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**NRCS**

Natural  
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Conservation  
Service

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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 **Genesee County, Michigan**

## RBF Storage



# 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.

# Custom Soil Resource Report Soil Map



Soil Map may not be valid at this scale.


Map Scale: 1:2,080 if printed on A landscape (11" x 8.5") sheet.

0 30 60 120 180 Meters  
0 100 200 400 600 Feet

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 17N WGS84

### 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 1:20,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

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: Genesee County, Michigan  
 Survey Area Data: Version 18, Aug 29, 2022

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

Date(s) aerial images were photographed: Oct 9, 2022—Oct 21, 2022

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
CIB	Celina-Conover loams, 2 to 6 percent slopes	3.0	38.3%
CvraaB	Conover loam, 0 to 4 percent slopes	1.6	20.0%
MoC	Wawasee loam, 6 to 12 percent slopes	0.2	2.0%
MoD	Miami loam, 12 to 18 percent slopes	1.2	15.4%
Sn	Sloan silt loam, occasionally flooded	1.4	17.9%
SvB	Spinks-Oakville loamy sands, 2 to 6 percent slopes	0.5	6.4%
<b>Totals for Area of Interest</b>		<b>7.9</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

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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, 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.

## Genesee County, Michigan

### CIB—Celina-Conover loams, 2 to 6 percent slopes

#### Map Unit Setting

*National map unit symbol:* 68dz  
*Elevation:* 750 to 1,000 feet  
*Mean annual precipitation:* 31 to 32 inches  
*Mean annual air temperature:* 47 to 47 degrees F  
*Frost-free period:* 137 to 179 days  
*Farmland classification:* All areas are prime farmland

#### Map Unit Composition

*Celina and similar soils:* 50 percent  
*Conover and similar soils:* 30 percent  
*Minor components:* 20 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

#### Description of Celina

##### Setting

*Landform:* Knolls on ground moraines  
*Landform position (three-dimensional):* Rise  
*Down-slope shape:* Linear  
*Across-slope shape:* Convex  
*Parent material:* Loamy till

##### Typical profile

*Ap - 0 to 7 inches:* loam  
*E - 7 to 12 inches:* loam  
*Bt1 - 12 to 25 inches:* clay loam  
*Bt2 - 25 to 28 inches:* clay loam  
*C - 28 to 42 inches:* loam  
*2Cd - 42 to 80 inches:* loam

##### Properties and qualities

*Slope:* 2 to 6 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):* Low to moderately low  
(0.00 to 0.06 in/hr)  
*Depth to water table:* About 18 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Calcium carbonate, maximum content:* 30 percent  
*Available water supply, 0 to 60 inches:* Moderate (about 7.6 inches)

##### Interpretive groups

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 2e  
*Hydrologic Soil Group:* B/D  
*Ecological site:* F098XA011MI - Moist Loamy Drift Plains  
*Hydric soil rating:* No

## Description of Conover

### Setting

*Landform:* Swales on ground moraines  
*Landform position (three-dimensional):* Rise  
*Down-slope shape:* Linear  
*Across-slope shape:* Convex  
*Parent material:* Loamy till

### Typical profile

*Ap - 0 to 7 inches:* loam  
*E - 7 to 11 inches:* loam  
*Bt1 - 11 to 17 inches:* clay loam  
*Bt2 - 17 to 30 inches:* clay loam  
*C - 30 to 42 inches:* loam  
*Cd - 42 to 80 inches:* loam

### Properties and qualities

*Slope:* 1 to 3 percent  
*Depth to restrictive feature:* More than 80 inches  
*Drainage class:* Somewhat poorly drained  
*Runoff class:* Low  
*Capacity of the most limiting layer to transmit water (Ksat):* Moderately high to high  
(0.20 to 2.00 in/hr)  
*Depth to water table:* About 6 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Calcium carbonate, maximum content:* 30 percent  
*Available water supply, 0 to 60 inches:* Moderate (about 7.7 inches)

### Interpretive groups

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 2w  
*Hydrologic Soil Group:* C/D  
*Ecological site:* F098XA011MI - Moist Loamy Drift Plains  
*Hydric soil rating:* No

## Minor Components

### Brookston

*Percent of map unit:* 10 percent  
*Landform:* Depressions on ground moraines  
*Landform position (three-dimensional):* Talf  
*Down-slope shape:* Linear  
*Across-slope shape:* Linear  
*Ecological site:* F098XA012MI - Wet Loamy Depressions  
*Hydric soil rating:* Yes

### Miami

*Percent of map unit:* 10 percent  
*Landform:* Knolls on ground moraines  
*Landform position (three-dimensional):* Rise  
*Down-slope shape:* Linear  
*Across-slope shape:* Convex  
*Ecological site:* F098XA015MI - Dry Loamy Drift Plains  
*Hydric soil rating:* No

## **CvraaB—Conover loam, 0 to 4 percent slopes**

### **Map Unit Setting**

*National map unit symbol:* 2yct3  
*Elevation:* 600 to 960 feet  
*Mean annual precipitation:* 30 to 41 inches  
*Mean annual air temperature:* 43 to 52 degrees F  
*Frost-free period:* 140 to 200 days  
*Farmland classification:* Prime farmland if drained

### **Map Unit Composition**

*Conover and similar soils:* 85 percent  
*Minor components:* 15 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

### **Description of Conover**

#### **Setting**

*Landform:* Ground moraines, end moraines  
*Landform position (two-dimensional):* Shoulder, backslope, footslope, summit  
*Landform position (three-dimensional):* Interfluve, head slope, nose slope, side slope, base slope  
*Down-slope shape:* Linear  
*Across-slope shape:* Concave, convex, linear  
*Parent material:* Loamy till over dense loamy till

#### **Typical profile**

*Ap - 0 to 10 inches:* loam  
*Bt1 - 10 to 20 inches:* clay loam  
*Bt2 - 20 to 26 inches:* clay loam  
*BC - 26 to 44 inches:* loam  
*Cd - 44 to 80 inches:* loam

#### **Properties and qualities**

*Slope:* 0 to 4 percent  
*Depth to restrictive feature:* 32 to 80 inches to densic material  
*Drainage class:* Somewhat poorly drained  
*Runoff class:* Medium  
*Capacity of the most limiting layer to transmit water (Ksat):* Very low to low (0.00 to 0.01 in/hr)  
*Depth to water table:* About 6 to 18 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Calcium carbonate, maximum content:* 33 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:* Low (about 4.8 inches)

**Interpretive groups**

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 2w  
*Hydrologic Soil Group:* C/D  
*Ecological site:* F098XA011MI - Moist Loamy Drift Plains  
*Hydric soil rating:* No

**Minor Components**

**Miami**

*Percent of map unit:* 6 percent  
*Landform:* Ground moraines, end moraines  
*Landform position (two-dimensional):* Shoulder, backslope  
*Landform position (three-dimensional):* Nose slope, side slope  
*Down-slope shape:* Convex  
*Across-slope shape:* Linear, convex  
*Ecological site:* F098XA011MI - Moist Loamy Drift Plains  
*Hydric soil rating:* No

**Parkhill**

*Percent of map unit:* 5 percent  
*Landform:* Ground moraines, end moraines  
*Landform position (two-dimensional):* Backslope, footslope  
*Landform position (three-dimensional):* Head slope, side slope, base slope  
*Down-slope shape:* Concave  
*Across-slope shape:* Concave, linear  
*Ecological site:* F098XA012MI - Wet Loamy Depressions  
*Hydric soil rating:* Yes

**Matherton**

*Percent of map unit:* 4 percent  
*Landform:* Ground moraines, end moraines  
*Landform position (two-dimensional):* Summit, shoulder, backslope, footslope  
*Landform position (three-dimensional):* Interfluvium, head slope, nose slope, side slope, base slope  
*Down-slope shape:* Linear  
*Across-slope shape:* Convex, concave, linear  
*Ecological site:* F098XA011MI - Moist Loamy Drift Plains  
*Hydric soil rating:* No

**MoC—Wawasee loam, 6 to 12 percent slopes**

**Map Unit Setting**

*National map unit symbol:* 2w652  
*Elevation:* 770 to 1,070 feet  
*Mean annual precipitation:* 30 to 41 inches  
*Mean annual air temperature:* 43 to 52 degrees F  
*Frost-free period:* 140 to 230 days  
*Farmland classification:* Farmland of local importance

**Map Unit Composition**

*Wawasee and similar soils: 90 percent*

*Minor components: 10 percent*

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

**Description of Wawasee**

**Setting**

*Landform: Ground moraines, end moraines*

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

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

*Down-slope shape: Convex, linear*

*Across-slope shape: Linear, convex*

*Parent material: Calcareous loamy till*

**Typical profile**

*Ap - 0 to 7 inches: loam*

*Bt - 7 to 31 inches: clay loam*

*C - 31 to 80 inches: loam*

**Properties and qualities**

*Slope: 6 to 12 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 low (0.01 to 0.14 in/hr)*

*Depth to water table: More than 80 inches*

*Frequency of flooding: None*

*Frequency of ponding: None*

*Calcium carbonate, maximum content: 30 percent*

*Maximum salinity: Nonsaline (0.1 to 0.4 mmhos/cm)*

*Sodium adsorption ratio, maximum: 2.0*

*Available water supply, 0 to 60 inches: Moderate (about 8.7 inches)*

**Interpretive groups**

*Land capability classification (irrigated): None specified*

*Land capability classification (nonirrigated): 3e*

*Hydrologic Soil Group: C*

*Ecological site: F098XA015MI - Dry Loamy Drift Plains*

*Hydric soil rating: No*

**Minor Components**

**Brookston**

*Percent of map unit: 3 percent*

*Landform: End moraines, depressions on ground moraines*

*Landform position (two-dimensional): Toeslope*

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

*Down-slope shape: Concave, linear*

*Across-slope shape: Concave, linear*

*Ecological site: F098XA012MI - Wet Loamy Depressions*

*Hydric soil rating: Yes*

**Spinks**

*Percent of map unit: 3 percent*

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*Landform:* Ground moraines, end moraines  
*Landform position (two-dimensional):* Shoulder, backslope  
*Landform position (three-dimensional):* Head slope, nose slope, side slope  
*Down-slope shape:* Convex, linear  
*Across-slope shape:* Linear, convex  
*Ecological site:* F098XA014MI - Dry Sandy Drift Plains  
*Hydric soil rating:* No

### **Conover**

*Percent of map unit:* 3 percent  
*Landform:* Ground moraines, end moraines  
*Landform position (two-dimensional):* Footslope  
*Landform position (three-dimensional):* Base slope  
*Down-slope shape:* Concave, linear  
*Across-slope shape:* Concave, linear  
*Ecological site:* F098XA011MI - Moist Loamy Drift Plains  
*Hydric soil rating:* No

### **Carlisle**

*Percent of map unit:* 1 percent  
*Landform:* End moraines, depressions on ground moraines  
*Landform position (two-dimensional):* Toeslope  
*Landform position (three-dimensional):* Base slope  
*Down-slope shape:* Concave, linear  
*Across-slope shape:* Concave, linear  
*Ecological site:* F098XA006MI - Mucky Depressions  
*Hydric soil rating:* Yes

## **MoD—Miami loam, 12 to 18 percent slopes**

### **Map Unit Setting**

*National map unit symbol:* 68g5  
*Elevation:* 670 to 1,030 feet  
*Mean annual precipitation:* 31 to 32 inches  
*Mean annual air temperature:* 47 to 47 degrees F  
*Frost-free period:* 137 to 179 days  
*Farmland classification:* Farmland of local importance

### **Map Unit Composition**

*Miami and similar soils:* 95 percent  
*Minor components:* 5 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

### **Description of Miami**

#### **Setting**

*Landform:* Moraines  
*Landform position (two-dimensional):* Summit, shoulder, backslope, footslope, toeslope

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*Landform position (three-dimensional):* Interfluvial, head slope, nose slope, side slope, base slope, crest  
*Down-slope shape:* Convex, linear  
*Across-slope shape:* Concave, convex  
*Parent material:* Loamy till

### Typical profile

*Ap - 0 to 8 inches:* loam  
*E - 8 to 12 inches:* loam  
*Bt1 - 12 to 25 inches:* clay loam  
*Bt2 - 25 to 33 inches:* clay loam  
*C - 33 to 48 inches:* loam  
*Cd - 48 to 80 inches:* loam

### Properties and qualities

*Slope:* 12 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 (0.20 to 0.60 in/hr)  
*Depth to water table:* More than 80 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Calcium carbonate, maximum content:* 30 percent  
*Available water supply, 0 to 60 inches:* Moderate (about 8.8 inches)

### Interpretive groups

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 4e  
*Hydrologic Soil Group:* C  
*Ecological site:* F098XA022MI - Loamy Slopes  
*Hydric soil rating:* No

### Minor Components

#### **Miami, moderately eroded**

*Percent of map unit:* 5 percent  
*Landform:* Moraines  
*Landform position (two-dimensional):* Summit, shoulder, backslope, footslope, toeslope  
*Landform position (three-dimensional):* Interfluvial, head slope, nose slope, side slope, base slope, crest  
*Down-slope shape:* Convex, linear  
*Across-slope shape:* Concave, convex  
*Ecological site:* F098XA022MI - Loamy Slopes  
*Hydric soil rating:* No

## **Sn—Sloan silt loam, occasionally flooded**

### **Map Unit Setting**

*National map unit symbol:* 68gz

*Elevation:* 710 to 960 feet

*Mean annual precipitation:* 31 to 32 inches

*Mean annual air temperature:* 47 to 47 degrees F

*Frost-free period:* 137 to 179 days

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

### **Map Unit Composition**

*Sloan, occasionally flooded, and similar soils:* 95 percent

*Minor components:* 5 percent

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

### **Description of Sloan, Occasionally Flooded**

#### **Setting**

*Landform:* Oxbows on flood plains, meander scars on flood plains

*Landform position (three-dimensional):* Talf

*Down-slope shape:* Linear

*Across-slope shape:* Linear

*Parent material:* Loamy alluvium

#### **Typical profile**

*A1 - 0 to 7 inches:* silt loam

*A2 - 7 to 17 inches:* silt loam

*Bg - 17 to 25 inches:* silt loam

*Cg - 25 to 80 inches:* stratified very fine sand to loam to silt loam

#### **Properties and qualities**

*Slope:* 0 to 2 percent

*Depth to restrictive feature:* More than 80 inches

*Drainage class:* Very poorly drained

*Runoff class:* Negligible

*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 0 inches

*Frequency of flooding:* NoneOccasional

*Frequency of ponding:* None

*Calcium carbonate, maximum content:* 30 percent

*Available water supply, 0 to 60 inches:* Moderate (about 7.4 inches)

#### **Interpretive groups**

*Land capability classification (irrigated):* None specified

*Land capability classification (nonirrigated):* 5w

*Hydrologic Soil Group:* B/D

*Ecological site:* F098XA004MI - Wet Floodplains

*Hydric soil rating:* Yes

## Minor Components

### Ceresco

*Percent of map unit:* 5 percent  
*Landform:* Levees on flood plains  
*Landform position (three-dimensional):* Rise  
*Down-slope shape:* Linear  
*Across-slope shape:* Convex  
*Ecological site:* F098XA003MI - Moist Floodplains  
*Hydric soil rating:* No

## SvB—Spinks-Oakville loamy sands, 2 to 6 percent slopes

### Map Unit Setting

*National map unit symbol:* 68h2  
*Elevation:* 690 to 950 feet  
*Mean annual precipitation:* 31 to 32 inches  
*Mean annual air temperature:* 47 to 47 degrees F  
*Frost-free period:* 137 to 179 days  
*Farmland classification:* Farmland of local importance

### Map Unit Composition

*Spinks and similar soils:* 60 percent  
*Oakville and similar soils:* 30 percent  
*Minor components:* 10 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

### Description of Spinks

#### Setting

*Landform:* Knolls on stream terraces, knolls on outwash plains  
*Landform position (three-dimensional):* Rise  
*Down-slope shape:* Linear  
*Across-slope shape:* Convex  
*Parent material:* Sandy glaciofluvial deposits

#### Typical profile

*Ap - 0 to 7 inches:* loamy sand  
*E1 - 7 to 13 inches:* loamy sand  
*E2 - 13 to 16 inches:* loamy coarse sand  
*E and Bt - 16 to 70 inches:* stratified sand to loamy sand to sandy loam  
*C - 70 to 80 inches:* sand

#### Properties and qualities

*Slope:* 2 to 6 percent  
*Depth to restrictive feature:* More than 80 inches  
*Drainage class:* Well drained  
*Runoff class:* Very low  
*Capacity of the most limiting layer to transmit water (Ksat):* High to very high (2.00 to 20.00 in/hr)

## Custom Soil Resource Report

*Depth to water table:* More than 80 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Calcium carbonate, maximum content:* 25 percent  
*Available water supply, 0 to 60 inches:* Moderate (about 6.1 inches)

### Interpretive groups

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 3s  
*Hydrologic Soil Group:* A  
*Ecological site:* F098XA014MI - Dry Sandy Drift Plains  
*Hydric soil rating:* No

### Description of Oakville

#### Setting

*Landform:* Knolls on outwash plains, knolls on stream terraces  
*Landform position (three-dimensional):* Rise  
*Down-slope shape:* Linear  
*Across-slope shape:* Convex  
*Parent material:* Sandy glaciofluvial deposits

#### Typical profile

*Ap - 0 to 7 inches:* fine sand  
*Bw1 - 7 to 13 inches:* fine sand  
*Bw2 - 13 to 30 inches:* fine sand  
*C - 30 to 80 inches:* sand

#### Properties and qualities

*Slope:* 2 to 6 percent  
*Depth to restrictive feature:* More than 80 inches  
*Drainage class:* Well drained  
*Runoff class:* Very low  
*Capacity of the most limiting layer to transmit water (Ksat):* High to very high (6.00 to 20.00 in/hr)  
*Depth to water table:* More than 80 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Available water supply, 0 to 60 inches:* Low (about 4.0 inches)

#### Interpretive groups

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 4s  
*Hydrologic Soil Group:* A  
*Ecological site:* F098XA014MI - Dry Sandy Drift Plains  
*Hydric soil rating:* No

### Minor Components

#### Arkport

*Percent of map unit:* 5 percent  
*Landform:* Deltas on stream terraces  
*Landform position (three-dimensional):* Rise  
*Down-slope shape:* Linear  
*Across-slope shape:* Convex  
*Ecological site:* F098XA014MI - Dry Sandy Drift Plains  
*Hydric soil rating:* No

## Custom Soil Resource Report

### **Boyer**

*Percent of map unit:* 5 percent

*Landform:* Ground moraines, knolls on stream terraces

*Landform position (three-dimensional):* Rise

*Down-slope shape:* Linear

*Across-slope shape:* Convex

*Ecological site:* F098XA014MI - Dry Sandy Drift Plains

*Hydric soil rating:* No