Date: 8/18/2023

Soils Map and Report

Client(s): ARLAN D PARDE Gage County, Nebraska Approximate Acres: 137.80

Assisted By: TYLER HUSA NRCS BEATRICE SERVICE CENTER LOWER BIG BLUE NATURAL RESOURCES DISTRICT

T2154





Prepared with assistance from USDA-Natural Resources Conservation Service





Map Unit Description (Brief, Generated)

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions in this report, along with the maps, provide information on the composition of map units and properties of their components.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

The Map Unit Description (Brief, Generated) report displays a generated description of the major soils that occur in a map unit. Descriptions of non-soil (miscellaneous areas) and minor map unit components are not included. This description is generated from the underlying soil attribute data.

Additional information about the map units described in this report is available in other Soil Data Mart reports, which give properties of the soils and the limitations, capabilities, and potentials for many uses. Also, the narratives that accompany the Soil Data Mart reports define some of the properties included in the map unit descriptions.

Report—Map Unit Description (Brief, Generated)

Gage County, Nebraska

Map Unit: 7411--Cortland-Malmo complex, 6 to 11 percent slopes, eroded

Component: Cortland, Eroded (55%)

The Cortland, Eroded component makes up 55 percent of the map unit. Slopes are 6 to 12 percent. This component is on hillslopes on uplands. The parent material consists of outwash and/or loamy till. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches (or restricted depth) is moderate. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 2 percent. This component is in the R106XY075NE Loamy Upland ecological site. Nonirrigated land capability classification is 4e. Irrigated land capability classification is 4e. This soil does not meet hydric criteria.

Component: Malmo, Eroded (25%)

The Malmo, Eroded component makes up 25 percent of the map unit. Slopes are 6 to 12 percent. This component is on hillslopes on uplands. The parent material consists of weathered till. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is moderately well drained. Water movement in the most restrictive layer is low. Available water to a depth of 60 inches (or restricted depth) is moderate. Shrink-swell potential is high. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 24 inches during March, April, May, June. Organic matter content in the surface horizon is about 2 percent. This component is in the R106XY074NE Clayey Upland ecological site. Nonirrigated land capability classification is 4e. This soil does not meet hydric criteria. The calcium

carbonate equivalent within 40 inches, typically, does not exceed 1 percent.

Component: Otoe, Eroded (20%)

Generated brief soil descriptions are created for major soil components. The Otoe, Eroded soil is a minor component.

Map Unit: 7464--Otoe silty clay loam, 6 to 11 percent slopes, eroded

Component: Otoe, eroded (85%)

The Otoe, eroded component makes up 85 percent of the map unit. Slopes are 6 to 11 percent. This component is on hillslopes on uplands. The parent material consists of loess over till. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is moderately well drained. Water movement in the most restrictive layer is moderately low. Available water to a depth of 60 inches (or restricted depth) is high. Shrink-swell potential is high. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 24 inches during March, April. Organic matter content in the surface horizon is about 3 percent. This component is in the R106XY074NE Clayey Upland ecological site. Nonirrigated land capability classification is 4e. This soil does not meet hydric criteria. There are no saline horizons within 30 inches of the soil surface.

Component: Malmo, eroded (10%)

Generated brief soil descriptions are created for major soil components. The Malmo, eroded soil is a minor component.

Component: Wymore, eroded (5%)

Generated brief soil descriptions are created for major soil components. The Wymore, eroded soil is a minor component.

Map Unit: 7689--Wymore silty clay loam, 0 to 2 percent slopes

Component: Wymore (90%)

The Wymore component makes up 90 percent of the map unit. Slopes are 0 to 2 percent. This component is on hillslopes on uplands. The parent material consists of loess. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is moderately well drained. Water movement in the most restrictive layer is low. Available water to a depth of 60 inches (or restricted depth) is high. Shrink-swell potential is high. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 24 inches during March, April. Organic matter content in the surface horizon is about 3 percent. This component is in the R106XY074NE Clayey Upland ecological site. Nonirrigated land capability classification is 2s. Irrigated land capability classification is 2s. This soil does not meet hydric criteria. There are no saline horizons within 30 inches of the soil surface.

Component: Butler (4%)

Generated brief soil descriptions are created for major soil components. The Butler soil is a minor component.

Component: Aksarben (4%)

Generated brief soil descriptions are created for major soil components. The Aksarben soil is a minor component.

Component: Fillmore, frequently ponded (2%)

Generated brief soil descriptions are created for major soil components. The Fillmore, frequently ponded soil is a minor component.

Map Unit: 7693--Wymore silty clay loam, 2 to 6 percent slopes

Component: Wymore (85%)

The Wymore component makes up 85 percent of the map unit. Slopes are 2 to 6 percent. This component is on hillslopes on uplands. The parent material consists of loess. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is moderately well drained. Water movement in the most restrictive layer is low. Available water to a depth of 60 inches (or restricted depth) is high. Shrink-swell potential is high. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 24 inches during March, April. Organic matter content in the surface horizon is about 3 percent. This component is in the R106XY074NE Clayey Upland ecological site. Nonirrigated land capability classification is 3e. Irrigated land capability classification is 3e. This soil does not meet hydric criteria. There are no saline horizons within 30 inches of the soil surface.

Component: Malmo (5%)

Generated brief soil descriptions are created for major soil components. The Malmo soil is a minor component.



Component: Otoe (5%)

Generated brief soil descriptions are created for major soil components. The Otoe soil is a minor component.

Component: Pawnee (5%)

Generated brief soil descriptions are created for major soil components. The Pawnee soil is a minor component,

Data Source Information

Soil Survey Area: Gage County, Nebraska Survey Area Data: Version 25, Sep 06, 2022



Soils Inventory Report

Tract	Land Unit	Map Unit Symbol	Map Unit Name	Acres	Percent
2154	1	7464	Otoe silty clay loam, 6 to 11 percent slopes, eroded	17.4	16%
2154	1	7689	Wymore silty clay loam, 0 to 2 percent slopes	41.4	38%
2154	1	7693	Wymore silty clay loam, 2 to 6 percent slopes	51.2	47%

٦	Catal	П
- 1	Ota	ı

110.0 100%

Tract	Land Unit	Map Unit Symbol	Map Unit Name	Acres	Percent
2154	2	7464	Otoe silty clay loam, 6 to 11 percent slopes, eroded	6.5	79%
2154	2	7689	Wymore silty clay loam, 0 to 2 percent slopes	1.6	20%
2154	2	7693	Wymore silty clay loam, 2 to 6 percent slopes	0.1	1%

Total

8.2 100%

Tract	Land Unit	Map Unit Symbol	Map Unit Name	Acres	Percent
2154	3	7464	Otoe silty clay loam, 6 to 11 percent slopes, eroded	3.2	63%
2154	3	7693	Wymore silty clay loam, 2 to 6 percent slopes	1.9	37%

Total

5.1

100%

Tract	Land Unit	Map Unit Symbol	Map Unit Name	Acres	Percent
2154	4	7464	Otoe silty clay loam, 6 to 11 percent slopes, eroded	1.0	9%
2154	4	7689	Wymore silty clay loam, 0 to 2 percent slopes	2.1	18%
2154	4	7693	Wymore silty clay loam, 2 to 6 percent slopes	8.3	73%

Total

11.4 100%

Tract	Land Unit	Map Unit Symbol	Map Unit Name	Acres	Percent
2154	5	7693	Wymore silty clay loam, 2 to 6 percent slopes	0.2	100%

Total

0.2

100%

Tract	Land Unit	Map Unit Symbol	Map Unit Name	Acres	Percent
2154	6	7464	Otoe silty clay loam, 6 to 11 percent slopes, eroded	0.0	0%
2154	6	7693	Wymore silty clay loam, 2 to 6 percent slopes	0.4	100%

Total

0.4 100%

Tract	Land Unit	Map Unit Symbol	Map Unit Name	Acres	Percent
2154	7	7464	Otoe silty clay loam, 6 to 11 percent slopes, eroded	1.1	61%
2154	7	7689	Wymore silty clay loam, 0 to 2 percent slopes	0.0	0%
2154	7	7693	Wymore silty clay loam, 2 to 6 percent slopes	0.7	39%

Total

1.8 100%

Tract	Land Unit	Map Unit Symbol	Map Unit Name	Acres	Percent
2154	8	7411	Cortland-Malmo complex, 6 to 11 percent slopes, eroded	0.1	14%
2154	8	7464	Otoe silty clay loam, 6 to 11 percent slopes, eroded	0.6	86%

Total

0.7 100%

Tract	Land Unit	Map Unit Symbol	Map Unit Name	Acres	Percent
2154	9	7693	Wymore silty clay loam, 2 to 6 percent slopes	0.1	100%

Total

0.1

100%

Grand Total

137.9 100%



Gage County, Nebraska



Wetland Determination

Cropland

- Restricted Use
 - Limited Restrictions
- Exempt from Wetland Provisions

2022 NAIP Ortho Imagery

2023 Program Year
Map Created April 03, 2023

Farm 8009 Tract 2154

Tract Cropland Total: 135.26 acres

United States Department of Agriculture (USDA) Farm Service Agency (FSA) maps are for FSA Program administration only. This map does not represent a legal survey or reflect actual ownership; rather it depicts the information provided directly from the producer and/or National Agricultural Imagery Program (NAIP) imagery. The producer accepts the data 'as is' and assumes all risks associated with its use. USDA-FSA assumes no responsibility for actual or consequential damager are result of any user's reliance on this data outside FSA Programs. Wetland identifiers do not represent the size, shape, or specific determination of the area, Refer to your original determination (CPA-026 and attached maps) for exact boundaries and determinations or contact USDA Natural Resources Conservation Service (NRCS).