HYDRIC SOIL INTERPRETATIONS
HYDRIC SOILS LIST
WILLIAMS 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.

HYDRIC SOIL INTERPRETATIONS
HYDRIC SOILS LIST
WILLIAMS 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
53:							
ARNEGARD LOAM, 0 TO 3 PERCENT SLOPES	ARNEGARD	No	---	---	---	---	---
92:							
BADLAND	BADLAND	No	---	---	---	---	---
100:							
BANKS LOAMY FINE SAND, slightly wet, 0 TO 3 PERCENT SLOPES	BANKS	No	---	---	---	---	---
281:							
BOWDLE LOAM, 0 TO 3 PERCENT SLOPES	BOWDLE	No	---	---	---	---	---
340:							
CABBA-BADLAND outcrop COMPLEX, 9 TO 70 PERCENT SLOPES	CABBA	No	ridge	---	---	---	---
	BADLAND	No	ridge	---	---	---	---
	BRANDENBURG	No	ridge	---	---	---	---
	VEBAR	No	hill	---	---	---	---
	AMOR	No	ridge	---	---	---	---
	CHERRY	No	---	---	---	---	---
	ARIKARA	No	ridge	---	---	---	---
	DOGTOOTH	No	ridge	---	---	---	---
	ZAHL	No	knoll, moraine, ridge, till plain	---	---	---	---
669:							
FARLAND SILT LOAM, 1 TO 6 PERCENT SLOPES	FARLAND	No	---	---	---	---	---
674:							
FARNUF LOAM, 0 TO 3 PERCENT SLOPES	FARNUF	No	---	---	---	---	---
676:							
FARNUF-SAKAKAWEA LOAMS, 3 TO 6 PERCENT SLOPES	FARNUF	No	---	---	---	---	---
	SAKAKAWEA	No	---	---	---	---	---
882:							
HAMERLY-TONKA COMPLEX, 0 TO 3 PERCENT SLOPES	HAMERLY	No	---	---	---	---	---
	TONKA	Yes	depression	3,2B3	YES	NO	YES
910:							
HAVRELON LOAM, slightly wet,0 to 1 percent slopes	HAVRELON	No	---	---	---	---	---
1021:							
KORCHEA LOAM, 0 TO 3 PERCENT SLOPES	KORCHEA	No	---	---	---	---	---
	HAVRELON	No	---	---	---	---	---
	SHAMBO	No	---	---	---	---	---
	FARLAND	No	---	---	---	---	---
1128:							
LEHR LOAM, 0 TO 6 PERCENT SLOPES	LEHR	No	---	---	---	---	---
	WABEK	No	---	---	---	---	---
	BOWDLE	No	---	---	---	---	---
	WILLIAMS	No	---	---	---	---	---
	BEARDEN	No	flat, lake plain	---	---	---	---
	MANNING	No	---	---	---	---	---
	ZAHL	No	---	---	---	---	---

HYDRIC SOIL INTERPRETATIONS
HYDRIC SOILS LIST
WILLIAMS 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
1143:							
LIHEN LOAMY FINE SAND, 0 TO 6 PERCENT SLOPES	LIHEN	No	---	---	---	---	---
	BLANCHARD	No	---	---	---	---	---
	APPAM	No	---	---	---	---	---
	TALLY	No	---	---	---	---	---
1178:							
LOHLER SILTY CLAY, slightly wet, 0 to 2 percent slopes	LOHLER	No	---	---	---	---	---
	SCORIO	No	---	---	---	---	---
	HAVRELON	No	---	---	---	---	---
	LALLIE	Yes	depression	2B3	YES	NO	NO
1249:							
APPAM SANDY LOAM, 0 TO 6 PERCENT SLOPES	APPAM	No	---	---	---	---	---
	TALLY	No	---	---	---	---	---
	WABEK	No	---	---	---	---	---
	BOWDLE	No	---	---	---	---	---
	LIVONA	No	---	---	---	---	---
	LIHEN	No	---	---	---	---	---
	LOHNES	No	---	---	---	---	---
1427:							
PARNELL SILTY CLAY LOAM, 0 to 1 percent slopes	PARNELL	Yes	depression	3,2B3	YES	NO	YES
	VALLERS, SALINE	Yes	flat	2B3	YES	NO	NO
	BEARDEN	No	flat, lake plain	---	---	---	---
	PERELLA	Yes	depression	2B3,3	YES	NO	YES
	SOUTHAM	Yes	depression	2B3,3	YES	NO	YES
	TONKA	Yes	depression	2B3,3	YES	NO	YES
1466:							
PITS, GRAVEL AND SAND	PITS, GRAVEL AND SAND	No	---	---	---	---	---
	WABEK	No	---	---	---	---	---
	BOWDLE	No	---	---	---	---	---
	LEHR	No	---	---	---	---	---
1664:							
SHAMBO LOAM, 0 TO 2 PERCENT SLOPES	SHAMBO	No	---	---	---	---	---
	FARLAND	No	---	---	---	---	---
	LEHR	No	---	---	---	---	---
	ARNEGARD	No	---	---	---	---	---
	DAGLUM	No	---	---	---	---	---
	KORCHEA	No	---	---	---	---	---
	STIRUM	Yes	flat	3,2B3	YES	NO	YES
1710:							
SOUTHAM SILTY CLAY LOAM, 0 to 1 percent slopes	SOUTHAM	Yes	depression	2B3,3	YES	NO	YES
	PARNELL	Yes	depression	2B3,3	YES	NO	YES
	VALLERS, SALINE	Yes	flat	2B3	YES	NO	NO
1798:							
TALLY FINE SANDY LOAM, 6 TO 9 PERCENT SLOPES	TALLY	No	---	---	---	---	---
	SAKAKAWEA	No	---	---	---	---	---
	LIHEN	No	---	---	---	---	---
1835:							
TONKA SILT LOAM, 0 to 1 percent slopes	TONKA	Yes	depression	3,2B3	YES	NO	YES
	BOWBELLS	No	---	---	---	---	---
	PARNELL	Yes	depression	2B3,3	YES	NO	YES

HYDRIC SOIL INTERPRETATIONS
HYDRIC SOILS LIST
WILLIAMS 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
1854:							
TREMBLES FINE SANDY LOAM, slightly wet, 0 to 1 percent slopes	TREMBLES	No	---	---	---	---	---
	HAVRELON	No	---	---	---	---	---
	BANKS	No	---	---	---	---	---
	MINNEWAUKAN	Yes	flat	2B2	YES	NO	NO
1871:							
VALLERS LOAM, SALINE, 0 to 1 percent slopes	VALLERS	Yes	flat	2B3	YES	NO	NO
	ARNEGARD	No	---	---	---	---	---
	SHAMBO	No	---	---	---	---	---
	BEARDEN	No	flat, lake plain	---	---	---	---
	LEHR	No	---	---	---	---	---
	PARNELL	Yes	depression	3,2B3	YES	NO	YES
	WILLIAMS	No	---	---	---	---	---
1978:							
WATER	WATER	Yes	depression	3,2B3	YES	NO	YES
2014:							
WILLIAMS-BOWBELLS LOAMS, 0 TO 3 PERCENT SLOPES	WILLIAMS	No	---	---	---	---	---
	BOWBELLS	No	---	---	---	---	---
	ZAHL	No	---	---	---	---	---
	VIDA	No	---	---	---	---	---
	BEARDEN	No	flat, lake plain	---	---	---	---
	TONKA	Yes	depression	3,2B3	YES	NO	YES
2015:							
WILLIAMS-BOWBELLS LOAMS, 3 TO 6 PERCENT SLOPES	WILLIAMS	No	---	---	---	---	---
	BOWBELLS	No	---	---	---	---	---
	ZAHL	No	---	---	---	---	---
	VIDA	No	---	---	---	---	---
	MAX	No	---	---	---	---	---
	ARNEGARD	No	---	---	---	---	---
	BEARDEN	No	flat, lake plain	---	---	---	---
	TONKA	Yes	depression	2B3,3	YES	NO	YES
2031:							
WILLIAMS-ZAHL LOAMS, 3 TO 6 PERCENT SLOPES	ZAHL	No	---	---	---	---	---
	WILLIAMS	No	---	---	---	---	---
	MAX	No	---	---	---	---	---
	BOWBELLS	No	---	---	---	---	---
	VIDA	No	---	---	---	---	---
	BEARDEN	No	flat, lake plain	---	---	---	---
	ARNEGARD	No	---	---	---	---	---
	TONKA	Yes	depression	3,2B3	YES	NO	YES

HYDRIC SOIL INTERPRETATIONS
HYDRIC SOILS LIST
WILLIAMS 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
2032:							
WILLIAMS-ZAHL LOAMS, 6 TO 9 PERCENT SLOPES	ZAHL	No	knoll, moraine, ridge	---	---	---	---
	WILLIAMS	No	knoll, moraine, ridge	---	---	---	---
	BOWBELLS	No	swale, till plain	---	---	---	---
	VIDA	No	knoll, moraine, ridge	---	---	---	---
	MAX	No	knoll, moraine, ridge	---	---	---	---
	TONKA	Yes	depression	2B3,3	YES	NO	YES
	ARNEGARD	No	swale	---	---	---	---
2081:							
ZAHL-WILLIAMS LOAMS, 9 TO 15 PERCENT SLOPES	ZAHL	No	---	---	---	---	---
	WILLIAMS	No	---	---	---	---	---
	MAX	No	---	---	---	---	---
	BOWBELLS	No	---	---	---	---	---
	CABBA	No	---	---	---	---	---
	TONKA	Yes	depression	2B3,3	YES	NO	YES
	VEBAR	No	---	---	---	---	---
	WABEK	No	---	---	---	---	---
2130:							
WILLIAMS-ZAHL-PARNELL COMPLEX, 0 TO 9 PERCENT SLOPES	ZAHL	No	---	---	---	---	---
	WILLIAMS	No	---	---	---	---	---
	PARNELL	Yes	depression	3,2B3	YES	NO	YES
	TONKA	Yes	depression	2B3,3	YES	NO	YES
	BOWBELLS	No	---	---	---	---	---
	DIVIDE	No	---	---	---	---	---
	LIVONA	No	---	---	---	---	---
	TALLY	No	---	---	---	---	---
	BEARDEN	No	flat, lake plain	---	---	---	---
2131:							
ZAHL-WILLIAMS-PARNELL COMPLEX, 0 TO 35 PERCENT SLOPES	ZAHL	No	---	---	---	---	---
	WILLIAMS	No	---	---	---	---	---
	PARNELL	Yes	depression	3,2B3	YES	NO	YES
	BEARDEN	No	flat, lake plain	---	---	---	---
	BOWBELLS	No	---	---	---	---	---
	LIVONA	No	---	---	---	---	---
	SOUTHAM	Yes	depression	2B3,3	YES	NO	YES
2170:							
DIVIDE LOAM, 0 TO 3 PERCENT SLOPES	DIVIDE	No	---	---	---	---	---
	BEARDEN	No	flat, lake plain	---	---	---	---
	BOWDLE	No	---	---	---	---	---
	MARYSLAND	Yes	flat	2B3	YES	NO	NO
	LEHR	No	---	---	---	---	---
	TONKA	Yes	depression	2B3	YES	NO	NO
	VALLERS, SALINE	Yes	flat	2B3	YES	NO	NO

HYDRIC SOIL INTERPRETATIONS
HYDRIC SOILS LIST
WILLIAMS 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
2176:							
ZAHL-WILLIAMS LOAMS, 15 TO 60 PERCENT SLOPES	ZAHL	No	---	---	---	---	---
	WILLIAMS	No	---	---	---	---	---
	BOWBELLS	No	---	---	---	---	---
	MAX	No	---	---	---	---	---
	CABBA	No	---	---	---	---	---
	PARNELL	Yes	depression	3,2B3	YES	NO	YES
	WABEK	No	---	---	---	---	---
2261:							
SCHALLER LOAMY SAND, 0 TO 6 PERCENT SLOPES	SCHALLER	No	---	---	---	---	---
	APPAM	No	---	---	---	---	---
	CLAIRE	No	---	---	---	---	---
	DIVIDE	No	---	---	---	---	---
	WYRENE	No	---	---	---	---	---
2270:							
HARRIET AND STIRUM SOILS, 0 to 1 percent slopes	HARRIET	Yes	flat	2B3	YES	NO	NO
	STIRUM	Yes	flat	2B3	YES	NO	NO
	LALLIE, SALINE	Yes	depression	2B3,3	YES	NO	YES
	VALLERS, SALINE	Yes	flat	2B3	YES	NO	NO
	PORTAL	No	---	---	---	---	---
	TREMBLES	No	---	---	---	---	---
	DAGLUM	No	---	---	---	---	---
	RHOADES	No	---	---	---	---	---
2338:							
AMOR-WILLIAMS-ZAHL LOAMS, 3 TO 9 PERCENT SLOPES	AMOR	No	---	---	---	---	---
	WILLIAMS	No	---	---	---	---	---
	SHAMBO	No	---	---	---	---	---
	ZAHL	No	---	---	---	---	---
	BOWBELLS	No	---	---	---	---	---
	CABBA	No	---	---	---	---	---
	CHERRY	No	---	---	---	---	---
	LEHR	No	---	---	---	---	---
	BEISIGL	No	---	---	---	---	---
2339:							
AMOR-ZAHL-CABBA LOAMS, 9 TO 25 PERCENT SLOPES	AMOR	No	ridge	---	---	---	---
	ZAHL	No	knoll, moraine, ridge, till plain	---	---	---	---
	CABBA	No	hill	---	---	---	---
	WILLIAMS	No	knoll, moraine, ridge	---	---	---	---
	BOWBELLS	No	swale, till plain	---	---	---	---
	REEDER	No	---	---	---	---	---
	FLASHER	No	ridge	---	---	---	---
	DOGTOOTH	No	ridge	---	---	---	---
	VEBAR	No	hill	---	---	---	---

HYDRIC SOIL INTERPRETATIONS
HYDRIC SOILS LIST
WILLIAMS 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
2340:							
ARNEGARD-SHAMBO LOAMS, 3 TO 6 PERCENT SLOPES	ARNEGARD	No	---	---	---	---	---
	SHAMBO	No	---	---	---	---	---
	STADY	No	---	---	---	---	---
	BOWBELLS	No	---	---	---	---	---
	BOWDLE	No	---	---	---	---	---
2341:							
BRANDENBURG CHANNERY LOAM, 3 TO 70 PERCENT SLOPES	BRANDENBURG	No	---	---	---	---	---
	SEARING	No	---	---	---	---	---
	AMOR	No	---	---	---	---	---
	WILLIAMS	No	---	---	---	---	---
	ROCK OUTCROP	Unranked	ridge	---	---	---	---
	ZAHL	No	---	---	---	---	---
	CABBA	No	---	---	---	---	---
2342:							
CABBA-AMOR-ZAHL LOAMS, 25 TO 60 PERCENT SLOPES	CABBA	No	---	---	---	---	---
	AMOR	No	---	---	---	---	---
	ZAHL	No	---	---	---	---	---
	WILLIAMS	No	---	---	---	---	---
	RHOADES	No	---	---	---	---	---
	BADLANDS	No	---	---	---	---	---
	ARNEGARD	No	---	---	---	---	---
	CHERRY	No	---	---	---	---	---
2343:							
CHERRY LOAM, 0 TO 6 PERCENT SLOPES	CHERRY	No	---	---	---	---	---
	FARLAND	No	---	---	---	---	---
	SHAMBO	No	---	---	---	---	---
2344:							
CHERRY LOAM, 6 TO 9 PERCENT SLOPES	CHERRY	No	---	---	---	---	---
	FARLAND	No	---	---	---	---	---
	SHAMBO	No	---	---	---	---	---
2345:							
DAGLUM-RHOADES LOAMS, 0 TO 6 PERCENT SLOPES	DAGLUM	No	---	---	---	---	---
	RHOADES	No	---	---	---	---	---
	APPAM	No	---	---	---	---	---
	VALLERS	Yes	flat	2B3	YES	NO	NO
	FARLAND	No	---	---	---	---	---
	AMOR	No	---	---	---	---	---
	HARRIET	Yes	flat	2B3	YES	NO	NO
2346:							
DOOLEY SANDY LOAM, 0 TO 6 PERCENT SLOPES	DOOLEY	No	---	---	---	---	---
	LIVONA	No	---	---	---	---	---
	TALLY	No	---	---	---	---	---
	ZAHL	No	---	---	---	---	---
	WILLIAMS	No	---	---	---	---	---
	MANNING	No	---	---	---	---	---
	NIOBELL	No	---	---	---	---	---
2347:							
BEARDEN SILT LOAM, 0 TO 3 PERCENT SLOPES	BEARDEN	No	flat, lake plain	---	---	---	---
	WILLIAMS	No	---	---	---	---	---
	WILDROSE	No	---	---	---	---	---
	SHAMBO	No	---	---	---	---	---
	TONKA	Yes	depression	2B3,3	YES	NO	YES
	ARNEGARD	No	---	---	---	---	---

HYDRIC SOIL INTERPRETATIONS
HYDRIC SOILS LIST
WILLIAMS 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
2348:							
KORCHEA-DIVIDE LOAMS, CHANNELED 0 to 3 percent slopes	KORCHEA	No	---	---	---	---	---
	DIVIDE	No	---	---	---	---	---
	LEHR	No	---	---	---	---	---
	SHAMBO	No	---	---	---	---	---
	PARNELL	Yes	depression	2B3,3	YES	NO	YES
	MARYSLAND	Yes	flat	2B3	YES	NO	NO
	VELVA	---	---	---	---	---	---
	HAVRELON	No	---	---	---	---	---
2349:							
LAWTHER SILTY CLAY, 0 to 2 percent slopes	LAWTHER	No	---	---	---	---	---
	KORCHEA	No	---	---	---	---	---
	SAVAGE	No	---	---	---	---	---
	FARGO	Yes	depression	3,2B3	YES	NO	YES
2350:							
LEHR-WILLIAMS LOAMS, 0 TO 6 PERCENT SLOPES	LEHR	No	---	---	---	---	---
	WILLIAMS	No	---	---	---	---	---
	ZAHL	No	---	---	---	---	---
	BOWDLE	No	---	---	---	---	---
	MANNING	No	---	---	---	---	---
	ARNEGARD	No	---	---	---	---	---
	WABEK	No	---	---	---	---	---
2351:							
LEHR-WILLIAMS LOAMS, 6 TO 9 PERCENT SLOPES	WILLIAMS	No	---	---	---	---	---
	LEHR	No	---	---	---	---	---
	MANNING	No	---	---	---	---	---
	LIVONA	No	---	---	---	---	---
	WABEK	No	---	---	---	---	---
	TALLY	No	---	---	---	---	---
	ZAHL	No	---	---	---	---	---
	BOWBELLS	No	---	---	---	---	---
2352:							
LIHEN-BLANCHARD LOAMY FINE SANDS, 6 TO 15 PERCENT SLOPES	BLANCHARD	No	rise, stream terrace	---	---	---	---
	LIHEN	No	---	---	---	---	---
	VEBAR	No	---	---	---	---	---
	TALLY	No	---	---	---	---	---
2353:							
LIVONA FINE SANDY LOAM, 0 TO 6 PERCENT SLOPES	LIVONA	No	---	---	---	---	---
	ZAHL	No	---	---	---	---	---
	WILLIAMS	No	---	---	---	---	---
	APPAM	No	---	---	---	---	---
	BEARDEN	No	flat, lake plain	---	---	---	---
	TALLY	No	---	---	---	---	---
	TONKA	Yes	depression	2B3,3	YES	NO	YES
2354:							
LIVONA-ZAHL COMPLEX, 6 TO 9 PERCENT SLOPES	LIVONA	No	---	---	---	---	---
	ZAHL	No	---	---	---	---	---
	DOOLEY	No	---	---	---	---	---
	TALLY	No	---	---	---	---	---
	WILLIAMS	No	---	---	---	---	---
	APPAM	No	---	---	---	---	---
	BOWBELLS	No	---	---	---	---	---
	LIHEN	No	---	---	---	---	---

HYDRIC SOIL INTERPRETATIONS
HYDRIC SOILS LIST
WILLIAMS 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
2355: MONDAMIN SILTY CLAY LOAM, 0 TO 3 PERCENT SLOPES	MONDAMIN	No	---	---	---	---	---
	WILDROSE	No	---	---	---	---	---
	FARNUF	No	---	---	---	---	---
	COLVIN	Yes	flat	2B3	YES	NO	NO
	SAKAKAWEA	No	---	---	---	---	---
	BEARDEN	No	flat, lake plain	---	---	---	---
	TONKA	Yes	depression	2B3,3	YES	NO	YES
2356: NIOBELL-WILLIAMS LOAMS, 0 TO 6 PERCENT SLOPES	NIOBELL	No	---	---	---	---	---
	WILLIAMS	No	---	---	---	---	---
	TONKA	Yes	depression	2B3,3	YES	NO	YES
	ZAHL	No	---	---	---	---	---
2357: SAVAGE-GRAIL SILTY CLAY LOAMS, 0 TO 6 PERCENT SLOPES	SAVAGE	No	---	---	---	---	---
	GRAIL	No	---	---	---	---	---
	LAWTHER	No	---	---	---	---	---
	FARLAND	No	---	---	---	---	---
	SHAMBO	No	---	---	---	---	---
2358: TALLY FINE SANDY LOAM, 0 TO 6 PERCENT SLOPES	TALLY	No	---	---	---	---	---
	LIHEN	No	---	---	---	---	---
	PARSHALL	No	---	---	---	---	---
	SHAMBO	No	---	---	---	---	---
	APPAM	No	---	---	---	---	---
	DOOLEY	No	---	---	---	---	---
	WABEK	No	---	---	---	---	---
2359: VEBAR-FLASHER-ZAHL COMPLEX, 9 TO 25 PERCENT SLOPES	VEBAR	No	---	---	---	---	---
	FLASHER	No	---	---	---	---	---
	TALLY	No	---	---	---	---	---
	LIHEN	No	---	---	---	---	---
	ZAHL	No	---	---	---	---	---
	WILLIAMS	No	---	---	---	---	---
	AMOR	No	---	---	---	---	---
	BEISIGL	No	---	---	---	---	---
	CABBA	No	---	---	---	---	---
2360: VEBAR-Flasher-TALLY FINE SANDY LOAMS, 3 TO 9 PERCENT SLOPES	VEBAR	No	---	---	---	---	---
	FLASHER	No	---	---	---	---	---
	TALLY	No	---	---	---	---	---
	CABBA	No	---	---	---	---	---
	AMOR	No	---	---	---	---	---
	PARSHALL	No	---	---	---	---	---
2361: WABEK SANDY LOAM, 0 TO 6 PERCENT SLOPES	WABEK	No	---	---	---	---	---
	APPAM	No	---	---	---	---	---
	RUSO	No	---	---	---	---	---
	LEHR	No	---	---	---	---	---
	LIHEN	No	---	---	---	---	---
	SCHALLER	No	---	---	---	---	---

HYDRIC SOIL INTERPRETATIONS
HYDRIC SOILS LIST
WILLIAMS 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
2362:							
WABEK SANDY LOAM, 6 TO 25 PERCENT SLOPES	WABEK	No	---	---	---	---	---
	APPAM	No	---	---	---	---	---
	BOWDLE	No	---	---	---	---	---
	LEHR	No	---	---	---	---	---
	RUSO	No	---	---	---	---	---
2363:							
WILDROSE CLAY, 0 to 1 percent slopes	WILDROSE	No	---	---	---	---	---
	MAKOTI	No	---	---	---	---	---
	MONDAMIN	No	---	---	---	---	---
	FARNUF	No	---	---	---	---	---
	GRANO	Yes	depression	2B3,3	YES	NO	YES
2364:							
Mckeen loam, 0 to 1 percent slopes	AQUENTS	Yes	flat	2B3,4	YES	YES	NO
	TREMBLES	No	---	---	---	---	---
	BANKS	No	---	---	---	---	---
2365:							
LOHLER SILTY CLAY, SALINE, 0 to 1 percent sloeps	LOHLER	No	---	---	---	---	---
	SCORIO, SALINE	No	---	---	---	---	---
	LALLIE	Yes	depression	2B3,3	YES	NO	YES
2366:							
SCORIO SILTY CLAY, slightly wet, 0 to 2 percent slopes	SCORIO	No	---	---	---	---	---
	HAVRELON	No	---	---	---	---	---
	LOHLER	No	---	---	---	---	---
	BANKS	No	---	---	---	---	---
	LALLIE	Yes	depression	2B3,3	YES	NO	YES
	TREMBLES	No	---	---	---	---	---
2367:							
SCORIO SILTY CLAY, SALINE, 0 to 1 percent slopes	SCORIO	No	---	---	---	---	---
	LOHLER, SALINE	No	---	---	---	---	---
	LALLIE	Yes	depression	2B3,3	YES	NO	YES

HYDRIC SOIL INTERPRETATIONS
HYDRIC SOILS LIST
WILLIAMS 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 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.