



United States  
Department of  
Agriculture

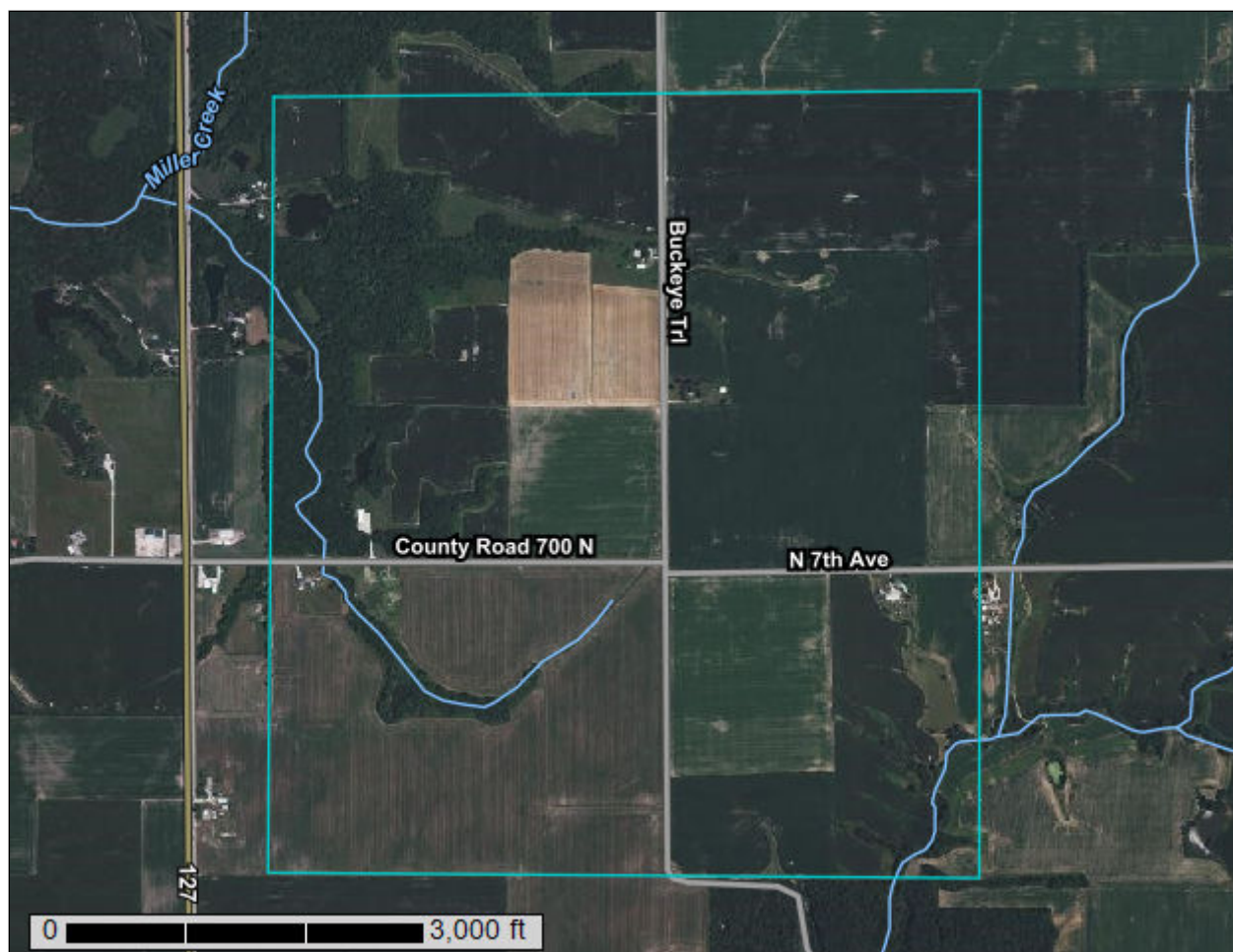
**NRCS**

Natural  
Resources  
Conservation  
Service

A product of the National  
Cooperative Soil Survey,  
a joint effort of the United  
States Department of  
Agriculture and other  
Federal agencies, State  
agencies including the  
Agricultural Experiment  
Stations, and local  
participants

# Custom Soil Resource Report for **Montgomery County, Illinois**

**IBR Boundary**



# Preface

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Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (<http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/>) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (<https://offices.sc.egov.usda.gov/locator/app?agency=nrcs>) or your NRCS State Soil Scientist ([http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2\\_053951](http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951)).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

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# Soil Map

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The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.



Soil Map

Map Scale: 1:14,100 if printed on A portrait (8.5" x 11") sheet.

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 16N WGS84

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Map Scale: 1:14,100 if printed on A portrait (8.5" x 11") sheet.




Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 16N WGS84

# Custom Soil Resource Report


## MAP LEGEND

### Area of Interest (AOI)

 Area of Interest (AOI)


### Soils


 Soil Map Unit Polygons


 Soil Map Unit Lines


 Soil Map Unit Points

### Special Point Features

 Blowout

 Borrow Pit


 Clay Spot


 Closed Depression

 Gravel Pit


 Gravelly Spot


 Landfill

 Lava Flow

 Marsh or swamp

 Mine or Quarry

 Miscellaneous Water


 Perennial Water

 Rock Outcrop


 Saline Spot

 Sandy Spot

 Severely Eroded Spot


 Sinkhole

 Slide or Slip


 Sodic Spot


 Spoil Area

 Stony Spot


 Very Stony Spot

 Wet Spot

 Other

 Special Line Features

### Water Features

 Streams and Canals


### Transportation

 Rails

 Interstate Highways

 US Routes

 Major Roads

 Local Roads

### Background

 Aerial Photography

## MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:12,000.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service

Web Soil Survey URL:

Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Montgomery County, Illinois

Survey Area Data: Version 19, Aug 31, 2022

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Apr 1, 2020—Oct 1, 2020

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

## Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
6C2	Fishhook silt loam, 5 to 10 percent slopes, eroded	9.0	1.0%
7C2	Atlas silt loam, 5 to 10 percent slopes, eroded	8.7	1.0%
7D2	Atlas silt loam, 10 to 18 percent slopes, eroded	4.1	0.5%
8D	Hickory silt loam, 10 to 18 percent slopes	32.2	3.6%
8D2	Hickory silt loam, 10 to 18 percent slopes, eroded	9.4	1.0%
8F	Hickory silt loam, 18 to 35 percent slopes	34.7	3.9%
46A	Herrick silt loam, 0 to 2 percent slopes	5.1	0.6%
112A	Cowden silt loam, 0 to 2 percent slopes	12.0	1.3%
113A	Oconee silt loam, 0 to 2 percent slopes	13.5	1.5%
113B	Oconee silt loam, 2 to 5 percent slopes	96.1	10.7%
470B2	Keller silt loam, 2 to 5 percent slopes, eroded	27.3	3.0%
515C2	Bunkum silt loam, 5 to 10 percent slopes, eroded	25.8	2.9%
515C3	Bunkum silty clay loam, 5 to 10 percent slopes, severely eroded	0.0	0.0%
517A	Marine silt loam, 0 to 2 percent slopes	22.1	2.5%
582B	Homen silt loam, 2 to 5 percent slopes	28.4	3.2%
582C2	Homen silt loam, 5 to 10 percent slopes, eroded	9.3	1.0%
790A	Herrick-Biddle silt loams, 0 to 2 percent slopes	41.3	4.6%
882A	Oconee-Darmstadt-Coulterville silt loams, 0 to 2 percent slopes	6.2	0.7%
882B	Oconee-Darmstadt-Coulterville silt loams, 2 to 5 percent slopes	4.9	0.5%
882B2	Oconee-Darmstadt-Coulterville silt loams, 2 to 5 percent slopes, eroded	36.2	4.0%



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Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
885A	Virden-Fosterburg silt loams, 0 to 2 percent slopes	13.9	1.6%
993A	Cowden-Piasa silt loams, 0 to 2 percent slopes	432.9	48.2%
3451cA	Lawson silt loam, cool mesic, 0 to 2 percent slopes, frequently flooded	16.2	1.8%
W	Water	8.1	0.9%
<b>Totals for Area of Interest</b>		<b>897.4</b>	<b>100.0%</b>

## Map Unit Descriptions

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, along with the maps, can be used to determine the composition and properties of a unit.

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.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however,

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onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

## Montgomery County, Illinois

### 6C2—Fishhook silt loam, 5 to 10 percent slopes, eroded

#### Map Unit Setting

*National map unit symbol:* y5bd

*Elevation:* 350 to 1,020 feet

*Mean annual precipitation:* 37 to 45 inches

*Mean annual air temperature:* 48 to 57 degrees F

*Frost-free period:* 180 to 200 days

*Farmland classification:* Farmland of statewide importance

#### Map Unit Composition

*Fishhook and similar soils:* 90 percent

*Estimates are based on observations, descriptions, and transects of the mapunit.*

#### Description of Fishhook

##### Setting

*Landform:* Hillslopes on ground moraines

*Landform position (two-dimensional):* Shoulder

*Landform position (three-dimensional):* Head slope

*Down-slope shape:* Convex

*Across-slope shape:* Linear

*Parent material:* Loess over paleosol formed in till

##### Typical profile

*H1 - 0 to 6 inches:* silt loam

*H2 - 6 to 32 inches:* silty clay loam

*H3 - 32 to 51 inches:* clay loam

*H4 - 51 to 80 inches:* clay loam

##### Properties and qualities

*Slope:* 5 to 10 percent

*Depth to restrictive feature:* 20 to 39 inches to densic material

*Drainage class:* Somewhat poorly drained

*Runoff class:* Very high

*Capacity of the most limiting layer to transmit water (Ksat):* Moderately low to moderately high (0.06 to 0.20 in/hr)

*Depth to water table:* About 12 to 24 inches

*Frequency of flooding:* None

*Frequency of ponding:* None

*Calcium carbonate, maximum content:* 10 percent

*Available water supply, 0 to 60 inches:* Low (about 5.0 inches)

##### Interpretive groups

*Land capability classification (irrigated):* None specified

*Land capability classification (nonirrigated):* 3e

*Hydrologic Soil Group:* C/D

*Ecological site:* F115XC005IL - Loess Upland Forest

*Hydric soil rating:* No

## **7C2—Atlas silt loam, 5 to 10 percent slopes, eroded**

### **Map Unit Setting**

*National map unit symbol:* 2tp1z

*Elevation:* 330 to 840 feet

*Mean annual precipitation:* 38 to 46 inches

*Mean annual air temperature:* 54 to 58 degrees F

*Frost-free period:* 180 to 195 days

*Farmland classification:* Farmland of statewide importance

### **Map Unit Composition**

*Atlas, eroded, and similar soils:* 90 percent

*Minor components:* 10 percent

*Estimates are based on observations, descriptions, and transects of the mapunit.*

### **Description of Atlas, Eroded**

#### **Setting**

*Landform:* Till plains

*Landform position (two-dimensional):* Shoulder, backslope

*Landform position (three-dimensional):* Head slope, side slope

*Down-slope shape:* Concave

*Across-slope shape:* Concave

*Parent material:* Loess over paleosol formed in till

#### **Typical profile**

*Ap - 0 to 7 inches:* silt loam

*2Btg1 - 7 to 29 inches:* silty clay loam

*2Btg2 - 29 to 79 inches:* silty clay loam

#### **Properties and qualities**

*Slope:* 5 to 10 percent

*Depth to restrictive feature:* More than 80 inches

*Drainage class:* Somewhat poorly drained

*Runoff class:* Very high

*Capacity of the most limiting layer to transmit water (Ksat):* Low to moderately low  
(0.01 to 0.06 in/hr)

*Depth to water table:* About 6 to 18 inches

*Frequency of flooding:* None

*Frequency of ponding:* None

*Calcium carbonate, maximum content:* 5 percent

*Maximum salinity:* Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)

*Sodium adsorption ratio, maximum:* 2.0

*Available water supply, 0 to 60 inches:* Moderate (about 8.5 inches)

#### **Interpretive groups**

*Land capability classification (irrigated):* None specified

*Land capability classification (nonirrigated):* 3e

*Hydrologic Soil Group:* D

*Ecological site:* F114XB502IN - Wet Till Upland Forest

*Hydric soil rating:* No

### Minor Components

#### Ava, eroded

*Percent of map unit:* 10 percent  
*Landform:* Ridges, hillslopes  
*Landform position (two-dimensional):* Summit, shoulder, backslope  
*Landform position (three-dimensional):* Interfluve, side slope  
*Down-slope shape:* Convex  
*Across-slope shape:* Convex, linear  
*Ecological site:* F113XY910IL - Fragic Backslope Woodland  
*Hydric soil rating:* No

### 7D2—Atlas silt loam, 10 to 18 percent slopes, eroded

#### Map Unit Setting

*National map unit symbol:* 2tp24  
*Elevation:* 330 to 840 feet  
*Mean annual precipitation:* 38 to 46 inches  
*Mean annual air temperature:* 54 to 58 degrees F  
*Frost-free period:* 180 to 195 days  
*Farmland classification:* Not prime farmland

#### Map Unit Composition

*Atlas, eroded, and similar soils:* 90 percent  
*Minor components:* 10 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

#### Description of Atlas, Eroded

##### Setting

*Landform:* Till plains  
*Landform position (two-dimensional):* Shoulder, backslope  
*Landform position (three-dimensional):* Head slope, side slope  
*Down-slope shape:* Concave  
*Across-slope shape:* Concave  
*Parent material:* Loess over paleosol formed in till

##### Typical profile

*Ap - 0 to 7 inches:* silt loam  
*2Btg1 - 7 to 29 inches:* silty clay loam  
*2Btg2 - 29 to 79 inches:* silty clay loam

##### Properties and qualities

*Slope:* 10 to 18 percent  
*Depth to restrictive feature:* More than 80 inches  
*Drainage class:* Somewhat poorly drained  
*Runoff class:* Very high  
*Capacity of the most limiting layer to transmit water (Ksat):* Low to moderately low  
(0.01 to 0.06 in/hr)  
*Depth to water table:* About 6 to 18 inches

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*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Calcium carbonate, maximum content:* 5 percent  
*Maximum salinity:* Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)  
*Sodium adsorption ratio, maximum:* 2.0  
*Available water supply, 0 to 60 inches:* Moderate (about 8.5 inches)

### Interpretive groups

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 4e  
*Hydrologic Soil Group:* D  
*Ecological site:* F114XB502IN - Wet Till Upland Forest  
*Hydric soil rating:* No

### Minor Components

#### Ava, eroded

*Percent of map unit:* 10 percent  
*Landform:* Hillslopes, ridges  
*Landform position (two-dimensional):* Backslope, summit, shoulder  
*Landform position (three-dimensional):* Side slope, interfluvium  
*Down-slope shape:* Convex  
*Across-slope shape:* Linear, convex  
*Ecological site:* F113XY910IL - Fragic Backslope Woodland  
*Hydric soil rating:* No

## 8D—Hickory silt loam, 10 to 18 percent slopes

### Map Unit Setting

*National map unit symbol:* 2ybgg  
*Elevation:* 330 to 850 feet  
*Mean annual precipitation:* 39 to 46 inches  
*Mean annual air temperature:* 54 to 57 degrees F  
*Frost-free period:* 185 to 195 days  
*Farmland classification:* Farmland of statewide importance

### Map Unit Composition

*Hickory and similar soils:* 93 percent  
*Minor components:* 7 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

### Description of Hickory

#### Setting

*Landform:* Ground moraines  
*Landform position (two-dimensional):* Shoulder, backslope  
*Landform position (three-dimensional):* Side slope  
*Down-slope shape:* Linear  
*Across-slope shape:* Linear  
*Parent material:* Loamy till

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### Typical profile

*A - 0 to 4 inches:* silt loam  
*E - 4 to 12 inches:* loam  
*Bt1 - 12 to 26 inches:* clay loam  
*Bt2 - 26 to 46 inches:* clay loam  
*Bt3 - 46 to 60 inches:* clay loam

### Properties and qualities

*Slope:* 10 to 18 percent  
*Depth to restrictive feature:* More than 80 inches  
*Drainage class:* Well drained  
*Runoff class:* Medium  
*Capacity of the most limiting layer to transmit water (Ksat):* Moderately high to high  
(0.60 to 2.00 in/hr)  
*Depth to water table:* More than 80 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Calcium carbonate, maximum content:* 15 percent  
*Maximum salinity:* Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)  
*Available water supply, 0 to 60 inches:* High (about 10.6 inches)

### Interpretive groups

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 3e  
*Hydrologic Soil Group:* B  
*Ecological site:* F113XY911IL - Loamy Till Backslope Forest  
*Hydric soil rating:* No

### Minor Components

#### Atlas, eroded

*Percent of map unit:* 3 percent  
*Landform:* Ground moraines  
*Landform position (two-dimensional):* Shoulder, backslope  
*Landform position (three-dimensional):* Head slope, side slope  
*Down-slope shape:* Concave  
*Across-slope shape:* Concave  
*Ecological site:* F114XB502IN - Wet Till Upland Forest  
*Hydric soil rating:* No

#### Ava, eroded

*Percent of map unit:* 2 percent  
*Landform:* Ridges, hillslopes  
*Landform position (two-dimensional):* Summit, shoulder, backslope  
*Landform position (three-dimensional):* Interfluve, side slope  
*Down-slope shape:* Convex  
*Across-slope shape:* Convex, linear  
*Ecological site:* F113XY910IL - Fragic Backslope Woodland  
*Hydric soil rating:* No

#### Wakeland, occasionally flooded, very brief

*Percent of map unit:* 2 percent  
*Landform:* Flood plains  
*Landform position (three-dimensional):* Base slope  
*Down-slope shape:* Linear  
*Across-slope shape:* Linear



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*Ecological site:* F114XB203IN - Wet Floodplain Forest

*Hydric soil rating:* No

### **8D2—Hickory silt loam, 10 to 18 percent slopes, eroded**

#### **Map Unit Setting**

*National map unit symbol:* 2w1yt

*Elevation:* 380 to 820 feet

*Mean annual precipitation:* 39 to 46 inches

*Mean annual air temperature:* 54 to 57 degrees F

*Frost-free period:* 185 to 195 days

*Farmland classification:* Farmland of statewide importance

#### **Map Unit Composition**

*Hickory, eroded, and similar soils:* 95 percent

*Minor components:* 5 percent

*Estimates are based on observations, descriptions, and transects of the mapunit.*

#### **Description of Hickory, Eroded**

##### **Setting**

*Landform:* Ground moraines

*Landform position (two-dimensional):* Shoulder, backslope

*Landform position (three-dimensional):* Side slope

*Down-slope shape:* Linear

*Across-slope shape:* Linear

*Parent material:* Loamy till

##### **Typical profile**

*Ap - 0 to 6 inches:* silt loam

*Bt1 - 6 to 26 inches:* clay loam

*Bt2 - 26 to 45 inches:* clay loam

*BC - 45 to 53 inches:* clay loam

*C - 53 to 60 inches:* loam

##### **Properties and qualities**

*Slope:* 10 to 18 percent

*Depth to restrictive feature:* More than 80 inches

*Drainage class:* Well drained

*Runoff class:* Medium

*Capacity of the most limiting layer to transmit water (Ksat):* Moderately high to high  
(0.60 to 2.00 in/hr)

*Depth to water table:* More than 80 inches

*Frequency of flooding:* None

*Frequency of ponding:* None

*Calcium carbonate, maximum content:* 15 percent

*Maximum salinity:* Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)

*Available water supply, 0 to 60 inches:* High (about 10.3 inches)

##### **Interpretive groups**

*Land capability classification (irrigated):* None specified

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*Land capability classification (nonirrigated): 3e*  
*Hydrologic Soil Group: B*  
*Ecological site: F113XY911IL - Loamy Till Backslope Forest*  
*Hydric soil rating: No*

### Minor Components

#### **Atlas, eroded**

*Percent of map unit: 3 percent*  
*Landform: Ground moraines*  
*Landform position (two-dimensional): Shoulder, backslope*  
*Landform position (three-dimensional): Head slope, side slope*  
*Down-slope shape: Concave*  
*Across-slope shape: Concave*  
*Ecological site: F114XB502IN - Wet Till Upland Forest*  
*Hydric soil rating: No*

#### **Wakeland, occasionally flooded, very brief**

*Percent of map unit: 1 percent*  
*Landform: Flood plains*  
*Landform position (three-dimensional): Base slope*  
*Down-slope shape: Linear*  
*Across-slope shape: Linear*  
*Ecological site: F114XB203IN - Wet Floodplain Forest*  
*Hydric soil rating: No*

#### **Ava**

*Percent of map unit: 1 percent*  
*Landform: Ridges*  
*Landform position (two-dimensional): Summit, shoulder*  
*Landform position (three-dimensional): Interfluve*  
*Down-slope shape: Convex*  
*Across-slope shape: Convex*  
*Ecological site: F113XY910IL - Fragic Backslope Woodland*  
*Hydric soil rating: No*

## 8F—Hickory silt loam, 18 to 35 percent slopes

### Map Unit Setting

*National map unit symbol: 2yb19*  
*Elevation: 370 to 680 feet*  
*Mean annual precipitation: 39 to 46 inches*  
*Mean annual air temperature: 54 to 57 degrees F*  
*Frost-free period: 185 to 195 days*  
*Farmland classification: Not prime farmland*

### Map Unit Composition

*Hickory and similar soils: 90 percent*  
*Minor components: 10 percent*  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

## Description of Hickory

### Setting

*Landform:* Ground moraines  
*Landform position (two-dimensional):* Shoulder, backslope  
*Landform position (three-dimensional):* Side slope  
*Down-slope shape:* Linear  
*Across-slope shape:* Linear  
*Parent material:* Loamy till

### Typical profile

*A - 0 to 4 inches:* silt loam  
*E - 4 to 12 inches:* loam  
*Bt1 - 12 to 26 inches:* clay loam  
*Bt2 - 26 to 46 inches:* clay loam  
*Bt3 - 46 to 60 inches:* clay loam

### Properties and qualities

*Slope:* 18 to 35 percent  
*Depth to restrictive feature:* More than 80 inches  
*Drainage class:* Well drained  
*Runoff class:* High  
*Capacity of the most limiting layer to transmit water (Ksat):* Moderately high to high  
(0.60 to 2.00 in/hr)  
*Depth to water table:* More than 80 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Calcium carbonate, maximum content:* 15 percent  
*Maximum salinity:* Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)  
*Available water supply, 0 to 60 inches:* High (about 10.6 inches)

### Interpretive groups

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 6e  
*Hydrologic Soil Group:* B  
*Ecological site:* F113XY911IL - Loamy Till Backslope Forest  
*Hydric soil rating:* No

## Minor Components

### Ava

*Percent of map unit:* 5 percent  
*Landform:* Ridges  
*Landform position (two-dimensional):* Summit, shoulder  
*Landform position (three-dimensional):* Interfluve  
*Down-slope shape:* Convex  
*Across-slope shape:* Convex  
*Ecological site:* F113XY910IL - Fragic Backslope Woodland  
*Hydric soil rating:* No

### Atlas, eroded

*Percent of map unit:* 3 percent  
*Landform:* Ground moraines  
*Landform position (two-dimensional):* Shoulder, backslope  
*Landform position (three-dimensional):* Head slope, side slope  
*Down-slope shape:* Concave

## Custom Soil Resource Report

*Across-slope shape:* Concave  
*Ecological site:* F114XB502IN - Wet Till Upland Forest  
*Hydric soil rating:* No

### **Belknap, frequently flooded**

*Percent of map unit:* 2 percent  
*Landform:* Flood plains  
*Landform position (three-dimensional):* Talf  
*Down-slope shape:* Linear  
*Across-slope shape:* Linear  
*Ecological site:* F113XY919IL - Wet Silty Floodplain Forest  
*Hydric soil rating:* No

## **46A—Herrick silt loam, 0 to 2 percent slopes**

### **Map Unit Setting**

*National map unit symbol:* 2tbs2  
*Elevation:* 330 to 820 feet  
*Mean annual precipitation:* 38 to 46 inches  
*Mean annual air temperature:* 52 to 58 degrees F  
*Frost-free period:* 180 to 195 days  
*Farmland classification:* All areas are prime farmland

### **Map Unit Composition**

*Herrick and similar soils:* 92 percent  
*Minor components:* 8 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

### **Description of Herrick**

#### **Setting**

*Landform:* Ground moraines  
*Landform position (two-dimensional):* Summit  
*Landform position (three-dimensional):* Interfluve, talf  
*Down-slope shape:* Linear  
*Across-slope shape:* Linear  
*Parent material:* Loess over silty pedisediment

#### **Typical profile**

*Ap - 0 to 13 inches:* silt loam  
*Btg - 13 to 39 inches:* silty clay loam  
*Bt - 39 to 60 inches:* silty clay loam  
*2C - 60 to 79 inches:* silt loam

#### **Properties and qualities**

*Slope:* 0 to 2 percent  
*Depth to restrictive feature:* More than 80 inches  
*Drainage class:* Somewhat poorly drained  
*Capacity of the most limiting layer to transmit water (Ksat):* Moderately high (0.20 to 0.60 in/hr)  
*Depth to water table:* About 12 to 24 inches

## Custom Soil Resource Report

*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Calcium carbonate, maximum content:* 10 percent  
*Maximum salinity:* Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)  
*Sodium adsorption ratio, maximum:* 10.0  
*Available water supply, 0 to 60 inches:* High (about 10.6 inches)

### Interpretive groups

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 2w  
*Hydrologic Soil Group:* C/D  
*Ecological site:* R114XB902IN - Wet Upland Prairie  
*Hydric soil rating:* No

### Minor Components

#### Virden

*Percent of map unit:* 4 percent  
*Landform:* Ground moraines  
*Landform position (two-dimensional):* Summit  
*Landform position (three-dimensional):* Interfluve, talus  
*Down-slope shape:* Concave  
*Across-slope shape:* Linear  
*Ecological site:* R114XB902IN - Wet Upland Prairie  
*Hydric soil rating:* Yes

#### Piasa

*Percent of map unit:* 3 percent  
*Landform:* Depressions, ground moraines  
*Landform position (two-dimensional):* Toeslope, summit  
*Landform position (three-dimensional):* Interfluve, talus  
*Down-slope shape:* Linear  
*Across-slope shape:* Linear  
*Ecological site:* R114XB901IN - Sodium Affected Uplands  
*Hydric soil rating:* Yes

#### Cowden

*Percent of map unit:* 1 percent  
*Landform:* Ground moraines  
*Landform position (two-dimensional):* Toeslope  
*Landform position (three-dimensional):* Interfluve, talus  
*Down-slope shape:* Linear  
*Across-slope shape:* Linear  
*Ecological site:* R113XY903IL - Wet Upland Prairie  
*Hydric soil rating:* Yes

## 112A—Cowden silt loam, 0 to 2 percent slopes

### Map Unit Setting

*National map unit symbol:* 2tbrs  
*Elevation:* 330 to 820 feet

## Custom Soil Resource Report

*Mean annual precipitation:* 38 to 46 inches  
*Mean annual air temperature:* 54 to 58 degrees F  
*Frost-free period:* 180 to 195 days  
*Farmland classification:* Prime farmland if drained

### Map Unit Composition

*Cowden and similar soils:* 94 percent  
*Minor components:* 6 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

### Description of Cowden

#### Setting

*Landform:* Ground moraines  
*Landform position (two-dimensional):* Summit  
*Landform position (three-dimensional):* Interfluve, tal  
*Down-slope shape:* Linear  
*Across-slope shape:* Linear  
*Parent material:* Loess over till

#### Typical profile

*Ap - 0 to 8 inches:* silt loam  
*Eg - 8 to 19 inches:* silt loam  
*Btg - 19 to 50 inches:* silty clay loam  
*Cg - 50 to 79 inches:* silt loam

#### Properties and qualities

*Slope:* 0 to 2 percent  
*Depth to restrictive feature:* 17 to 21 inches to abrupt textural change  
*Drainage class:* Poorly drained  
*Runoff class:* Negligible  
*Capacity of the most limiting layer to transmit water (Ksat):* Moderately low to moderately high (0.06 to 0.20 in/hr)  
*Depth to water table:* About 0 to 12 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* Frequent  
*Maximum salinity:* Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)  
*Sodium adsorption ratio, maximum:* 5.0  
*Available water supply, 0 to 60 inches:* Low (about 3.8 inches)

#### Interpretive groups

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 2w  
*Hydrologic Soil Group:* C/D  
*Ecological site:* R113XY903IL - Wet Upland Prairie  
*Hydric soil rating:* Yes

### Minor Components

#### Piasa

*Percent of map unit:* 6 percent  
*Landform:* Depressions, ground moraines  
*Landform position (two-dimensional):* Toeslope, summit  
*Landform position (three-dimensional):* Interfluve, dip, tal  
*Down-slope shape:* Linear  
*Across-slope shape:* Linear  
*Ecological site:* R114XB901IN - Sodium Affected Uplands

*Hydric soil rating:* Yes

## **113A—Oconee silt loam, 0 to 2 percent slopes**

### **Map Unit Setting**

*National map unit symbol:* 2tp7w  
*Elevation:* 360 to 840 feet  
*Mean annual precipitation:* 37 to 46 inches  
*Mean annual air temperature:* 50 to 57 degrees F  
*Frost-free period:* 170 to 200 days  
*Farmland classification:* Prime farmland if drained

### **Map Unit Composition**

*Oconee and similar soils:* 90 percent  
*Minor components:* 10 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

### **Description of Oconee**

#### **Setting**

*Landform:* Till plains  
*Landform position (two-dimensional):* Summit  
*Landform position (three-dimensional):* Interfluve  
*Down-slope shape:* Linear  
*Across-slope shape:* Linear  
*Parent material:* Loess

#### **Typical profile**

*Ap - 0 to 8 inches:* silt loam  
*E - 8 to 16 inches:* silt loam  
*Bt - 16 to 58 inches:* silty clay loam  
*C - 58 to 79 inches:* silty clay loam

#### **Properties and qualities**

*Slope:* 0 to 2 percent  
*Depth to restrictive feature:* More than 80 inches  
*Drainage class:* Somewhat poorly drained  
*Runoff class:* Medium  
*Capacity of the most limiting layer to transmit water (Ksat):* Moderately low to moderately high (0.06 to 0.20 in/hr)  
*Depth to water table:* About 6 to 24 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Sodium adsorption ratio, maximum:* 5.0  
*Available water supply, 0 to 60 inches:* High (about 9.8 inches)

#### **Interpretive groups**

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 2w  
*Hydrologic Soil Group:* C/D  
*Ecological site:* R114XB901IN - Sodium Affected Uplands



## Custom Soil Resource Report

*Hydric soil rating:* No

### Minor Components

#### Cowden

*Percent of map unit:* 10 percent  
*Landform:* Flats  
*Landform position (two-dimensional):* Summit  
*Down-slope shape:* Linear  
*Across-slope shape:* Linear  
*Ecological site:* R114XB902IN - Wet Upland Prairie  
*Hydric soil rating:* Yes

## 113B—Oconee silt loam, 2 to 5 percent slopes

### Map Unit Setting

*National map unit symbol:* 2tp7z  
*Elevation:* 360 to 840 feet  
*Mean annual precipitation:* 37 to 46 inches  
*Mean annual air temperature:* 50 to 57 degrees F  
*Frost-free period:* 170 to 200 days  
*Farmland classification:* All areas are prime farmland

### Map Unit Composition

*Oconee and similar soils:* 90 percent  
*Minor components:* 10 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

### Description of Oconee

#### Setting

*Landform:* Till plains  
*Landform position (two-dimensional):* Summit  
*Landform position (three-dimensional):* Interfluve  
*Down-slope shape:* Linear  
*Across-slope shape:* Linear  
*Parent material:* Loess

#### Typical profile

*Ap - 0 to 8 inches:* silt loam  
*E - 8 to 16 inches:* silt loam  
*Bt - 16 to 58 inches:* silty clay loam  
*C - 58 to 79 inches:* silty clay loam

#### Properties and qualities

*Slope:* 2 to 5 percent  
*Depth to restrictive feature:* More than 80 inches  
*Drainage class:* Somewhat poorly drained  
*Runoff class:* Medium  
*Capacity of the most limiting layer to transmit water (Ksat):* Moderately low to moderately high (0.06 to 0.20 in/hr)

## Custom Soil Resource Report

*Depth to water table:* About 6 to 24 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Sodium adsorption ratio, maximum:* 5.0  
*Available water supply, 0 to 60 inches:* High (about 9.8 inches)

### Interpretive groups

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 2e  
*Hydrologic Soil Group:* C/D  
*Ecological site:* R114XB901IN - Sodium Affected Uplands  
*Hydric soil rating:* No

### Minor Components

#### Cowden

*Percent of map unit:* 10 percent  
*Landform:* Flats  
*Landform position (two-dimensional):* Summit  
*Down-slope shape:* Linear  
*Across-slope shape:* Linear  
*Ecological site:* R114XB902IN - Wet Upland Prairie  
*Hydric soil rating:* Yes

## 470B2—Keller silt loam, 2 to 5 percent slopes, eroded

### Map Unit Setting

*National map unit symbol:* 1vs08  
*Elevation:* 400 to 1,020 feet  
*Mean annual precipitation:* 35 to 40 inches  
*Mean annual air temperature:* 50 to 57 degrees F  
*Frost-free period:* 160 to 190 days  
*Farmland classification:* All areas are prime farmland

### Map Unit Composition

*Keller and similar soils:* 90 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

### Description of Keller

#### Setting

*Landform:* Ground moraines  
*Landform position (two-dimensional):* Shoulder, backslope  
*Down-slope shape:* Convex  
*Across-slope shape:* Linear  
*Parent material:* Loess over paleosol formed in till

#### Typical profile

*A - 0 to 6 inches:* silt loam  
*Bt - 6 to 26 inches:* silty clay loam  
*2Btg - 26 to 67 inches:* silty clay loam

*2Bg - 67 to 80 inches: silty clay loam*

**Properties and qualities**

*Slope: 2 to 5 percent*

*Depth to restrictive feature: More than 80 inches*

*Drainage class: Somewhat poorly drained*

*Runoff class: Very high*

*Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)*

*Depth to water table: About 12 to 24 inches*

*Frequency of flooding: None*

*Frequency of ponding: None*

*Available water supply, 0 to 60 inches: High (about 10.3 inches)*

**Interpretive groups**

*Land capability classification (irrigated): None specified*

*Land capability classification (nonirrigated): 2e*

*Hydrologic Soil Group: C/D*

*Ecological site: R115XC002IL - Loess Upland Prairie*

*Hydric soil rating: No*

**515C2—Bunkum silt loam, 5 to 10 percent slopes, eroded**

**Map Unit Setting**

*National map unit symbol: 2tbs3*

*Elevation: 300 to 840 feet*

*Mean annual precipitation: 37 to 45 inches*

*Mean annual air temperature: 54 to 57 degrees F*

*Frost-free period: 180 to 200 days*

*Farmland classification: Farmland of statewide importance*

**Map Unit Composition**

*Bunkum, eroded, and similar soils: 92 percent*

*Minor components: 8 percent*

*Estimates are based on observations, descriptions, and transects of the mapunit.*

**Description of Bunkum, Eroded**

**Setting**

*Landform: Ground moraines*

*Landform position (two-dimensional): Shoulder, backslope*

*Landform position (three-dimensional): Head slope, side slope*

*Down-slope shape: Convex*

*Across-slope shape: Linear*

*Parent material: Loess over silty pedisegment*

**Typical profile**

*Ap - 0 to 7 inches: silt loam*

*Bt - 7 to 50 inches: silty clay loam*

*2Btg - 50 to 65 inches: silt loam*

*2CBg - 65 to 79 inches: silt loam*

**Properties and qualities**

*Slope:* 5 to 10 percent  
*Depth to restrictive feature:* More than 80 inches  
*Drainage class:* Somewhat poorly drained  
*Capacity of the most limiting layer to transmit water (Ksat):* Moderately high (0.20 to 0.60 in/hr)  
*Depth to water table:* About 12 to 24 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Maximum salinity:* Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)  
*Available water supply, 0 to 60 inches:* High (about 11.8 inches)

**Interpretive groups**

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 3e  
*Hydrologic Soil Group:* C/D  
*Ecological site:* F114XB502IN - Wet Till Upland Forest  
*Hydric soil rating:* No

**Minor Components**

**Rozetta, eroded**

*Percent of map unit:* 8 percent  
*Landform:* Ground moraines  
*Landform position (two-dimensional):* Shoulder, backslope  
*Landform position (three-dimensional):* Head slope, side slope  
*Down-slope shape:* Convex  
*Across-slope shape:* Linear  
*Ecological site:* F115XB004MO - Loess Upland Woodland  
*Hydric soil rating:* No

**515C3—Bunkum silty clay loam, 5 to 10 percent slopes, severely eroded**

**Map Unit Setting**

*National map unit symbol:* 2tbs5  
*Elevation:* 300 to 840 feet  
*Mean annual precipitation:* 37 to 45 inches  
*Mean annual air temperature:* 54 to 57 degrees F  
*Frost-free period:* 180 to 200 days  
*Farmland classification:* Farmland of statewide importance

**Map Unit Composition**

*Bunkum, severely eroded, and similar soils:* 93 percent  
*Minor components:* 7 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

**Description of Bunkum, Severely Eroded**

**Setting**

*Landform:* Ground moraines

## Custom Soil Resource Report

*Landform position (two-dimensional):* Shoulder, backslope  
*Landform position (three-dimensional):* Head slope, side slope  
*Down-slope shape:* Convex  
*Across-slope shape:* Linear  
*Parent material:* Loess over silty pedisegment

### Typical profile

*Ap - 0 to 6 inches:* silty clay loam  
*Bt - 6 to 50 inches:* silty clay loam  
*2Btg - 50 to 65 inches:* silt loam  
*2CBg - 65 to 79 inches:* silt loam

### Properties and qualities

*Slope:* 5 to 10 percent  
*Depth to restrictive feature:* More than 80 inches  
*Drainage class:* Somewhat poorly drained  
*Capacity of the most limiting layer to transmit water (Ksat):* Moderately high (0.20 to 0.60 in/hr)  
*Depth to water table:* About 12 to 24 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Maximum salinity:* Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)  
*Available water supply, 0 to 60 inches:* High (about 11.6 inches)

### Interpretive groups

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 4e  
*Hydrologic Soil Group:* C/D  
*Ecological site:* F114XB502IN - Wet Till Upland Forest  
*Hydric soil rating:* No

### Minor Components

#### Rozetta, eroded

*Percent of map unit:* 7 percent  
*Landform:* Ground moraines  
*Landform position (two-dimensional):* Shoulder, backslope  
*Landform position (three-dimensional):* Head slope, side slope  
*Down-slope shape:* Convex  
*Across-slope shape:* Linear  
*Ecological site:* F115XB004MO - Loess Upland Woodland  
*Hydric soil rating:* No

## 517A—Marine silt loam, 0 to 2 percent slopes

### Map Unit Setting

*National map unit symbol:* 2tp7n  
*Elevation:* 400 to 800 feet  
*Mean annual precipitation:* 37 to 46 inches  
*Mean annual air temperature:* 52 to 57 degrees F  
*Frost-free period:* 170 to 200 days

## Custom Soil Resource Report

*Farmland classification:* Prime farmland if drained

### Map Unit Composition

*Marine and similar soils:* 95 percent

*Minor components:* 5 percent

*Estimates are based on observations, descriptions, and transects of the mapunit.*

### Description of Marine

#### Setting

*Landform:* Ground moraines

*Landform position (two-dimensional):* Summit

*Landform position (three-dimensional):* Talf

*Down-slope shape:* Linear

*Across-slope shape:* Linear

*Parent material:* Loess over silty pedisegment

#### Typical profile

*Ap - 0 to 9 inches:* silt loam

*E - 9 to 17 inches:* silt loam

*Bt - 17 to 43 inches:* silty clay loam

*BCt - 43 to 62 inches:* silty clay loam

*2C - 62 to 77 inches:* silt loam

#### Properties and qualities

*Slope:* 0 to 2 percent

*Depth to restrictive feature:* 15 to 19 inches to abrupt textural change

*Drainage class:* Somewhat poorly drained

*Runoff class:* Medium

*Capacity of the most limiting layer to transmit water (Ksat):* Moderately low to moderately high (0.06 to 0.20 in/hr)

*Depth to water table:* About 6 to 24 inches

*Frequency of flooding:* None

*Frequency of ponding:* None

*Calcium carbonate, maximum content:* 10 percent

*Available water supply, 0 to 60 inches:* Low (about 3.9 inches)

#### Interpretive groups

*Land capability classification (irrigated):* None specified

*Land capability classification (nonirrigated):* 2w

*Hydrologic Soil Group:* C/D

*Ecological site:* F114XB803IN - Wet Silty Eolian Forest

*Hydric soil rating:* No

### Minor Components

#### Pierron

*Percent of map unit:* 5 percent

*Landform:* Swales

*Landform position (two-dimensional):* Summit

*Landform position (three-dimensional):* Talf

*Down-slope shape:* Linear

*Across-slope shape:* Linear

*Ecological site:* F114XB803IN - Wet Silty Eolian Forest

*Hydric soil rating:* Yes

## **582B—Homen silt loam, 2 to 5 percent slopes**

### **Map Unit Setting**

*National map unit symbol:* 2tp1c  
*Elevation:* 350 to 980 feet  
*Mean annual precipitation:* 37 to 46 inches  
*Mean annual air temperature:* 52 to 57 degrees F  
*Frost-free period:* 170 to 200 days  
*Farmland classification:* All areas are prime farmland

### **Map Unit Composition**

*Homen and similar soils:* 90 percent  
*Minor components:* 10 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

### **Description of Homen**

#### **Setting**

*Landform:* Till plains  
*Landform position (two-dimensional):* Summit  
*Landform position (three-dimensional):* Rise  
*Down-slope shape:* Convex  
*Across-slope shape:* Linear  
*Parent material:* Peoria loess over roxana loess

#### **Typical profile**

*Ap - 0 to 9 inches:* silt loam  
*E - 9 to 14 inches:* silt loam  
*Bt - 14 to 42 inches:* silty clay loam  
*2Btx - 42 to 77 inches:* silt loam  
*2Bt - 77 to 79 inches:* silt loam

#### **Properties and qualities**

*Slope:* 2 to 5 percent  
*Depth to restrictive feature:* More than 80 inches  
*Drainage class:* Moderately well drained  
*Runoff class:* Medium  
*Capacity of the most limiting layer to transmit water (Ksat):* Moderately low to moderately high (0.06 to 0.20 in/hr)  
*Depth to water table:* About 18 to 42 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Sodium adsorption ratio, maximum:* 2.0  
*Available water supply, 0 to 60 inches:* High (about 9.6 inches)

#### **Interpretive groups**

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 2e  
*Hydrologic Soil Group:* C  
*Ecological site:* F114XB803IN - Wet Silty Eolian Forest



## Custom Soil Resource Report

*Hydric soil rating:* No

### Minor Components

#### Marine

*Percent of map unit:* 10 percent  
*Landform:* Ground moraines  
*Landform position (two-dimensional):* Summit  
*Landform position (three-dimensional):* Talf  
*Down-slope shape:* Convex  
*Across-slope shape:* Convex  
*Ecological site:* F114XB803IN - Wet Silty Eolian Forest  
*Hydric soil rating:* No

## 582C2—Homen silt loam, 5 to 10 percent slopes, eroded

### Map Unit Setting

*National map unit symbol:* 2tp1h  
*Elevation:* 350 to 800 feet  
*Mean annual precipitation:* 37 to 46 inches  
*Mean annual air temperature:* 52 to 57 degrees F  
*Frost-free period:* 170 to 200 days  
*Farmland classification:* Farmland of statewide importance

### Map Unit Composition

*Homen, eroded, and similar soils:* 90 percent  
*Minor components:* 10 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

### Description of Homen, Eroded

#### Setting

*Landform:* Ground moraines  
*Landform position (two-dimensional):* Summit  
*Landform position (three-dimensional):* Talf  
*Down-slope shape:* Convex  
*Across-slope shape:* Convex  
*Parent material:* Peoria loess over roxana loess

#### Typical profile

*Ap - 0 to 7 inches:* silt loam  
*E - 7 to 41 inches:* silty clay loam  
*Bt - 41 to 77 inches:* silt loam  
*2Btx - 77 to 92 inches:* silt loam

#### Properties and qualities

*Slope:* 5 to 10 percent  
*Depth to restrictive feature:* More than 80 inches  
*Drainage class:* Moderately well drained  
*Runoff class:* High

## Custom Soil Resource Report

*Capacity of the most limiting layer to transmit water (Ksat):* Moderately low to moderately high (0.06 to 0.20 in/hr)

*Depth to water table:* About 18 to 42 inches

*Frequency of flooding:* None

*Frequency of ponding:* None

*Available water supply, 0 to 60 inches:* High (about 10.9 inches)

### Interpretive groups

*Land capability classification (irrigated):* None specified

*Land capability classification (nonirrigated):* 3e

*Hydrologic Soil Group:* C

*Ecological site:* F114XB803IN - Wet Silty Eolian Forest

*Hydric soil rating:* No

### Minor Components

#### Marine, eroded

*Percent of map unit:* 10 percent

*Landform:* Ground moraines

*Landform position (two-dimensional):* Summit

*Landform position (three-dimensional):* Talf

*Down-slope shape:* Convex

*Across-slope shape:* Convex

*Ecological site:* F114XB803IN - Wet Silty Eolian Forest

*Hydric soil rating:* No

## 790A—Herrick-Biddle silt loams, 0 to 2 percent slopes

### Map Unit Setting

*National map unit symbol:* 1vs0p

*Elevation:* 500 to 1,000 feet

*Mean annual precipitation:* 37 to 45 inches

*Mean annual air temperature:* 52 to 57 degrees F

*Frost-free period:* 170 to 200 days

*Farmland classification:* All areas are prime farmland

### Map Unit Composition

*Herrick and similar soils:* 60 percent

*Biddle and similar soils:* 30 percent

*Minor components:* 5 percent

*Estimates are based on observations, descriptions, and transects of the mapunit.*

### Description of Herrick

#### Setting

*Landform:* Ground moraines

*Landform position (two-dimensional):* Summit

*Landform position (three-dimensional):* Talf

*Down-slope shape:* Linear

*Across-slope shape:* Linear

## Custom Soil Resource Report

*Parent material:* Loess

### Typical profile

*Ap - 0 to 7 inches:* silt loam  
*A - 7 to 15 inches:* silt loam  
*Bt - 15 to 35 inches:* silty clay loam  
*Btng - 35 to 70 inches:* silty clay loam  
*2Cg - 70 to 80 inches:* silt loam

### Properties and qualities

*Slope:* 0 to 2 percent  
*Depth to restrictive feature:* More than 80 inches  
*Drainage class:* Somewhat poorly drained  
*Runoff class:* Medium  
*Capacity of the most limiting layer to transmit water (Ksat):* Moderately high (0.20 to 0.60 in/hr)  
*Depth to water table:* About 12 to 24 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Calcium carbonate, maximum content:* 10 percent  
*Available water supply, 0 to 60 inches:* High (about 10.9 inches)

### Interpretive groups

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 1  
*Hydrologic Soil Group:* C/D  
*Ecological site:* R114XB902IN - Wet Upland Prairie  
*Hydric soil rating:* No

## Description of Biddle

### Setting

*Landform:* Ground moraines  
*Landform position (two-dimensional):* Summit  
*Landform position (three-dimensional):* Talf  
*Down-slope shape:* Linear  
*Across-slope shape:* Linear  
*Parent material:* Loess

### Typical profile

*Ap - 0 to 7 inches:* silt loam  
*A - 7 to 16 inches:* silt loam  
*Bt - 16 to 36 inches:* silty clay loam  
*Btng - 36 to 76 inches:* silty clay loam  
*2Cg - 76 to 80 inches:* silt loam

### Properties and qualities

*Slope:* 0 to 2 percent  
*Depth to restrictive feature:* More than 80 inches  
*Drainage class:* Somewhat poorly drained  
*Runoff class:* Medium  
*Capacity of the most limiting layer to transmit water (Ksat):* Moderately low to moderately high (0.06 to 0.20 in/hr)  
*Depth to water table:* About 12 to 24 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Calcium carbonate, maximum content:* 15 percent

## Custom Soil Resource Report

*Sodium adsorption ratio, maximum:* 12.5

*Available water supply, 0 to 60 inches:* High (about 11.6 inches)

### Interpretive groups

*Land capability classification (irrigated):* None specified

*Land capability classification (nonirrigated):* 1

*Hydrologic Soil Group:* C/D

*Ecological site:* R114XB901IN - Sodium Affected Uplands

*Hydric soil rating:* No

### Minor Components

#### Piasa

*Percent of map unit:* 5 percent

*Landform:* Depressions, ground moraines

*Landform position (two-dimensional):* Toeslope, summit

*Down-slope shape:* Concave, linear

*Across-slope shape:* Concave, linear

*Ecological site:* R114XB901IN - Sodium Affected Uplands

*Hydric soil rating:* Yes

## 882A—Oconee-Darmstadt-Coulterville silt loams, 0 to 2 percent slopes

### Map Unit Setting

*National map unit symbol:* 2ytt1

*Elevation:* 330 to 820 feet

*Mean annual precipitation:* 38 to 46 inches

*Mean annual air temperature:* 54 to 58 degrees F

*Frost-free period:* 180 to 195 days

*Farmland classification:* Farmland of statewide importance

### Map Unit Composition

*Oconee and similar soils:* 35 percent

*Darmstadt and similar soils:* 30 percent

*Coulterville and similar soils:* 25 percent

*Minor components:* 10 percent

*Estimates are based on observations, descriptions, and transects of the mapunit.*

### Description of Oconee

#### Setting

*Landform:* Till plains

*Landform position (two-dimensional):* Summit

*Landform position (three-dimensional):* Interfluvium, talus

*Down-slope shape:* Linear

*Across-slope shape:* Linear

*Parent material:* Loess

#### Typical profile

*Ap - 0 to 8 inches:* silt loam

## Custom Soil Resource Report

*E - 8 to 16 inches:* silt loam  
*Bt - 16 to 58 inches:* silty clay loam  
*C - 58 to 79 inches:* silt loam

### Properties and qualities

*Slope:* 0 to 2 percent  
*Depth to restrictive feature:* More than 80 inches  
*Drainage class:* Somewhat poorly drained  
*Runoff class:* Medium  
*Capacity of the most limiting layer to transmit water (Ksat):* Moderately low to moderately high (0.06 to 0.20 in/hr)  
*Depth to water table:* About 6 to 24 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Maximum salinity:* Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)  
*Sodium adsorption ratio, maximum:* 5.0  
*Available water supply, 0 to 60 inches:* High (about 9.8 inches)

### Interpretive groups

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 2w  
*Hydrologic Soil Group:* C/D  
*Ecological site:* R114XB901IN - Sodium Affected Uplands  
*Hydric soil rating:* No

## Description of Darmstadt

### Setting

*Landform:* Ground moraines  
*Landform position (two-dimensional):* Summit  
*Landform position (three-dimensional):* Talf  
*Down-slope shape:* Linear  
*Across-slope shape:* Linear  
*Parent material:* Loess over mixed loess and drift

### Typical profile

*Ap - 0 to 6 inches:* silt loam  
*E - 6 to 14 inches:* silt loam  
*Bt - 14 to 20 inches:* silty clay loam  
*Btng - 20 to 40 inches:* silty clay loam  
*2Cng - 40 to 60 inches:* silt loam

### Properties and qualities

*Slope:* 0 to 2 percent  
*Depth to restrictive feature:* 16 to 22 inches to natric  
*Drainage class:* Somewhat poorly drained  
*Runoff class:* Medium  
*Capacity of the most limiting layer to transmit water (Ksat):* Moderately low (0.02 to 0.06 in/hr)  
*Depth to water table:* About 12 to 24 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Calcium carbonate, maximum content:* 25 percent  
*Maximum salinity:* Nonsaline to slightly saline (0.0 to 4.0 mmhos/cm)  
*Sodium adsorption ratio, maximum:* 25.0  
*Available water supply, 0 to 60 inches:* Low (about 3.8 inches)

**Interpretive groups**

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 3s  
*Hydrologic Soil Group:* D  
*Ecological site:* R113XY902IL - Natric Till Plain Savanna  
*Hydric soil rating:* No

**Description of Coulterville**

**Setting**

*Landform:* Ground moraines  
*Landform position (two-dimensional):* Summit  
*Landform position (three-dimensional):* Talf  
*Down-slope shape:* Linear  
*Across-slope shape:* Linear  
*Parent material:* Loess over mixed loess and drift

**Typical profile**

*Ap - 0 to 7 inches:* silt loam  
*Btng - 7 to 23 inches:* silty clay loam  
*Btkng - 23 to 39 inches:* silt loam  
*BCkn - 39 to 68 inches:* silt loam  
*2C - 68 to 79 inches:* silt loam

**Properties and qualities**

*Slope:* 0 to 2 percent  
*Depth to restrictive feature:* More than 80 inches  
*Drainage class:* Somewhat poorly drained  
*Runoff class:* Medium  
*Capacity of the most limiting layer to transmit water (Ksat):* Moderately low to moderately high (0.06 to 0.20 in/hr)  
*Depth to water table:* About 6 to 24 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Calcium carbonate, maximum content:* 10 percent  
*Maximum salinity:* Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)  
*Sodium adsorption ratio, maximum:* 13.0  
*Available water supply, 0 to 60 inches:* High (about 10.4 inches)

**Interpretive groups**

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 2w  
*Hydrologic Soil Group:* C/D  
*Ecological site:* F114XB502IN - Wet Till Upland Forest  
*Hydric soil rating:* No

**Minor Components**

**Piasa**

*Percent of map unit:* 5 percent  
*Landform:* Depressions, ground moraines  
*Landform position (two-dimensional):* Toeslope  
*Landform position (three-dimensional):* Interfluve, dip, talf  
*Down-slope shape:* Concave, linear  
*Across-slope shape:* Concave, linear  
*Ecological site:* R114XB901IN - Sodium Affected Uplands

*Hydric soil rating:* Yes

**Cowden**

*Percent of map unit:* 5 percent

*Landform:* Ground moraines

*Landform position (two-dimensional):* Toeslope

*Landform position (three-dimensional):* Interfluve, tal

*Down-slope shape:* Linear

*Across-slope shape:* Linear

*Ecological site:* R113XY903IL - Wet Upland Prairie

*Hydric soil rating:* Yes

**882B—Oconee-Darmstadt-Coulterville silt loams, 2 to 5 percent slopes**

**Map Unit Setting**

*National map unit symbol:* 1vs7l

*Elevation:* 340 to 1,020 feet

*Mean annual precipitation:* 37 to 45 inches

*Mean annual air temperature:* 52 to 57 degrees F

*Frost-free period:* 170 to 200 days

*Farmland classification:* All areas are prime farmland

**Map Unit Composition**

*Oconee and similar soils:* 40 percent

*Darmstadt and similar soils:* 29 percent

*Coulterville and similar soils:* 25 percent

*Minor components:* 6 percent

*Estimates are based on observations, descriptions, and transects of the mapunit.*

**Description of Oconee**

**Setting**

*Landform:* Ground moraines

*Landform position (two-dimensional):* Summit, shoulder

*Down-slope shape:* Convex

*Across-slope shape:* Convex

*Parent material:* Loess

**Typical profile**

*H1 - 0 to 8 inches:* silt loam

*H2 - 8 to 16 inches:* silt loam

*H3 - 16 to 47 inches:* silty clay loam

*H4 - 47 to 65 inches:* silty clay loam

*H5 - 65 to 80 inches:* silt loam

**Properties and qualities**

*Slope:* 2 to 5 percent

*Depth to restrictive feature:* More than 80 inches



## Custom Soil Resource Report

*Drainage class:* Somewhat poorly drained  
*Runoff class:* Very high  
*Capacity of the most limiting layer to transmit water (Ksat):* Moderately low to moderately high (0.06 to 0.20 in/hr)  
*Depth to water table:* About 6 to 24 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Calcium carbonate, maximum content:* 10 percent  
*Available water supply, 0 to 60 inches:* High (about 11.3 inches)

### Interpretive groups

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 2e  
*Hydrologic Soil Group:* C/D  
*Ecological site:* R114XB901IN - Sodium Affected Uplands  
*Hydric soil rating:* No

### Description of Darmstadt

#### Setting

*Landform:* Ground moraines  
*Landform position (two-dimensional):* Summit, shoulder, backslope  
*Down-slope shape:* Convex  
*Across-slope shape:* Convex  
*Parent material:* Loess

#### Typical profile

*H1 - 0 to 11 inches:* silt loam  
*H2 - 11 to 21 inches:* silty clay loam  
*H3 - 21 to 39 inches:* silty clay loam  
*H4 - 39 to 62 inches:* silt loam  
*H5 - 62 to 80 inches:* silt loam

#### Properties and qualities

*Slope:* 2 to 5 percent  
*Depth to restrictive feature:* 8 to 19 inches to natric  
*Drainage class:* Somewhat poorly drained  
*Runoff class:* Very high  
*Capacity of the most limiting layer to transmit water (Ksat):* Low to moderately low (0.01 to 0.06 in/hr)  
*Depth to water table:* About 6 to 24 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Calcium carbonate, maximum content:* 30 percent  
*Maximum salinity:* Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)  
*Sodium adsorption ratio, maximum:* 25.0  
*Available water supply, 0 to 60 inches:* Very low (about 2.2 inches)

### Interpretive groups

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 3e  
*Hydrologic Soil Group:* D  
*Ecological site:* R113XY902IL - Natric Till Plain Savanna  
*Hydric soil rating:* No

## Description of Coulterville

### Setting

*Landform:* Ground moraines  
*Landform position (two-dimensional):* Summit, shoulder, backslope  
*Down-slope shape:* Convex  
*Across-slope shape:* Convex  
*Parent material:* Loess

### Typical profile

*H1 - 0 to 7 inches:* silt loam  
*H2 - 7 to 15 inches:* silty clay loam  
*H3 - 15 to 68 inches:* silty clay loam  
*H4 - 68 to 80 inches:* silt loam

### Properties and qualities

*Slope:* 2 to 5 percent  
*Depth to restrictive feature:* More than 80 inches  
*Drainage class:* Somewhat poorly drained  
*Runoff class:* Very high  
*Capacity of the most limiting layer to transmit water (Ksat):* Moderately low to moderately high (0.06 to 0.20 in/hr)  
*Depth to water table:* About 6 to 24 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Calcium carbonate, maximum content:* 20 percent  
*Sodium adsorption ratio, maximum:* 13.0  
*Available water supply, 0 to 60 inches:* High (about 9.0 inches)

### Interpretive groups

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 2e  
*Hydrologic Soil Group:* C/D  
*Ecological site:* F114XB502IN - Wet Till Upland Forest  
*Hydric soil rating:* No

## Minor Components

### Cowden

*Percent of map unit:* 3 percent  
*Landform:* Flats  
*Landform position (two-dimensional):* Toeslope  
*Landform position (three-dimensional):* Talf  
*Down-slope shape:* Linear  
*Across-slope shape:* Linear  
*Ecological site:* R113XY903IL - Wet Upland Prairie  
*Hydric soil rating:* Yes

### Piasa

*Percent of map unit:* 3 percent  
*Landform:* Depressions  
*Down-slope shape:* Concave  
*Across-slope shape:* Concave  
*Ecological site:* R114XB901IN - Sodium Affected Uplands  
*Hydric soil rating:* Yes

**882B2—Oconee-Darmstadt-Coulterville silt loams, 2 to 5 percent slopes, eroded**

**Map Unit Setting**

*National map unit symbol:* 1vsds  
*Elevation:* 340 to 1,020 feet  
*Mean annual precipitation:* 37 to 45 inches  
*Mean annual air temperature:* 52 to 57 degrees F  
*Frost-free period:* 170 to 200 days  
*Farmland classification:* All areas are prime farmland

**Map Unit Composition**

*Oconee and similar soils:* 40 percent  
*Darmstadt and similar soils:* 29 percent  
*Coulterville and similar soils:* 25 percent  
*Minor components:* 6 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

**Description of Oconee**

**Setting**

*Landform:* Ground moraines  
*Landform position (two-dimensional):* Summit, shoulder  
*Down-slope shape:* Convex  
*Across-slope shape:* Convex  
*Parent material:* Loess

**Typical profile**

*Ap - 0 to 8 inches:* silt loam  
*Bt1 - 8 to 47 inches:* silty clay loam  
*Bt2 - 47 to 65 inches:* silty clay loam  
*Bt3 - 65 to 80 inches:* silt loam

**Properties and qualities**

*Slope:* 2 to 5 percent  
*Depth to restrictive feature:* More than 80 inches  
*Drainage class:* Somewhat poorly drained  
*Runoff class:* Very high  
*Capacity of the most limiting layer to transmit water (Ksat):* Moderately low to moderately high (0.06 to 0.20 in/hr)  
*Depth to water table:* About 6 to 24 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Calcium carbonate, maximum content:* 10 percent  
*Available water supply, 0 to 60 inches:* High (about 9.7 inches)

**Interpretive groups**

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 2e  
*Hydrologic Soil Group:* C/D  
*Ecological site:* R114XB901IN - Sodium Affected Uplands  
*Hydric soil rating:* No

**Description of Darmstadt**

**Setting**

*Landform:* Ground moraines  
*Landform position (two-dimensional):* Summit, shoulder, backslope  
*Down-slope shape:* Convex  
*Across-slope shape:* Convex  
*Parent material:* Loess

**Typical profile**

*Ap - 0 to 11 inches:* silt loam  
*Btn1 - 11 to 21 inches:* silty clay loam  
*Btn2 - 21 to 39 inches:* silty clay loam  
*Cng - 39 to 62 inches:* silt loam  
*Cg - 62 to 80 inches:* silt loam

**Properties and qualities**

*Slope:* 2 to 5 percent  
*Depth to restrictive feature:* 8 to 19 inches to natric  
*Drainage class:* Somewhat poorly drained  
*Runoff class:* Very high  
*Capacity of the most limiting layer to transmit water (Ksat):* Low to moderately low  
(0.01 to 0.06 in/hr)  
*Depth to water table:* About 6 to 24 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Calcium carbonate, maximum content:* 30 percent  
*Maximum salinity:* Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)  
*Sodium adsorption ratio, maximum:* 25.0  
*Available water supply, 0 to 60 inches:* Very low (about 2.2 inches)

**Interpretive groups**

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 3e  
*Hydrologic Soil Group:* D  
*Ecological site:* R113XY902IL - Natric Till Plain Savanna  
*Hydric soil rating:* No

**Description of Coulterville**

**Setting**

*Landform:* Ground moraines  
*Landform position (two-dimensional):* Summit, shoulder, backslope  
*Down-slope shape:* Convex  
*Across-slope shape:* Convex  
*Parent material:* Loess

**Typical profile**

*Ap - 0 to 7 inches:* silt loam  
*Btng - 7 to 15 inches:* silty clay loam

## Custom Soil Resource Report

*Btkn - 15 to 68 inches: silty clay loam*

*2C - 68 to 80 inches: silt loam*

### Properties and qualities

*Slope: 2 to 5 percent*

*Depth to restrictive feature: More than 80 inches*

*Drainage class: Somewhat poorly drained*

*Runoff class: Very high*

*Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)*

*Depth to water table: About 6 to 24 inches*

*Frequency of flooding: None*

*Frequency of ponding: None*

*Calcium carbonate, maximum content: 20 percent*

*Sodium adsorption ratio, maximum: 13.0*

*Available water supply, 0 to 60 inches: High (about 9.0 inches)*

### Interpretive groups

*Land capability classification (irrigated): None specified*

*Land capability classification (nonirrigated): 2e*

*Hydrologic Soil Group: C/D*

*Ecological site: F114XB502IN - Wet Till Upland Forest*

*Hydric soil rating: No*

### Minor Components

#### Cowden

*Percent of map unit: 3 percent*

*Landform: Flats*

*Landform position (two-dimensional): Toeslope*

*Landform position (three-dimensional): Talf*

*Down-slope shape: Linear*

*Across-slope shape: Linear*

*Ecological site: R113XY903IL - Wet Upland Prairie*

*Hydric soil rating: Yes*

#### Piasa

*Percent of map unit: 3 percent*

*Landform: Depressions*

*Down-slope shape: Concave*

*Across-slope shape: Concave*

*Ecological site: R114XB901IN - Sodium Affected Uplands*

*Hydric soil rating: Yes*

## 885A—Virden-Fosterburg silt loams, 0 to 2 percent slopes

### Map Unit Setting

*National map unit symbol: 1vs0t*

## Custom Soil Resource Report

*Elevation:* 340 to 1,000 feet  
*Mean annual precipitation:* 37 to 45 inches  
*Mean annual air temperature:* 52 to 57 degrees F  
*Frost-free period:* 170 to 200 days  
*Farmland classification:* Prime farmland if drained

### Map Unit Composition

*Virден and similar soils:* 50 percent  
*Fosterburg and similar soils:* 40 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

### Description of Virден

#### Setting

*Landform:* Depressions, ground moraines  
*Landform position (two-dimensional):* Toeslope, summit  
*Landform position (three-dimensional):* Talf  
*Down-slope shape:* Concave, linear  
*Across-slope shape:* Concave, linear  
*Parent material:* Loess

#### Typical profile

*H1 - 0 to 15 inches:* silt loam  
*H2 - 15 to 74 inches:* silty clay loam  
*H3 - 74 to 80 inches:* silty clay loam

#### Properties and qualities

*Slope:* 0 to 2 percent  
*Depth to restrictive feature:* More than 80 inches  
*Drainage class:* Poorly drained  
*Runoff class:* Negligible  
*Capacity of the most limiting layer to transmit water (Ksat):* Moderately high (0.20 to 0.60 in/hr)  
*Depth to water table:* About 0 to 12 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* Frequent  
*Calcium carbonate, maximum content:* 10 percent  
*Available water supply, 0 to 60 inches:* High (about 10.6 inches)

#### Interpretive groups

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 2w  
*Hydrologic Soil Group:* C/D  
*Ecological site:* R114XB902IN - Wet Upland Prairie  
*Hydric soil rating:* Yes

### Description of Fosterburg

#### Setting

*Landform:* Depressions, ground moraines  
*Landform position (two-dimensional):* Toeslope, summit  
*Landform position (three-dimensional):* Talf  
*Down-slope shape:* Concave, linear  
*Across-slope shape:* Concave, linear  
*Parent material:* Loess

**Typical profile**

*H1 - 0 to 13 inches:* silt loam  
*H2 - 13 to 20 inches:* silty clay loam  
*H3 - 20 to 41 inches:* silty clay loam  
*H4 - 41 to 71 inches:* silty clay loam  
*H5 - 71 to 80 inches:* silt loam

**Properties and qualities**

*Slope:* 0 to 2 percent  
*Depth to restrictive feature:* More than 80 inches  
*Drainage class:* Poorly drained  
*Runoff class:* Negligible  
*Capacity of the most limiting layer to transmit water (Ksat):* Moderately low to moderately high (0.06 to 0.20 in/hr)  
*Depth to water table:* About 0 to 12 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* Frequent  
*Calcium carbonate, maximum content:* 15 percent  
*Sodium adsorption ratio, maximum:* 13.0  
*Available water supply, 0 to 60 inches:* Very high (about 12.2 inches)

**Interpretive groups**

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 3w  
*Hydrologic Soil Group:* C/D  
*Ecological site:* R114XB901IN - Sodium Affected Uplands  
*Hydric soil rating:* Yes

**Minor Components**

**Piasa**

*Percent of map unit:*  
*Landform:* Depressions, ground moraines  
*Landform position (two-dimensional):* Toeslope, summit  
*Down-slope shape:* Concave, linear  
*Across-slope shape:* Concave, linear  
*Ecological site:* R114XB901IN - Sodium Affected Uplands  
*Hydric soil rating:* Yes

**993A—Cowden-Piasa silt loams, 0 to 2 percent slopes**

**Map Unit Setting**

*National map unit symbol:* 2tbs0  
*Elevation:* 330 to 840 feet  
*Mean annual precipitation:* 38 to 46 inches  
*Mean annual air temperature:* 52 to 58 degrees F  
*Frost-free period:* 180 to 195 days  
*Farmland classification:* Farmland of statewide importance

### Map Unit Composition

*Cowden and similar soils: 50 percent*

*Piasa and similar soils: 48 percent*

*Minor components: 2 percent*

*Estimates are based on observations, descriptions, and transects of the mapunit.*

### Description of Cowden

#### Setting

*Landform: Ground moraines*

*Landform position (two-dimensional): Summit*

*Landform position (three-dimensional): Interfluve, tal*

*Down-slope shape: Linear*

*Across-slope shape: Linear*

*Parent material: Loess*

#### Typical profile

*Ap - 0 to 8 inches: silt loam*

*Eg - 8 to 19 inches: silt loam*

*Btg - 19 to 50 inches: silty clay loam*

*Cg - 50 to 79 inches: silt loam*

#### Properties and qualities

*Slope: 0 to 2 percent*

*Depth to restrictive feature: 17 to 21 inches to abrupt textural change*

*Drainage class: Poorly drained*

*Runoff class: Negligible*

*Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)*

*Depth to water table: About 0 to 12 inches*

*Frequency of flooding: None*

*Frequency of ponding: Frequent*

*Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)*

*Sodium adsorption ratio, maximum: 5.0*

*Available water supply, 0 to 60 inches: Low (about 3.8 inches)*

#### Interpretive groups

*Land capability classification (irrigated): None specified*

*Land capability classification (nonirrigated): 2w*

*Hydrologic Soil Group: C/D*

*Ecological site: R113XY903IL - Wet Upland Prairie*

*Hydric soil rating: Yes*

### Description of Piasa

#### Setting

*Landform: Depressions, ground moraines*

*Landform position (two-dimensional): Toeslope, summit*

*Landform position (three-dimensional): Interfluve, dip, tal*

*Down-slope shape: Linear*

*Across-slope shape: Linear*

*Parent material: Loess over silty pedisediment*

#### Typical profile

*Ap - 0 to 8 inches: silt loam*

*Eng - 8 to 12 inches: silt loam*



## Custom Soil Resource Report

*Btng - 12 to 48 inches: silty clay loam*

*2BCng - 48 to 79 inches: silt loam*

### Properties and qualities

*Slope: 0 to 2 percent*

*Depth to restrictive feature: 11 to 14 inches to natric*

*Drainage class: Poorly drained*

*Capacity of the most limiting layer to transmit water (Ksat): Low to moderately low  
(0.01 to 0.06 in/hr)*

*Depth to water table: About 0 to 12 inches*

*Frequency of flooding: None*

*Frequency of ponding: Frequent*

*Calcium carbonate, maximum content: 30 percent*

*Maximum salinity: Very slightly saline to slightly saline (2.0 to 4.0 mmhos/cm)*

*Sodium adsorption ratio, maximum: 20.0*

*Available water supply, 0 to 60 inches: Very low (about 2.6 inches)*

### Interpretive groups

*Land capability classification (irrigated): None specified*

*Land capability classification (nonirrigated): 3w*

*Hydrologic Soil Group: D*

*Ecological site: R114XB901IN - Sodium Affected Uplands*

*Hydric soil rating: Yes*

### Minor Components

#### Darmstadt

*Percent of map unit: 2 percent*

*Landform: Ground moraines*

*Landform position (two-dimensional): Summit*

*Landform position (three-dimensional): Interfluve, rise*

*Down-slope shape: Linear*

*Across-slope shape: Linear*

*Ecological site: R113XY902IL - Natric Till Plain Savanna*

*Hydric soil rating: No*

## 3451cA—Lawson silt loam, cool mesic, 0 to 2 percent slopes, frequently flooded

### Map Unit Setting

*National map unit symbol: 2vpmb*

*Elevation: 420 to 890 feet*

*Mean annual precipitation: 34 to 42 inches*

*Mean annual air temperature: 46 to 56 degrees F*

*Frost-free period: 160 to 190 days*

*Farmland classification: Prime farmland if protected from flooding or not frequently flooded during the growing season*

**Map Unit Composition**

*Lawson, cool mesic, frequently flooded, and similar soils: 90 percent*

*Minor components: 10 percent*

*Estimates are based on observations, descriptions, and transects of the mapunit.*

**Description of Lawson, Cool Mesic, Frequently Flooded**

**Setting**

*Landform: Flood plains*

*Landform position (three-dimensional): Talf*

*Down-slope shape: Linear*

*Across-slope shape: Linear*

*Parent material: Alluvium*

**Typical profile**

*Ap - 0 to 9 inches: silt loam*

*A - 9 to 32 inches: silt loam*

*Cg - 32 to 79 inches: silt loam*

**Properties and qualities**

*Slope: 0 to 2 percent*

*Depth to restrictive feature: More than 80 inches*

*Drainage class: Somewhat poorly drained*

*Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high  
(0.60 to 2.00 in/hr)*

*Depth to water table: About 12 to 24 inches*

*Frequency of flooding: FrequentNone*

*Frequency of ponding: None*

*Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)*

*Available water supply, 0 to 60 inches: Very high (about 12.1 inches)*

**Interpretive groups**

*Land capability classification (irrigated): None specified*

*Land capability classification (nonirrigated): 3w*

*Hydrologic Soil Group: B/D*

*Ecological site: F108XA019IL - Silty Floodplain Forest, F115XC020IL - Loamy  
Floodplain Forest*

*Hydric soil rating: No*

**Minor Components**

**Sawmill, frequently flooded**

*Percent of map unit: 4 percent*

*Landform: Flood plains*

*Landform position (three-dimensional): Dip*

*Down-slope shape: Linear*

*Across-slope shape: Concave*

*Ecological site: R115XC016IL - Ponded Floodplain Marsh, F108XB021IL - Wet  
Loamy Floodplain Forest, R108XA018IL - Ponded Floodplain Marsh*

*Hydric soil rating: Yes*

**Huntsville, frequently flooded**

*Percent of map unit: 3 percent*

*Landform: Flood plains*

*Landform position (three-dimensional): Rise*

*Down-slope shape: Linear*

## Custom Soil Resource Report

*Across-slope shape:* Linear  
*Ecological site:* F095XB002WI - Wet Floodplain  
*Hydric soil rating:* No

### **Beaucoup, cool mesic, frequently flooded**

*Percent of map unit:* 2 percent  
*Landform:* Flood plains  
*Landform position (three-dimensional):* Dip  
*Down-slope shape:* Linear  
*Across-slope shape:* Concave  
*Ecological site:* R115XC016IL - Ponded Floodplain Marsh  
*Hydric soil rating:* Yes

### **Birds, frequently flooded**

*Percent of map unit:* 1 percent  
*Landform:* Flood plains  
*Landform position (three-dimensional):* Dip  
*Down-slope shape:* Linear  
*Across-slope shape:* Concave  
*Ecological site:* R115XC018IL - Wet Floodplain Sedge Meadow  
*Hydric soil rating:* Yes

## **W—Water**

### **Map Unit Composition**

*Water:* 100 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

### **Description of Water**

#### **Setting**

*Landform:* Rivers, oxbows, lakes, drainageways, perennial streams, channels

#### **Interpretive groups**

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 8w

# **Soil Information for All Uses**

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## **Suitabilities and Limitations for Use**

The Suitabilities and Limitations for Use section includes various soil interpretations displayed as thematic maps with a summary table for the soil map units in the selected area of interest. A single value or rating for each map unit is generated by aggregating the interpretive ratings of individual map unit components. This aggregation process is defined for each interpretation.

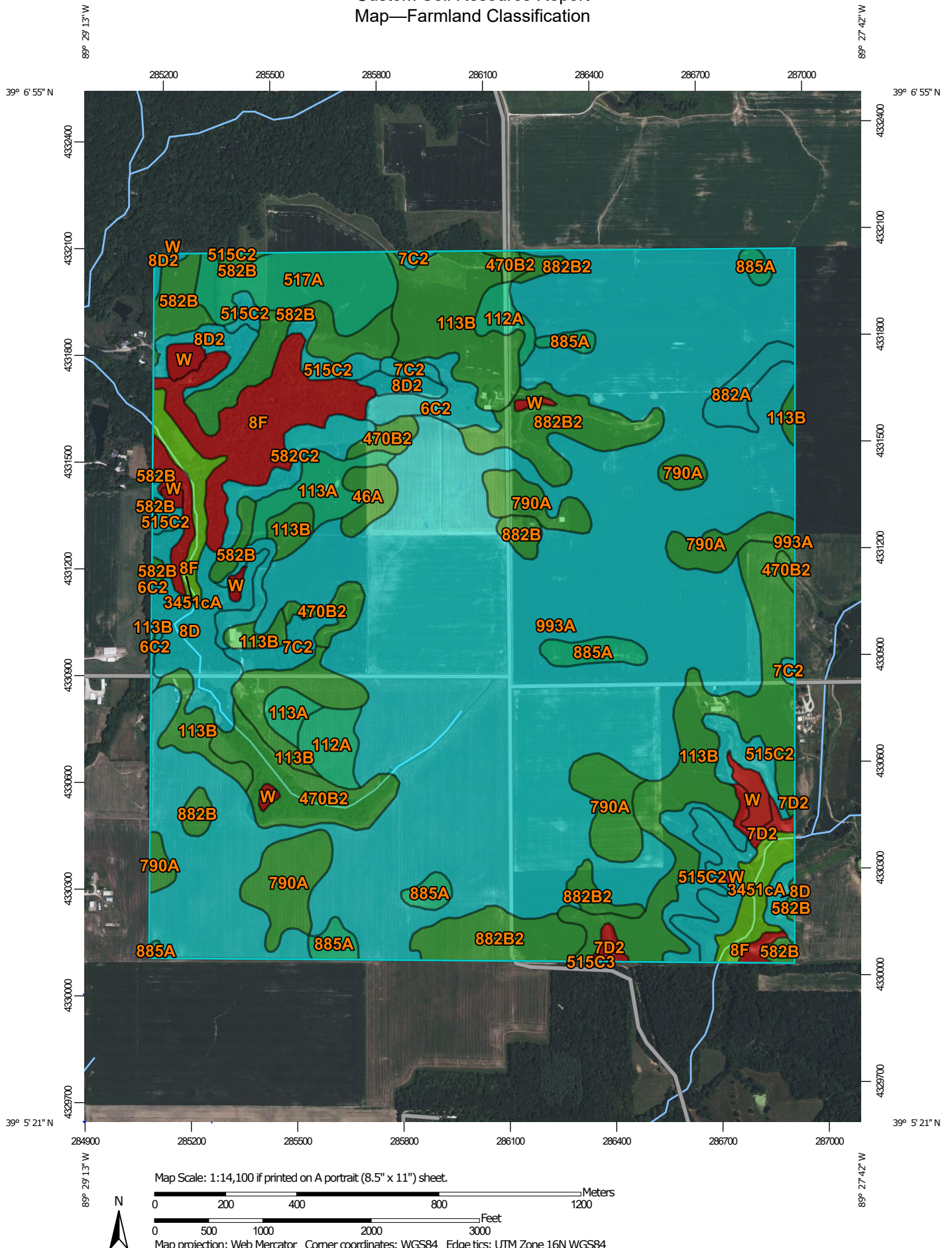
## **Land Classifications**

Land Classifications are specified land use and management groupings that are assigned to soil areas because combinations of soil have similar behavior for specified practices. Most are based on soil properties and other factors that directly influence the specific use of the soil. Example classifications include ecological site classification, farmland classification, irrigated and nonirrigated land capability classification, and hydric rating.

## **Farmland Classification**

Farmland classification identifies map units as prime farmland, farmland of statewide importance, farmland of local importance, or unique farmland. It identifies the location and extent of the soils that are best suited to food, feed, fiber, forage, and oilseed crops. NRCS policy and procedures on prime and unique farmlands are published in the "Federal Register," Vol. 43, No. 21, January 31, 1978.


# Custom Soil Resource Report Map—Farmland Classification



# Custom Soil Resource Report









## MAP LEGEND








### Area of Interest (AOI)






 Area of Interest (AOI)








### Soils



#### Soil Rating Polygons

-  Not prime farmland
-  All areas are prime farmland
-  Prime farmland if drained
-  Prime farmland if protected from flooding or not frequently flooded during the growing season
-  Prime farmland if irrigated
-  Prime farmland if drained and either protected from flooding or not frequently flooded during the growing season
-  Prime farmland if irrigated and drained
-  Prime farmland if irrigated and either protected from flooding or not frequently flooded during the growing season









-  Prime farmland if subsoiled, completely removing the root inhibiting soil layer
-  Prime farmland if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60
-  Prime farmland if irrigated and reclaimed of excess salts and sodium
-  Farmland of statewide importance
-  Farmland of statewide importance, if drained
-  Farmland of statewide importance, if protected from flooding or not frequently flooded during the growing season
-  Farmland of statewide importance, if irrigated

-  Farmland of statewide importance, if drained and either protected from flooding or not frequently flooded during the growing season
-  Farmland of statewide importance, if irrigated and drained
-  Farmland of statewide importance, if irrigated and either protected from flooding or not frequently flooded during the growing season
-  Farmland of statewide importance, if subsoiled, completely removing the root inhibiting soil layer
-  Farmland of statewide importance, if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60



































-  Farmland of statewide importance, if irrigated and reclaimed of excess salts and sodium
-  Farmland of statewide importance, if drained or either protected from flooding or not frequently flooded during the growing season
-  Farmland of statewide importance, if warm enough, and either drained or either protected from flooding or not frequently flooded during the growing season
-  Farmland of statewide importance, if warm enough
-  Farmland of statewide importance, if thawed
-  Farmland of local importance
-  Farmland of local importance, if irrigated

-  Farmland of unique importance
-  Not rated or not available



### Soil Rating Lines

-  Not prime farmland
-  All areas are prime farmland
-  Prime farmland if drained
-  Prime farmland if protected from flooding or not frequently flooded during the growing season
-  Prime farmland if irrigated
-  Prime farmland if drained and either protected from flooding or not frequently flooded during the growing season
-  Prime farmland if irrigated and drained
-  Prime farmland if irrigated and either protected from flooding or not frequently flooded during the growing season

## Custom Soil Resource Report

	Prime farmland if subsoiled, completely removing the root inhibiting soil layer		Farmland of statewide importance, if drained and either protected from flooding or not frequently flooded during the growing season		Farmland of statewide importance, if irrigated and reclaimed of excess salts and sodium		Farmland of unique importance		Prime farmland if subsoiled, completely removing the root inhibiting soil layer
	Prime farmland if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60		Farmland of statewide importance, if irrigated and drained		Farmland of statewide importance, if drained or either protected from flooding or not frequently flooded during the growing season	<b>Soil Rating Points</b>			Prime farmland if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60
	Prime farmland if irrigated and reclaimed of excess salts and sodium		Farmland of statewide importance, if irrigated and either protected from flooding or not frequently flooded during the growing season		Farmland of statewide importance, if warm enough, and either drained or either protected from flooding or not frequently flooded during the growing season		Not prime farmland		Prime farmland if irrigated and reclaimed of excess salts and sodium
	Farmland of statewide importance		Farmland of statewide importance, if subsoiled, completely removing the root inhibiting soil layer		Farmland of statewide importance, if thawed		Prime farmland if drained		Farmland of statewide importance
	Farmland of statewide importance, if drained		Farmland of statewide importance, if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60		Farmland of local importance		Prime farmland if protected from flooding or not frequently flooded during the growing season		Farmland of statewide importance, if drained
	Farmland of statewide importance, if protected from flooding or not frequently flooded during the growing season		Farmland of local importance, if irrigated		Farmland of local importance, if irrigated		Prime farmland if irrigated		Farmland of statewide importance, if protected from flooding or not frequently flooded during the growing season
	Farmland of statewide importance, if irrigated						Prime farmland if drained and either protected from flooding or not frequently flooded during the growing season		Farmland of statewide importance, if irrigated
							Prime farmland if irrigated and drained		
							Prime farmland if irrigated and either protected from flooding or not frequently flooded during the growing season		

## Custom Soil Resource Report

<p> Farmland of statewide importance, if drained and either protected from flooding or not frequently flooded during the growing season</p> <p> Farmland of statewide importance, if irrigated and drained</p> <p> Farmland of statewide importance, if irrigated and either protected from flooding or not frequently flooded during the growing season</p> <p> Farmland of statewide importance, if subsoiled, completely removing the root inhibiting soil layer</p> <p> Farmland of statewide importance, if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60</p>	<p> Farmland of statewide importance, if irrigated and reclaimed of excess salts and sodium</p> <p> Farmland of statewide importance, if drained or either protected from flooding or not frequently flooded during the growing season</p> <p> Farmland of statewide importance, if warm enough, and either drained or either protected from flooding or not frequently flooded during the growing season</p> <p> Farmland of statewide importance, if warm enough</p> <p> Farmland of statewide importance, if thawed</p> <p> Farmland of local importance</p> <p> Farmland of local importance, if irrigated</p>	<p> Farmland of unique importance</p> <p> Not rated or not available</p> <p><b>Water Features</b></p> <p> Streams and Canals</p> <p><b>Transportation</b></p> <p> Rails</p> <p> Interstate Highways</p> <p> US Routes</p> <p> Major Roads</p> <p> Local Roads</p> <p><b>Background</b></p> <p> Aerial Photography</p>	<p>The soil surveys that comprise your AOI were mapped at 1:12,000.</p> <p>Please rely on the bar scale on each map sheet for map measurements.</p> <p>Source of Map: Natural Resources Conservation Service Web Soil Survey URL: Coordinate System: Web Mercator (EPSG:3857)</p> <p>Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.</p> <p>This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.</p> <p>Soil Survey Area: Montgomery County, Illinois Survey Area Data: Version 19, Aug 31, 2022</p> <p>Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.</p> <p>Date(s) aerial images were photographed: Apr 1, 2020—Oct 1, 2020</p> <p>The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.</p>
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**Table—Farmland Classification**

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
6C2	Fishhook silt loam, 5 to 10 percent slopes, eroded	Farmland of statewide importance	9.0	1.0%
7C2	Atlas silt loam, 5 to 10 percent slopes, eroded	Farmland of statewide importance	8.7	1.0%
7D2	Atlas silt loam, 10 to 18 percent slopes, eroded	Not prime farmland	4.1	0.5%
8D	Hickory silt loam, 10 to 18 percent slopes	Farmland of statewide importance	32.2	3.6%
8D2	Hickory silt loam, 10 to 18 percent slopes, eroded	Farmland of statewide importance	9.4	1.0%
8F	Hickory silt loam, 18 to 35 percent slopes	Not prime farmland	34.7	3.9%
46A	Herrick silt loam, 0 to 2 percent slopes	All areas are prime farmland	5.1	0.6%
112A	Cowden silt loam, 0 to 2 percent slopes	Prime farmland if drained	12.0	1.3%
113A	Oconee silt loam, 0 to 2 percent slopes	Prime farmland if drained	13.5	1.5%
113B	Oconee silt loam, 2 to 5 percent slopes	All areas are prime farmland	96.1	10.7%
470B2	Keller silt loam, 2 to 5 percent slopes, eroded	All areas are prime farmland	27.3	3.0%
515C2	Bunkum silt loam, 5 to 10 percent slopes, eroded	Farmland of statewide importance	25.8	2.9%
515C3	Bunkum silty clay loam, 5 to 10 percent slopes, severely eroded	Farmland of statewide importance	0.0	0.0%
517A	Marine silt loam, 0 to 2 percent slopes	Prime farmland if drained	22.1	2.5%
582B	Homen silt loam, 2 to 5 percent slopes	All areas are prime farmland	28.4	3.2%
582C2	Homen silt loam, 5 to 10 percent slopes, eroded	Farmland of statewide importance	9.3	1.0%
790A	Herrick-Biddle silt loams, 0 to 2 percent slopes	All areas are prime farmland	41.3	4.6%
882A	Oconee-Darmstadt-Coulterville silt loams, 0 to 2 percent slopes	Farmland of statewide importance	6.2	0.7%
882B	Oconee-Darmstadt-Coulterville silt loams, 2 to 5 percent slopes	All areas are prime farmland	4.9	0.5%
882B2	Oconee-Darmstadt-Coulterville silt loams, 2 to 5 percent slopes, eroded	All areas are prime farmland	36.2	4.0%

## Custom Soil Resource Report

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
885A	Viriden-Fosterburg silt loams, 0 to 2 percent slopes	Prime farmland if drained	13.9	1.6%
993A	Cowden-Piasa silt loams, 0 to 2 percent slopes	Farmland of statewide importance	432.9	48.2%
3451cA	Lawson silt loam, cool mesic, 0 to 2 percent slopes, frequently flooded	Prime farmland if protected from flooding or not frequently flooded during the growing season	16.2	1.8%
W	Water	Not prime farmland	8.1	0.9%
<b>Totals for Area of Interest</b>			<b>897.4</b>	<b>100.0%</b>

### Rating Options—Farmland Classification

*Aggregation Method:* No Aggregation Necessary

*Tie-break Rule:* Lower