: HAMERLY-SVEA LOAMS, NEARLY LEVEL | HAMERLY | No | --- | --- | --- | --- | --- |
| | SVEA | No | --- | --- | --- | --- | --- |
| HgB: HAMERLY-SVEA LOAMS, GENTLY UNDULATING | HAMERLY | No | --- | --- | --- | --- | --- |
| | SVEA | No | --- | --- | --- | --- | --- |
| Hh: HATTIE SILTY CLAY, LACUSTRINE | HATTIE, LACUSTRINE | No | --- | --- | --- | --- | --- |
| HlA: HECLA LOAMY SAND, NEARLY LEVEL | HECLA | No | --- | --- | --- | --- | --- |
| HlB: HECLA LOAMY SAND, GENTLY UNDULATING | HECLA | No | --- | --- | --- | --- | --- |
| HmA: HEGNE-FARGO SILTY CLAYS, NEARLY LEVEL | HEGNE | Yes | lake plain | 2B3 | YES | NO | NO |
| | FARGO | Yes | lake plain | 2B3 | YES | NO | NO |
| HmB: HEGNE-FARGO SILTY CLAYS, GENTLY SLOPING | HEGNE | Yes | lake plain | 2B3 | YES | NO | NO |
| | FARGO | Yes | lake plain | 2B3 | YES | NO | NO |
| Hn: HEGNE SILTY CLAY, SALINE | HEGNE, SALINE | Yes | depression | 2B3,3 | YES | NO | YES |
| Hs: HEGNE SILTY CLAY, STRONGLY SALINE-ALKALI | HEGNE, STR. SALINE, ALKALI | Yes | lake plain | 2B3 | YES | NO | NO |
| Kn: KLOTEN COMPLEX | KLOTEN | No | --- | --- | --- | --- | --- |
| La: LAMOURE SOILS, MODERATELY SALINE | LAMOURE, MODERATELY SALINE | Yes | flood plain | 2B3 | YES | NO | NO |
| LeA: LANKIN LOAM, LEVEL | LANKIN | No | --- | --- | --- | --- | --- |
| Lk: LANKIN CLAY LOAM | LANKIN | No | --- | --- | --- | --- | --- |
| LnA: LANKIN AND SVEA LOAMS, NEARLY LEVEL | LANKIN | No | --- | --- | --- | --- | --- |
| | SVEA | No | --- | --- | --- | --- | --- |
| LnB: LANKIN AND SVEA LOAMS, GENTLY SLOPING | LANKIN | No | --- | --- | --- | --- | --- |
| | SVEA | 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 |
| Lp: | | | | | | | |
| LA PRAIRIE SILT LOAM | LA PRAIRIE | No | --- | --- | --- | --- | --- |
| Lr: | | | | | | | |
| LA PRAIRIE SILTY CLAY LOAM | LA PRAIRIE | No | --- | --- | --- | --- | --- |
| | CHANNEL | Yes | --- | 4 | NO | YES | NO |
| Lu: | | | | | | | |
| LUDDEN SILTY CLAY | LUDDEN | Yes | flood plain | 4,2B3 | YES | YES | NO |
| Ly: | | | | | | | |
| LUDDEN AND RYAN SOILS | LUDDEN | Yes | flood plain | 2B3,4 | YES | YES | NO |
| | RYAN | Yes | flood plain | 2B3 | YES | NO | NO |
| M-W: | | | | | | | |
| MISCELLANEOUS WATER | MISCELLANEOUS WATER | Yes | depression | 2B3,3 | YES | NO | YES |
| Mk3: | | | | | | | |
| MADDOCK-HECLA COMPLEX, SEVERELY ERODED | MADDOCK | No | --- | --- | --- | --- | --- |
| | HECLA | No | --- | --- | --- | --- | --- |
| Mn: | | | | | | | |
| MANFRED SOILS | MANFRED | Yes | depression | 2B3,3 | YES | NO | YES |
| Oa: | | | | | | | |
| OJATA SOILS | OJATA | Yes | lake plain | 2B3 | YES | NO | NO |
| OeA: | | | | | | | |
| OVERLY SILT LOAM, LEVEL | OVERLY | No | --- | --- | --- | --- | --- |
| OlA: | | | | | | | |
| OVERLY SILTY CLAY LOAM, LEVEL | OVERLY | No | --- | --- | --- | --- | --- |
| OlB: | | | | | | | |
| OVERLY SILTY CLAY LOAM, GENTLY SLOPING | OVERLY | No | --- | --- | --- | --- | --- |
| OlC: | | | | | | | |
| OVERLY SILTY CLAY LOAM, SLOPING | OVERLY | No | --- | --- | --- | --- | --- |
| Om: | | | | | | | |
| OVERLY SILTY CLAY LOAM, FANS | OVERLY | No | --- | --- | --- | --- | --- |
| OvA: | | | | | | | |
| OVERLY SILTY CLAY, LEVEL | OVERLY | No | --- | --- | --- | --- | --- |
| Ow: | | | | | | | |
| OVERLY SILTY CLAY, FANS | OVERLY | No | --- | --- | --- | --- | --- |
| Pa: | | | | | | | |
| PARNELL SILTY CLAY LOAM | PARNELL | Yes | depression | 3,2B3 | YES | NO | YES |
| Pg: | | | | | | | |
| PITS, GRAVEL AND SAND | PITS | No | --- | --- | --- | --- | --- |
| Pt: | | | | | | | |
| PARNELL AND TONKA SOILS | PARNELL | Yes | depression | 2B3,3 | YES | NO | YES |
| | TONKA | Yes | depression | 3,2B3 | YES | NO | YES |
| Pu: | | | | | | | |
| PERELLA SILTY CLAY LOAM | PERELLA | Yes | depression | 3,2B3 | YES | NO | YES |
| Ra: | | | | | | | |
| RAUVILLE SOILS | RAUVILLE | Yes | oxbow | 4,2B3 | YES | YES | NO |
| ReA: | | | | | | | |
| RENSHAW LOAM, NEARLY LEVEL | RENSHAW | No | --- | --- | --- | --- | --- |
| ReB: | | | | | | | |
| RENSHAW LOAM, GENTLY SLOPING | RENSHAW | No | --- | --- | --- | --- | --- |

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|---|---|---|---|---|---|---|---|
| | | | | Hydric criteria code | Meets saturation criteria | Meets flooding criteria | Meets ponding criteria |
| Ro: ROCKWELL FINE SANDY LOAM | ROCKWELL | Yes | beach | 2B3 | YES | NO | NO |
| So: SOUTHAM SOILS | SOUTHAM SOILS | Yes | depression | 2B3,3 | YES | NO | YES |
| Sr: SIOUX-RENSHAW COMPLEX | SIOUX | No | --- | --- | --- | --- | --- |
| | RENSHAW | No | --- | --- | --- | --- | --- |
| SsE: SIOUX AND RENSHAW SOILS, STEEP | SIOUX | No | --- | --- | --- | --- | --- |
| | RENSHAW | No | --- | --- | --- | --- | --- |
| SuA: SVEA-BARNES LOAMS, NEARLY LEVEL | SVEA | No | --- | --- | --- | --- | --- |
| | BARNES | No | --- | --- | --- | --- | --- |
| SvA: SVEA-CRESBARD LOAMS, NEARLY LEVEL | SVEA | No | --- | --- | --- | --- | --- |
| | CRESBARD | No | --- | --- | --- | --- | --- |
| ToA: TOWNER SANDY LOAM, LEVEL | TOWNER | No | --- | --- | --- | --- | --- |
| Un: ULEN SANDY LOAM | ULEN | No | --- | --- | --- | --- | --- |
| Va: VALLERS LOAM, SALINE | VALLERS, SALINE | Yes | flat | 2B3 | YES | NO | NO |
| Vh: VALLERS-HAMERLY LOAMS | VALLERS | Yes | flat | 2B3 | YES | NO | NO |
| | HAMERLY | No | --- | --- | --- | --- | --- |
| Vm: VALLERS-HAMERLY STONY LOAMS | VALLERS, STONY | Yes | flat | 2B3 | YES | NO | NO |
| | HAMERLY, STONY | No | --- | --- | --- | --- | --- |
| VnA: VANG-BRANTFORD LOAMS, NEARLY LEVEL | VANG | No | --- | --- | --- | --- | --- |
| | BRANTFORD | No | --- | --- | --- | --- | --- |
| Wa: WAHPETON SILTY CLAY | WAHPETON | No | --- | --- | --- | --- | --- |
| WhC: WALSH LOAM, SLOPING | WALSH | No | --- | --- | --- | --- | --- |
| WlA: WALSH LOAM, SAND SUBSTRATUM, NEARLY LEVEL | WALSHL., SAND SUBSTRATUM | No | --- | --- | --- | --- | --- |
| WlB: WALSH LOAM, SAND SUBSTRATUM, GENTLY SLOPING | WALSH L., SAND SUBSTRATUM | No | --- | --- | --- | --- | --- |
| Wm: WALSH SILT LOAM | WALSH | No | --- | --- | --- | --- | --- |
| WnA: WALSH CLAY LOAM, LEVEL | WALSH | No | --- | --- | --- | --- | --- |
| WoB: WAUKON LOAM, GENTLY UNDULATING | WAUKON | No | --- | --- | --- | --- | --- |
| WoD: WAUKON LOAM, STRONGLY ROLLING | WAUKON | No | --- | --- | --- | --- | --- |

HYDRIC SOIL INTERPRETATIONS
HYDRIC SOILS LIST
Walsh 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 |
| ZgC: ZELL-GARDENA SILT LOAMS, SLOPING | ZELL | No | --- | --- | --- | --- | --- |
| | GARDENA | No | --- | --- | --- | --- | --- |
| ZgE: ZELL-GARDENA SILT LOAMS, STEEP | ZELL | No | --- | --- | --- | --- | --- |
| | GARDENA | No | --- | --- | --- | --- | --- |

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.