



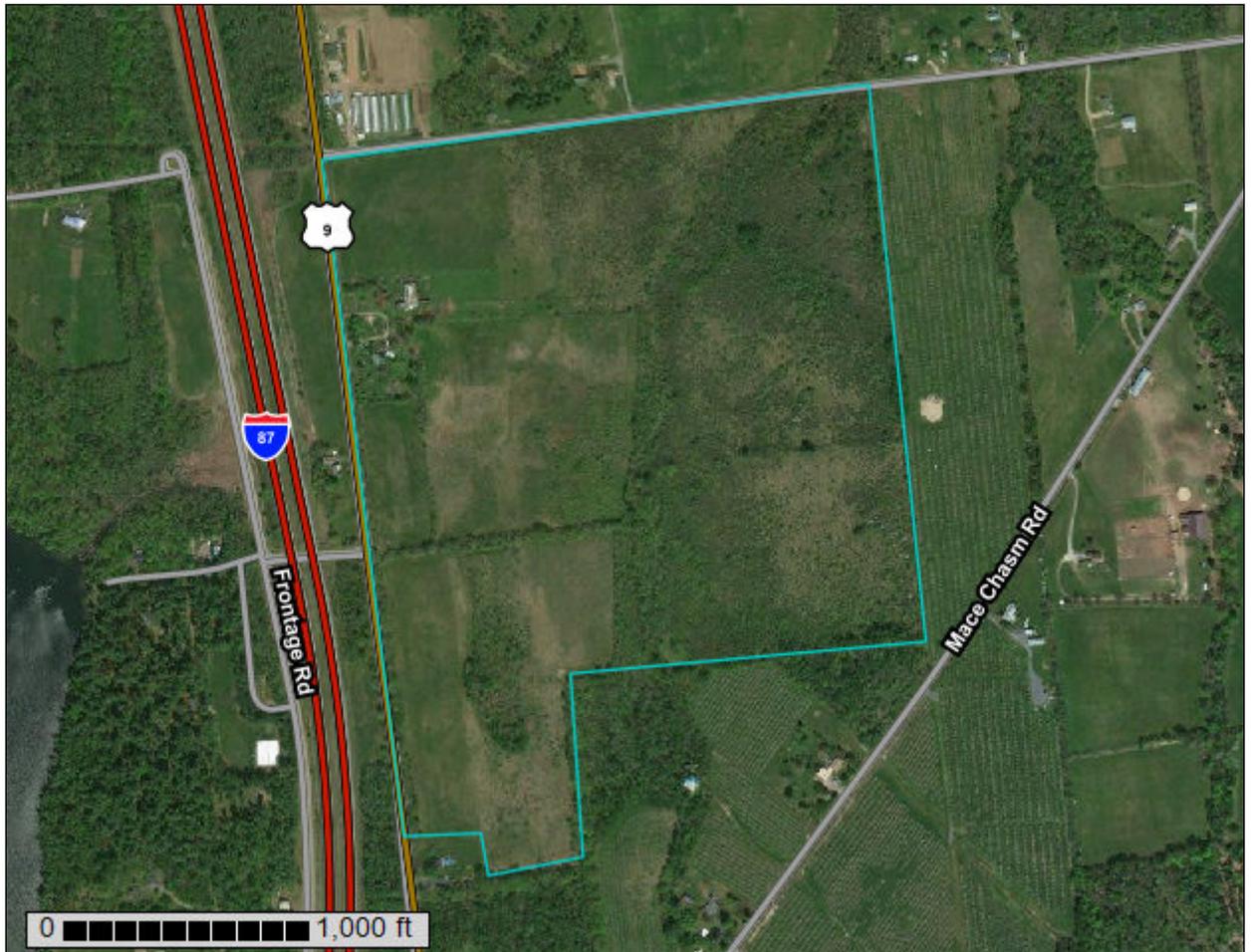
United States  
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Agriculture

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 Essex County, New York



# 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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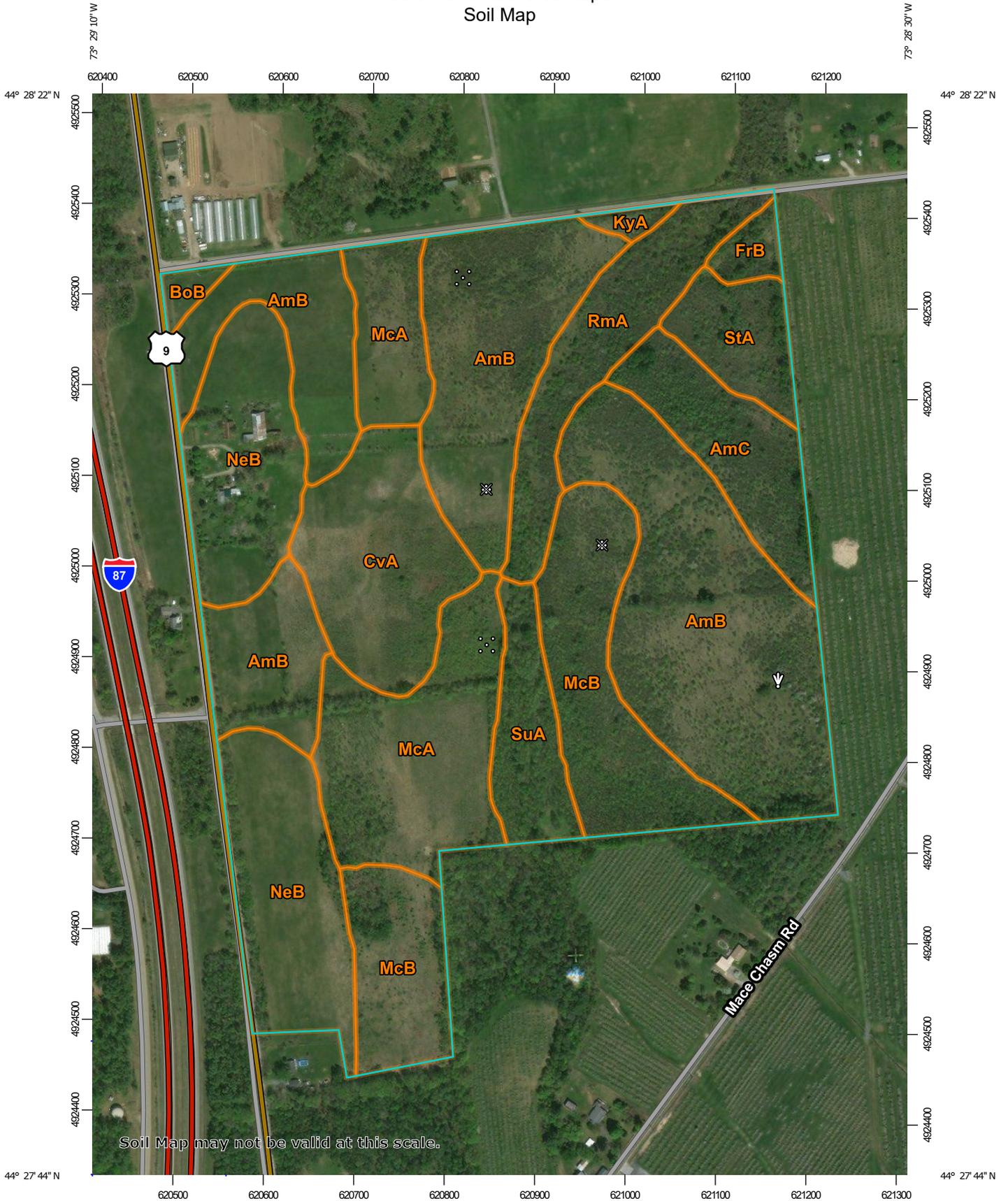
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# Soil Map

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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



Map Scale: 1:5,810 if printed on A portrait (8.5" x 11") sheet.

0 50 100 200 300 Meters

0 250 500 1000 1500 Feet

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 18N 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 1:24,000.

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: Essex County, New York  
 Survey Area Data: Version 19, Sep 16, 2019

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

Date(s) aerial images were photographed: Jun 28, 2012—Mar 29, 2017

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
AmB	Amenia fine sandy loam, 2 to 8 percent slopes	42.6	33.9%
AmC	Amenia fine sandy loam, 8 to 15 percent slopes	6.3	5.0%
BoB	Bombay gravelly loam, 3 to 8 percent slopes	0.7	0.6%
CvA	Covington clay, 0 to 3 percent slopes	9.6	7.7%
FrB	Factoryville loamy fine sand, 2 to 8 percent slopes	1.2	0.9%
KyA	Kingsbury silty clay loam, 0 to 3 percent slopes	0.6	0.5%
McA	Massena gravelly silt loam, 0 to 3 percent slopes	15.5	12.3%
McB	Massena gravelly silt loam, 3 to 8 percent slopes	15.4	12.2%
NeB	Nellis loam, 3 to 8 percent slopes	17.9	14.2%
RmA	Rippowam fine sandy loam, 0 to 3 percent slopes	7.7	6.1%
StA	Stafford fine sandy loam, 0 to 3 percent slopes	3.8	3.0%
SuA	Sun silt loam, 0 to 3 percent slopes	4.6	3.6%
<b>Totals for Area of Interest</b>		<b>125.9</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.

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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, 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

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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.

## Essex County, New York

### AmB—Amenia fine sandy loam, 2 to 8 percent slopes

#### Map Unit Setting

*National map unit symbol:* 9s3v  
*Elevation:* 100 to 510 feet  
*Mean annual precipitation:* 26 to 36 inches  
*Mean annual air temperature:* 45 to 48 degrees F  
*Frost-free period:* 130 to 150 days  
*Farmland classification:* All areas are prime farmland

#### Map Unit Composition

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

#### Description of Amenia

##### Setting

*Landform:* Drumlinoid ridges  
*Landform position (two-dimensional):* Summit, shoulder, backslope  
*Landform position (three-dimensional):* Crest, side slope  
*Down-slope shape:* Concave  
*Across-slope shape:* Convex  
*Parent material:* Loamy lodgement till derived from limestone

##### Typical profile

*Ap - 0 to 9 inches:* fine sandy loam  
*Bw - 9 to 14 inches:* fine sandy loam  
*BC - 14 to 21 inches:* fine sandy loam  
*Cd1 - 21 to 36 inches:* fine sandy loam  
*Cd2 - 36 to 48 inches:* fine sandy loam  
*Cd3 - 48 to 72 inches:* fine sandy loam

##### Properties and qualities

*Slope:* 2 to 8 percent  
*Depth to restrictive feature:* 20 to 36 inches to densic material  
*Natural drainage class:* Moderately well 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 18 to 30 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Calcium carbonate, maximum in profile:* 25 percent  
*Available water storage in profile:* Very low (about 2.7 inches)

##### Interpretive groups

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 2e  
*Hydrologic Soil Group:* D  
*Hydric soil rating:* No

**Minor Components**

**Nellis**

*Percent of map unit: 5 percent*  
*Hydric soil rating: No*

**Massena**

*Percent of map unit: 4 percent*  
*Hydric soil rating: No*

**Unnamed**

*Percent of map unit: 2 percent*  
*Hydric soil rating: No*

**Cayuga**

*Percent of map unit: 2 percent*  
*Hydric soil rating: No*

**Bombay**

*Percent of map unit: 2 percent*  
*Hydric soil rating: No*

**AmC—Amenia fine sandy loam, 8 to 15 percent slopes**

**Map Unit Setting**

*National map unit symbol: 9s3t*  
*Elevation: 100 to 510 feet*  
*Mean annual precipitation: 26 to 36 inches*  
*Mean annual air temperature: 45 to 48 degrees F*  
*Frost-free period: 130 to 150 days*  
*Farmland classification: Farmland of statewide importance*

**Map Unit Composition**

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

**Description of Amenia**

**Setting**

*Landform: Drumlinoid ridges*  
*Landform position (two-dimensional): Shoulder, backslope*  
*Landform position (three-dimensional): Side slope*  
*Down-slope shape: Concave*  
*Across-slope shape: Convex*  
*Parent material: Loamy lodgement till derived from limestone*

**Typical profile**

*Ap - 0 to 9 inches: fine sandy loam*  
*Bw - 9 to 14 inches: fine sandy loam*  
*BC - 14 to 21 inches: fine sandy loam*

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*Cd1 - 21 to 36 inches: fine sandy loam*

*Cd2 - 36 to 48 inches: fine sandy loam*

*Cd3 - 48 to 72 inches: fine sandy loam*

### Properties and qualities

*Slope: 8 to 15 percent*

*Depth to restrictive feature: 20 to 36 inches to densic material*

*Natural drainage class: Moderately well 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 18 to 30 inches*

*Frequency of flooding: None*

*Frequency of ponding: None*

*Calcium carbonate, maximum in profile: 25 percent*

*Available water storage in profile: Very low (about 2.7 inches)*

### Interpretive groups

*Land capability classification (irrigated): None specified*

*Land capability classification (nonirrigated): 3e*

*Hydrologic Soil Group: D*

*Hydric soil rating: No*

### Minor Components

#### Nellis

*Percent of map unit: 6 percent*

*Hydric soil rating: No*

#### Massena

*Percent of map unit: 3 percent*

*Hydric soil rating: No*

#### Unnamed

*Percent of map unit: 2 percent*

*Hydric soil rating: No*

#### Cayuga

*Percent of map unit: 2 percent*

*Hydric soil rating: No*

#### Bombay

*Percent of map unit: 2 percent*

*Hydric soil rating: No*

## BoB—Bombay gravelly loam, 3 to 8 percent slopes

### Map Unit Setting

*National map unit symbol: b098*

*Elevation: 100 to 510 feet*

*Mean annual precipitation: 26 to 36 inches*

*Mean annual air temperature: 45 to 48 degrees F*

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*Frost-free period:* 130 to 150 days

*Farmland classification:* All areas are prime farmland

### Map Unit Composition

*Bombay and similar soils:* 85 percent

*Minor components:* 15 percent

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

### Description of Bombay

#### Setting

*Landform:* Drumlinoid ridges

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

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

*Down-slope shape:* Concave

*Across-slope shape:* Convex

#### Typical profile

*Ap - 0 to 10 inches:* gravelly loam

*Bt/E - 10 to 18 inches:* gravelly loam

*Bt - 18 to 25 inches:* gravelly loam

*BC - 25 to 36 inches:* gravelly loam

*C - 36 to 72 inches:* gravelly fine sandy loam

#### Properties and qualities

*Slope:* 3 to 8 percent

*Depth to restrictive feature:* More than 80 inches

*Natural drainage class:* Moderately well drained

*Runoff class:* Very high

*Capacity of the most limiting layer to transmit water (Ksat):* Moderately low to high  
(0.06 to 1.98 in/hr)

*Depth to water table:* About 18 to 30 inches

*Frequency of flooding:* None

*Frequency of ponding:* None

*Calcium carbonate, maximum in profile:* 25 percent

*Available water storage in profile:* Moderate (about 6.8 inches)

#### Interpretive groups

*Land capability classification (irrigated):* None specified

*Land capability classification (nonirrigated):* 2e

*Hydrologic Soil Group:* B/D

*Hydric soil rating:* No

### Minor Components

#### Nellis

*Percent of map unit:* 5 percent

*Hydric soil rating:* No

#### Massena

*Percent of map unit:* 4 percent

*Hydric soil rating:* No

#### Unnamed

*Percent of map unit:* 2 percent

*Hydric soil rating:* No

**Amenia**

*Percent of map unit: 2 percent*  
*Hydric soil rating: No*

**Cayuga**

*Percent of map unit: 2 percent*  
*Hydric soil rating: No*

**CvA—Covington clay, 0 to 3 percent slopes**

**Map Unit Setting**

*National map unit symbol: 1vjzp*  
*Elevation: 100 to 510 feet*  
*Mean annual precipitation: 26 to 36 inches*  
*Mean annual air temperature: 45 to 48 degrees F*  
*Frost-free period: 130 to 150 days*  
*Farmland classification: Not prime farmland*

**Map Unit Composition**

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

**Description of Covington**

**Setting**

*Landform: Lake plains*  
*Landform position (two-dimensional): Toeslope*  
*Landform position (three-dimensional): Tread*  
*Down-slope shape: Concave*  
*Across-slope shape: Concave*  
*Parent material: Clayey glaciolacustrine deposits derived from igneous and sedimentary rock*

**Typical profile**

*Ap - 0 to 9 inches: clay*  
*Btg1 - 9 to 19 inches: clay*  
*Btg2 - 19 to 24 inches: clay*  
*BCg - 24 to 36 inches: clay*  
*Cg - 36 to 72 inches: clay*

**Properties and qualities**

*Slope: 0 to 3 percent*  
*Depth to restrictive feature: More than 80 inches*  
*Natural drainage class: Poorly drained*  
*Runoff class: Very high*  
*Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.06 in/hr)*  
*Depth to water table: About 0 to 12 inches*  
*Frequency of flooding: None*

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*Frequency of ponding:* None  
*Calcium carbonate, maximum in profile:* 15 percent  
*Available water storage in profile:* Moderate (about 7.2 inches)

### **Interpretive groups**

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 4w  
*Hydrologic Soil Group:* D  
*Hydric soil rating:* Yes

### **Minor Components**

#### **Kingsbury**

*Percent of map unit:* 5 percent  
*Hydric soil rating:* No

#### **Livingston**

*Percent of map unit:* 4 percent  
*Landform:* Lake plains  
*Landform position (two-dimensional):* Toeslope  
*Landform position (three-dimensional):* Tread  
*Down-slope shape:* Concave  
*Across-slope shape:* Concave  
*Hydric soil rating:* Yes

#### **Churchville**

*Percent of map unit:* 3 percent  
*Hydric soil rating:* No

#### **Whallonsburg**

*Percent of map unit:* 2 percent  
*Landform:* Swamps  
*Landform position (two-dimensional):* Toeslope  
*Landform position (three-dimensional):* Dip  
*Down-slope shape:* Concave  
*Across-slope shape:* Concave  
*Hydric soil rating:* Yes

#### **Unnamed**

*Percent of map unit:* 1 percent  
*Hydric soil rating:* Yes

## **FrB—Factoryville loamy fine sand, 2 to 8 percent slopes**

### **Map Unit Setting**

*National map unit symbol:* 119ds  
*Elevation:* 100 to 510 feet  
*Mean annual precipitation:* 26 to 36 inches  
*Mean annual air temperature:* 45 to 48 degrees F  
*Frost-free period:* 130 to 150 days  
*Farmland classification:* All areas are prime farmland

**Map Unit Composition**

*Factoryville and similar soils:* 85 percent

*Minor components:* 15 percent

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

**Description of Factoryville**

**Setting**

*Landform:* Deltas

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

*Landform position (three-dimensional):* Tread

*Down-slope shape:* Convex

*Across-slope shape:* Convex

*Parent material:* Sandy glaciolacustrine deposits derived from igneous and sedimentary rock

**Typical profile**

*Ap - 0 to 11 inches:* loamy fine sand

*Bw1 - 11 to 19 inches:* loamy fine sand

*Bw2 - 19 to 29 inches:* loamy fine sand

*Bw3 - 29 to 33 inches:* loamy fine sand

*C1 - 33 to 65 inches:* fine sand

*C2 - 65 to 72 inches:* fine sand

**Properties and qualities**

*Slope:* 2 to 8 percent

*Depth to restrictive feature:* More than 80 inches

*Natural drainage class:* Well drained

*Runoff class:* Low

*Capacity of the most limiting layer to transmit water (Ksat):* High to very high (5.95 to 19.98 in/hr)

*Depth to water table:* About 24 to 39 inches

*Frequency of flooding:* None

*Frequency of ponding:* None

*Available water storage in profile:* Low (about 3.8 inches)

**Interpretive groups**

*Land capability classification (irrigated):* None specified

*Land capability classification (nonirrigated):* 2s

*Hydrologic Soil Group:* A

*Hydric soil rating:* No

**Minor Components**

**Deerfield**

*Percent of map unit:* 5 percent

*Hydric soil rating:* No

**Windsor**

*Percent of map unit:* 3 percent

*Hydric soil rating:* No

**Unnamed**

*Percent of map unit:* 3 percent

*Hydric soil rating:* No

**Dunkirk**

*Percent of map unit:* 1 percent  
*Hydric soil rating:* No

**Claverack**

*Percent of map unit:* 1 percent  
*Hydric soil rating:* No

**Hartland**

*Percent of map unit:* 1 percent  
*Hydric soil rating:* No

**Stafford**

*Percent of map unit:* 1 percent  
*Hydric soil rating:* No

**KyA—Kingsbury silty clay loam, 0 to 3 percent slopes**

**Map Unit Setting**

*National map unit symbol:* bq3k  
*Elevation:* 100 to 510 feet  
*Mean annual precipitation:* 26 to 36 inches  
*Mean annual air temperature:* 45 to 48 degrees F  
*Frost-free period:* 130 to 150 days  
*Farmland classification:* Farmland of statewide importance

**Map Unit Composition**

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

**Description of Kingsbury**

**Setting**

*Landform:* Lake plains  
*Landform position (two-dimensional):* Footslope  
*Landform position (three-dimensional):* Tread  
*Down-slope shape:* Concave  
*Across-slope shape:* Linear  
*Parent material:* Clayey glaciolacustrine deposits derived from igneous and sedimentary rock

**Typical profile**

*Ap - 0 to 9 inches:* silty clay loam  
*Bt1 - 9 to 14 inches:* clay  
*Bt2 - 14 to 21 inches:* clay  
*CB - 21 to 34 inches:* silty clay  
*C1 - 34 to 65 inches:* clay  
*C2 - 65 to 93 inches:* silty clay

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### Properties and qualities

*Slope:* 0 to 3 percent  
*Depth to restrictive feature:* More than 80 inches  
*Natural drainage class:* Somewhat poorly drained  
*Runoff class:* Very high  
*Capacity of the most limiting layer to transmit water (Ksat):* Very low to moderately low (0.00 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 in profile:* 15 percent  
*Available water storage in profile:* Moderate (about 8.6 inches)

### Interpretive groups

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 3w  
*Hydrologic Soil Group:* D  
*Hydric soil rating:* No

### Minor Components

#### Covington

*Percent of map unit:* 4 percent  
*Landform:* Lake plains  
*Landform position (two-dimensional):* Toeslope  
*Landform position (three-dimensional):* Tread  
*Down-slope shape:* Concave  
*Across-slope shape:* Concave  
*Hydric soil rating:* Yes

#### Cosad

*Percent of map unit:* 3 percent  
*Hydric soil rating:* No

#### Churchville

*Percent of map unit:* 3 percent  
*Hydric soil rating:* No

#### Vergennes

*Percent of map unit:* 2 percent  
*Hydric soil rating:* No

#### Livingston

*Percent of map unit:* 1 percent  
*Landform:* Lake plains  
*Landform position (two-dimensional):* Toeslope  
*Landform position (three-dimensional):* Tread  
*Down-slope shape:* Concave  
*Across-slope shape:* Concave  
*Hydric soil rating:* Yes

#### Unnamed

*Percent of map unit:* 1 percent  
*Hydric soil rating:* No

#### Niagara

*Percent of map unit:* 1 percent  
*Hydric soil rating:* No

## **McA—Massena gravelly silt loam, 0 to 3 percent slopes**

### **Map Unit Setting**

*National map unit symbol:* bq65  
*Elevation:* 100 to 510 feet  
*Mean annual precipitation:* 26 to 36 inches  
*Mean annual air temperature:* 45 to 48 degrees F  
*Frost-free period:* 130 to 150 days  
*Farmland classification:* Prime farmland if drained

### **Map Unit Composition**

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

### **Description of Massena**

#### **Setting**

*Landform:* Till plains, drumlinoid ridges  
*Landform position (two-dimensional):* Toeslope, footslope  
*Landform position (three-dimensional):* Base slope  
*Down-slope shape:* Concave  
*Across-slope shape:* Concave  
*Parent material:* Loamy lodgement till derived from limestone

#### **Typical profile**

*Ap - 0 to 9 inches:* gravelly silt loam  
*Bw1 - 9 to 18 inches:* loam  
*Bw2 - 18 to 24 inches:* loam  
*C - 24 to 72 inches:* gravelly sandy loam

#### **Properties and qualities**

*Slope:* 0 to 3 percent  
*Depth to restrictive feature:* More than 80 inches  
*Natural drainage class:* Somewhat poorly drained  
*Runoff class:* Very high  
*Capacity of the most limiting layer to transmit water (Ksat):* Moderately high to high (0.20 to 5.95 in/hr)  
*Depth to water table:* About 6 to 18 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Calcium carbonate, maximum in profile:* 25 percent  
*Available water storage in profile:* Moderate (about 6.9 inches)

#### **Interpretive groups**

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 3w  
*Hydrologic Soil Group:* A/D  
*Hydric soil rating:* No

**Minor Components**

**Amenia**

*Percent of map unit:* 4 percent  
*Hydric soil rating:* No

**Sun**

*Percent of map unit:* 3 percent  
*Landform:* Till plains  
*Landform position (two-dimensional):* Toeslope  
*Landform position (three-dimensional):* Base slope  
*Down-slope shape:* Concave  
*Across-slope shape:* Concave  
*Hydric soil rating:* Yes

**Churchville**

*Percent of map unit:* 2 percent  
*Hydric soil rating:* No

**Bombay**

*Percent of map unit:* 2 percent  
*Hydric soil rating:* No

**Unnamed**

*Percent of map unit:* 2 percent  
*Hydric soil rating:* No

**Georgia**

*Percent of map unit:* 2 percent  
*Hydric soil rating:* No

**McB—Massena gravelly silt loam, 3 to 8 percent slopes**

**Map Unit Setting**

*National map unit symbol:* bq66  
*Elevation:* 100 to 510 feet  
*Mean annual precipitation:* 26 to 36 inches  
*Mean annual air temperature:* 45 to 48 degrees F  
*Frost-free period:* 130 to 150 days  
*Farmland classification:* Prime farmland if drained

**Map Unit Composition**

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

**Description of Massena**

**Setting**

*Landform:* Till plains, drumlinoid ridges  
*Landform position (two-dimensional):* Footslope

## Custom Soil Resource Report

*Landform position (three-dimensional):* Base slope  
*Down-slope shape:* Concave  
*Across-slope shape:* Concave  
*Parent material:* Loamy lodgement till derived from limestone

### Typical profile

*Ap - 0 to 9 inches:* gravelly silt loam  
*Bw1 - 9 to 18 inches:* loam  
*Bw2 - 18 to 24 inches:* loam  
*C - 24 to 72 inches:* gravelly sandy loam

### Properties and qualities

*Slope:* 3 to 8 percent  
*Depth to restrictive feature:* More than 80 inches  
*Natural drainage class:* Somewhat poorly drained  
*Runoff class:* Very high  
*Capacity of the most limiting layer to transmit water (Ksat):* Moderately high to high (0.20 to 5.95 in/hr)  
*Depth to water table:* About 6 to 18 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Calcium carbonate, maximum in profile:* 25 percent  
*Available water storage in profile:* Moderate (about 6.9 inches)

### Interpretive groups

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 3w  
*Hydrologic Soil Group:* A/D  
*Hydric soil rating:* No

### Minor Components

#### Amenia

*Percent of map unit:* 4 percent  
*Hydric soil rating:* No

#### Sun

*Percent of map unit:* 3 percent  
*Landform:* Till plains  
*Landform position (two-dimensional):* Toeslope  
*Landform position (three-dimensional):* Base slope  
*Down-slope shape:* Concave  
*Across-slope shape:* Concave  
*Hydric soil rating:* Yes

#### Churchville

*Percent of map unit:* 2 percent  
*Hydric soil rating:* No

#### Unnamed

*Percent of map unit:* 2 percent  
*Hydric soil rating:* No

#### Georgia

*Percent of map unit:* 2 percent  
*Hydric soil rating:* No

#### Bombay

*Percent of map unit:* 2 percent

*Hydric soil rating:* No

## **NeB—Nellis loam, 3 to 8 percent slopes**

### **Map Unit Setting**

*National map unit symbol:* 2wrdv  
*Elevation:* 80 to 1,540 feet  
*Mean annual precipitation:* 26 to 59 inches  
*Mean annual air temperature:* 39 to 48 degrees F  
*Frost-free period:* 110 to 170 days  
*Farmland classification:* All areas are prime farmland

### **Map Unit Composition**

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

### **Description of Nellis**

#### **Setting**

*Landform:* Low hills, drumlinoid ridges, terraces  
*Landform position (two-dimensional):* Summit, shoulder  
*Landform position (three-dimensional):* Crest, tread  
*Down-slope shape:* Convex  
*Across-slope shape:* Convex  
*Parent material:* Loamy lodgement till derived from limestone

#### **Typical profile**

*Ap - 0 to 8 inches:* loam  
*Bw1 - 8 to 18 inches:* loam  
*Bw2 - 18 to 27 inches:* loam  
*BC - 27 to 37 inches:* gravelly loam  
*C - 37 to 79 inches:* gravelly sandy loam

#### **Properties and qualities**

*Slope:* 3 to 8 percent  
*Percent of area covered with surface fragments:* 0.0 percent  
*Depth to restrictive feature:* More than 80 inches  
*Natural drainage class:* Well drained  
*Runoff class:* Low  
*Capacity of the most limiting layer to transmit water (Ksat):* Moderately low to very high (0.01 to 14.17 in/hr)  
*Depth to water table:* More than 80 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Calcium carbonate, maximum in profile:* 35 percent  
*Available water storage in profile:* Moderate (about 6.9 inches)

#### **Interpretive groups**

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 2e

## Custom Soil Resource Report

*Hydrologic Soil Group:* A  
*Hydric soil rating:* No

### Minor Components

#### **Amenia**

*Percent of map unit:* 5 percent  
*Landform:* Drumlinoid ridges  
*Landform position (two-dimensional):* Summit, shoulder, backslope  
*Landform position (three-dimensional):* Crest, side slope  
*Down-slope shape:* Concave  
*Across-slope shape:* Convex  
*Hydric soil rating:* No

#### **Massena**

*Percent of map unit:* 4 percent  
*Landform:* Drumlinoid ridges  
*Landform position (two-dimensional):* Toeslope, footslope  
*Landform position (three-dimensional):* Base slope  
*Down-slope shape:* Concave  
*Across-slope shape:* Concave  
*Hydric soil rating:* No

#### **Madrid**

*Percent of map unit:* 3 percent  
*Landform:* Drumlinoid ridges, hills, till plains  
*Landform position (two-dimensional):* Summit  
*Landform position (three-dimensional):* Crest  
*Down-slope shape:* Convex  
*Across-slope shape:* Convex  
*Hydric soil rating:* No

#### **Galway**

*Percent of map unit:* 3 percent  
*Landform:* Hills  
*Landform position (two-dimensional):* Summit, shoulder  
*Landform position (three-dimensional):* Crest  
*Down-slope shape:* Convex  
*Across-slope shape:* Convex  
*Hydric soil rating:* No

## **RmA—Rippowam fine sandy loam, 0 to 3 percent slopes**

### **Map Unit Setting**

*National map unit symbol:* 1vk0f  
*Elevation:* 100 to 510 feet  
*Mean annual precipitation:* 26 to 36 inches  
*Mean annual air temperature:* 45 to 48 degrees F  
*Frost-free period:* 130 to 150 days  
*Farmland classification:* Farmland of statewide importance

**Map Unit Composition**

*Rippowam and similar soils:* 85 percent

*Minor components:* 15 percent

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

**Description of Rippowam**

**Setting**

*Landform:* Flood plains

*Landform position (two-dimensional):* Toeslope

*Landform position (three-dimensional):* Dip

*Down-slope shape:* Convex

*Across-slope shape:* Convex

*Parent material:* Loamy alluvium derived from igneous and sedimentary rock

**Typical profile**

*Oe - 0 to 2 inches:* mucky peat

*Ap - 2 to 11 inches:* fine sandy loam

*Cg1 - 11 to 21 inches:* fine sandy loam

*Cg2 - 21 to 29 inches:* fine sandy loam

*Cg3 - 29 to 36 inches:* fine sandy loam

*Cg4 - 36 to 43 inches:* fine sandy loam

*Cg5 - 43 to 72 inches:* very gravelly loamy sand

**Properties and qualities**

*Slope:* 0 to 3 percent

*Depth to restrictive feature:* More than 80 inches

*Natural drainage class:* Poorly drained

*Runoff class:* Very high

*Capacity of the most limiting layer to transmit water (Ksat):* Moderately high to high (0.20 to 5.95 in/hr)

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

*Frequency of flooding:* Frequent

*Frequency of ponding:* None

*Available water storage in profile:* Moderate (about 6.5 inches)

**Interpretive groups**

*Land capability classification (irrigated):* None specified

*Land capability classification (nonirrigated):* 4w

*Hydrologic Soil Group:* A/D

*Hydric soil rating:* Yes

**Minor Components**

**Pootatuck**

*Percent of map unit:* 5 percent

*Hydric soil rating:* No

**Unnamed**

*Percent of map unit:* 4 percent

*Hydric soil rating:* No

**Fluvaquents-udifluvents**

*Percent of map unit:* 3 percent

*Landform:* Flood plains

*Landform position (two-dimensional):* Toeslope

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

## Custom Soil Resource Report

*Down-slope shape:* Concave  
*Across-slope shape:* Concave  
*Hydric soil rating:* No

### **Gougeville**

*Percent of map unit:* 3 percent  
*Landform:* Deltas  
*Landform position (two-dimensional):* Toeslope  
*Landform position (three-dimensional):* Tread  
*Down-slope shape:* Concave  
*Across-slope shape:* Concave  
*Hydric soil rating:* Yes

## **StA—Stafford fine sandy loam, 0 to 3 percent slopes**

### **Map Unit Setting**

*National map unit symbol:* bq29  
*Elevation:* 100 to 510 feet  
*Mean annual precipitation:* 26 to 36 inches  
*Mean annual air temperature:* 45 to 48 degrees F  
*Frost-free period:* 130 to 150 days  
*Farmland classification:* Farmland of statewide importance

### **Map Unit Composition**

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

### **Description of Stafford**

#### **Setting**

*Landform:* Deltas  
*Landform position (two-dimensional):* Footslope, toeslope  
*Landform position (three-dimensional):* Tread  
*Down-slope shape:* Concave  
*Across-slope shape:* Concave  
*Parent material:* Sandy glaciolacustrine deposits derived from igneous and sedimentary rock

#### **Typical profile**

*Ap - 0 to 10 inches:* fine sandy loam  
*Bw - 10 to 20 inches:* loamy sand  
*Bg - 20 to 32 inches:* loamy sand  
*Cg - 32 to 72 inches:* sand

#### **Properties and qualities**

*Slope:* 0 to 3 percent  
*Depth to restrictive feature:* More than 80 inches  
*Natural drainage class:* Somewhat poorly drained  
*Runoff class:* Very high

## Custom Soil Resource Report

*Capacity of the most limiting layer to transmit water (Ksat):* High to very high (1.98 to 19.98 in/hr)

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

*Frequency of flooding:* None

*Frequency of ponding:* None

*Available water storage in profile:* Low (about 4.2 inches)

### Interpretive groups

*Land capability classification (irrigated):* None specified

*Land capability classification (nonirrigated):* 3w

*Hydrologic Soil Group:* A/D

*Hydric soil rating:* No

### Minor Components

#### Deerfield

*Percent of map unit:* 5 percent

*Hydric soil rating:* No

#### Gougeville

*Percent of map unit:* 4 percent

*Landform:* Deltas

*Landform position (two-dimensional):* Toeslope

*Landform position (three-dimensional):* Tread

*Down-slope shape:* Concave

*Across-slope shape:* Concave

*Hydric soil rating:* Yes

#### Tonawanda

*Percent of map unit:* 3 percent

*Hydric soil rating:* No

#### Cosad

*Percent of map unit:* 2 percent

*Hydric soil rating:* No

#### Claverack

*Percent of map unit:* 1 percent

*Hydric soil rating:* No

## SuA—Sun silt loam, 0 to 3 percent slopes

### Map Unit Setting

*National map unit symbol:* 1vk04

*Elevation:* 100 to 510 feet

*Mean annual precipitation:* 26 to 36 inches

*Mean annual air temperature:* 45 to 48 degrees F

*Frost-free period:* 130 to 150 days

*Farmland classification:* Farmland of statewide importance

### Map Unit Composition

*Sun and similar soils:* 85 percent

## Custom Soil Resource Report

*Minor components: 15 percent*

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

### Description of Sun

#### Setting

*Landform: Drumlinoid ridges, till plains*

*Landform position (two-dimensional): Toeslope*

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

*Down-slope shape: Concave*

*Across-slope shape: Concave*

*Parent material: Loamy lodgment till derived from limestone*

#### Typical profile

*Oe - 0 to 3 inches: mucky peat*

*Ap - 3 to 11 inches: silt loam*

*Bg1 - 11 to 15 inches: loam*

*Bg2 - 15 to 25 inches: loam*

*BCg - 25 to 40 inches: gravelly fine sandy loam*

*Cd - 40 to 54 inches: gravelly sandy loam*

*C - 54 to 72 inches: gravelly sandy loam*

#### Properties and qualities

*Slope: 0 to 3 percent*

*Depth to restrictive feature: 20 to 40 inches to densic material*

*Natural drainage class: 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 0 to 12 inches*

*Frequency of flooding: None*

*Frequency of ponding: None*

*Calcium carbonate, maximum in profile: 25 percent*

*Available water storage in profile: Moderate (about 7.1 inches)*

#### Interpretive groups

*Land capability classification (irrigated): None specified*

*Land capability classification (nonirrigated): 4w*

*Hydrologic Soil Group: A/D*

*Hydric soil rating: Yes*

### Minor Components

#### Massena

*Percent of map unit: 5 percent*

*Hydric soil rating: No*

#### Whallonsburg

*Percent of map unit: 4 percent*

*Landform: Swamps*

*Landform position (two-dimensional): Toeslope*

*Landform position (three-dimensional): Dip*

*Down-slope shape: Concave*

*Across-slope shape: Concave*

*Hydric soil rating: Yes*

#### Unnamed

*Percent of map unit: 3 percent*

## Custom Soil Resource Report

*Hydric soil rating:* No

### **Covington**

*Percent of map unit:* 3 percent

*Landform:* Lake plains

*Landform position (two-dimensional):* Toeslope

*Landform position (three-dimensional):* Tread

*Down-slope shape:* Concave

*Across-slope shape:* Concave

*Hydric soil rating:* Yes

# **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.

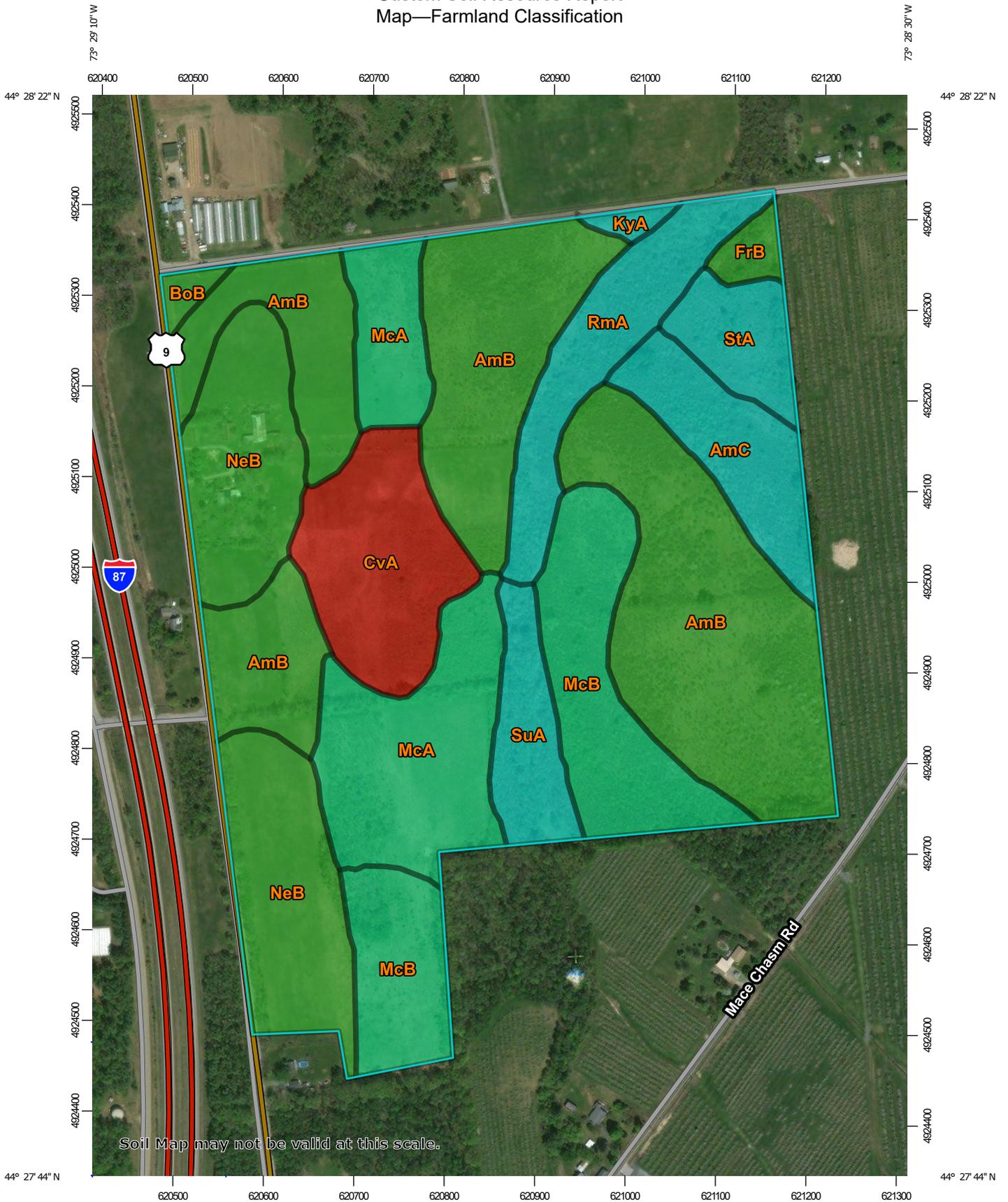
## **Land Classifications**

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



Map Scale: 1:5,810 if printed on A portrait (8.5" x 11") sheet.

0 50 100 200 300 Meters

0 250 500 1000 1500 Feet

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 18N WGS84



# 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 warm enough, and either drained or 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 drained		Farmland of statewide importance, if thawed		Prime farmland if drained		Farmland of statewide importance
	Farmland of statewide importance, if 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 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 irrigated		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, if irrigated		Prime farmland if irrigated		Farmland of statewide importance, if protected from flooding or not frequently flooded during the growing season
							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

<ul style="list-style-type: none"> <li> Farmland of statewide importance, if drained and either protected from flooding or not frequently flooded during the growing season</li> <li> Farmland of statewide importance, if irrigated and drained</li> <li> Farmland of statewide importance, if irrigated and either protected from flooding or not frequently flooded during the growing season</li> <li> Farmland of statewide importance, if subsoiled, completely removing the root inhibiting soil layer</li> <li> Farmland of statewide importance, if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60</li> </ul>	<ul style="list-style-type: none"> <li> Farmland of statewide importance, if irrigated and reclaimed of excess salts and sodium</li> <li> Farmland of statewide importance, if drained or either protected from flooding or not frequently flooded during the growing season</li> <li> Farmland of statewide importance, if warm enough, and either drained or either protected from flooding or not frequently flooded during the growing season</li> <li> Farmland of statewide importance, if warm enough</li> <li> Farmland of statewide importance, if thawed</li> <li> Farmland of local importance</li> <li> Farmland of local importance, if irrigated</li> </ul>	<ul style="list-style-type: none"> <li> Farmland of unique importance</li> <li> Not rated or not available</li> </ul> <p><b>Water Features</b></p> <ul style="list-style-type: none"> <li> Streams and Canals</li> </ul> <p><b>Transportation</b></p> <ul style="list-style-type: none"> <li> Rails</li> <li> Interstate Highways</li> <li> US Routes</li> <li> Major Roads</li> <li> Local Roads</li> </ul> <p><b>Background</b></p> <ul style="list-style-type: none"> <li> Aerial Photography</li> </ul>	<p>The soil surveys that comprise your AOI were mapped at 1:24,000.</p> <div style="border: 1px solid black; padding: 5px; margin: 10px 0;"> <p>Warning: Soil Map may not be valid at this scale.</p> <p>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.</p> </div> <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: Essex County, New York          Survey Area Data: Version 19, Sep 16, 2019</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: Jun 28, 2012—Mar 29, 2017</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
AmB	Amenia fine sandy loam, 2 to 8 percent slopes	All areas are prime farmland	42.6	33.9%
AmC	Amenia fine sandy loam, 8 to 15 percent slopes	Farmland of statewide importance	6.3	5.0%
BoB	Bombay gravelly loam, 3 to 8 percent slopes	All areas are prime farmland	0.7	0.6%
CvA	Covington clay, 0 to 3 percent slopes	Not prime farmland	9.6	7.7%
FrB	Factoryville loamy fine sand, 2 to 8 percent slopes	All areas are prime farmland	1.2	0.9%
KyA	Kingsbury silty clay loam, 0 to 3 percent slopes	Farmland of statewide importance	0.6	0.5%
McA	Massena gravelly silt loam, 0 to 3 percent slopes	Prime farmland if drained	15.5	12.3%
McB	Massena gravelly silt loam, 3 to 8 percent slopes	Prime farmland if drained	15.4	12.2%
NeB	Nellis loam, 3 to 8 percent slopes	All areas are prime farmland	17.9	14.2%
RmA	Rippowam fine sandy loam, 0 to 3 percent slopes	Farmland of statewide importance	7.7	6.1%
StA	Stafford fine sandy loam, 0 to 3 percent slopes	Farmland of statewide importance	3.8	3.0%
SuA	Sun silt loam, 0 to 3 percent slopes	Farmland of statewide importance	4.6	3.6%
<b>Totals for Area of Interest</b>			<b>125.9</b>	<b>100.0%</b>

### Rating Options—Farmland Classification

*Aggregation Method:* No Aggregation Necessary

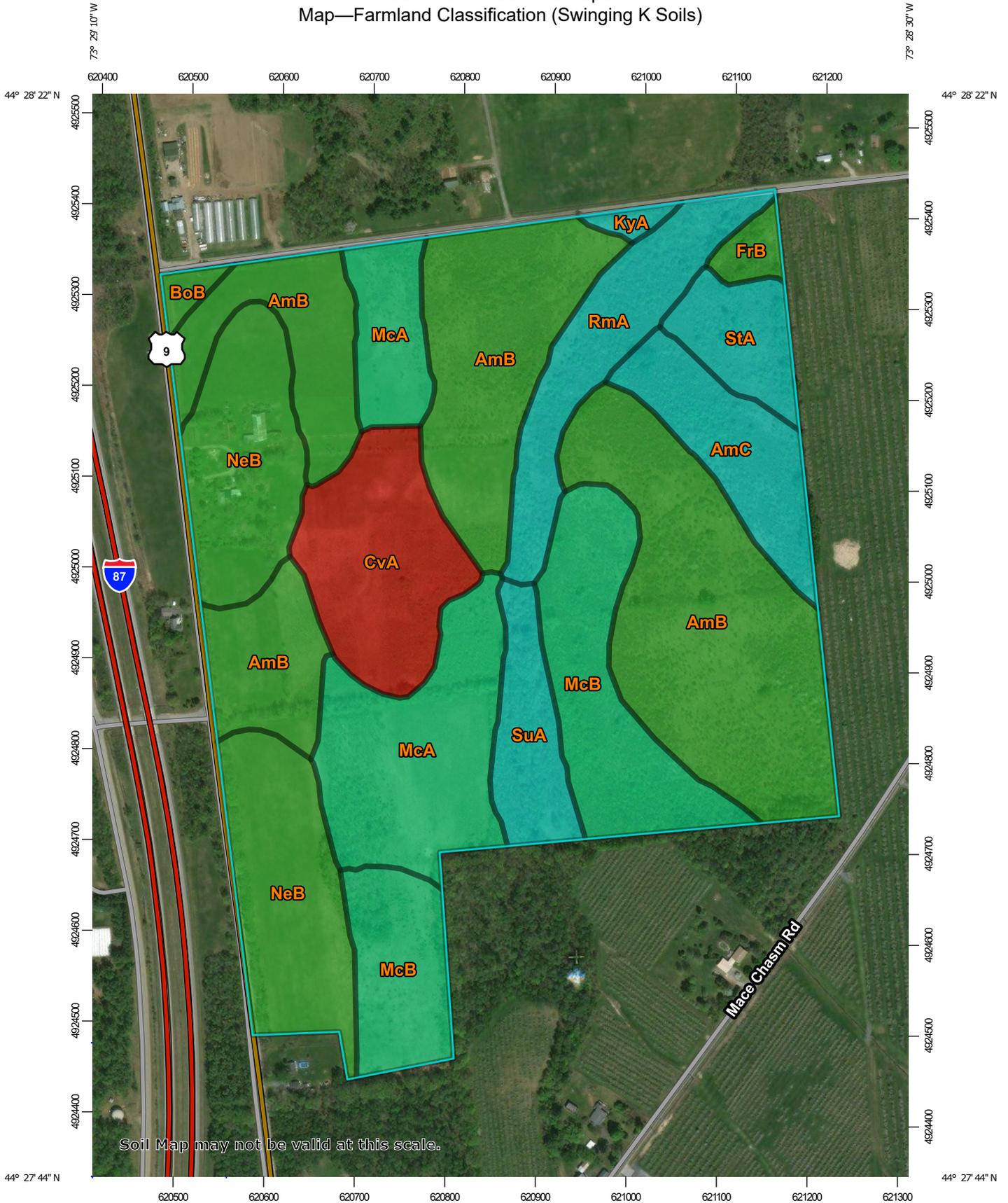
*Tie-break Rule:* Lower

### Farmland Classification (Swinging K Soils)

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 (Swinging K Soils)



Soil Map may not be valid at this scale.

Map Scale: 1:5,810 if printed on A portrait (8.5" x 11") sheet.  
 0 50 100 200 300 Meters  
 0 250 500 1000 1500 Feet  
 Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 18N WGS84

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

## Custom Soil Resource Report

<ul style="list-style-type: none"> <li> Farmland of statewide importance, if drained and either protected from flooding or not frequently flooded during the growing season</li> <li> Farmland of statewide importance, if irrigated and drained</li> <li> Farmland of statewide importance, if irrigated and either protected from flooding or not frequently flooded during the growing season</li> <li> Farmland of statewide importance, if subsoiled, completely removing the root inhibiting soil layer</li> <li> Farmland of statewide importance, if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60</li> </ul>	<ul style="list-style-type: none"> <li> Farmland of statewide importance, if irrigated and reclaimed of excess salts and sodium</li> <li> Farmland of statewide importance, if drained or either protected from flooding or not frequently flooded during the growing season</li> <li> Farmland of statewide importance, if warm enough, and either drained or either protected from flooding or not frequently flooded during the growing season</li> <li> Farmland of statewide importance, if warm enough</li> <li> Farmland of statewide importance, if thawed</li> <li> Farmland of local importance</li> <li> Farmland of local importance, if irrigated</li> </ul>	<ul style="list-style-type: none"> <li> Farmland of unique importance</li> <li> Not rated or not available</li> </ul> <p><b>Water Features</b></p> <ul style="list-style-type: none"> <li> Streams and Canals</li> </ul> <p><b>Transportation</b></p> <ul style="list-style-type: none"> <li> Rails</li> <li> Interstate Highways</li> <li> US Routes</li> <li> Major Roads</li> <li> Local Roads</li> </ul> <p><b>Background</b></p> <ul style="list-style-type: none"> <li> Aerial Photography</li> </ul>	<p>The soil surveys that comprise your AOI were mapped at 1:24,000.</p> <div style="border: 1px solid black; padding: 5px; margin: 10px 0;"> <p>Warning: Soil Map may not be valid at this scale.</p> <p>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.</p> </div> <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: Essex County, New York          Survey Area Data: Version 19, Sep 16, 2019</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: Jun 28, 2012—Mar 29, 2017</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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Custom Soil Resource Report

**Table—Farmland Classification (Swinging K Soils)**

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
AmB	Amenia fine sandy loam, 2 to 8 percent slopes	All areas are prime farmland	42.6	33.9%
AmC	Amenia fine sandy loam, 8 to 15 percent slopes	Farmland of statewide importance	6.3	5.0%
BoB	Bombay gravelly loam, 3 to 8 percent slopes	All areas are prime farmland	0.7	0.6%
CvA	Covington clay, 0 to 3 percent slopes	Not prime farmland	9.6	7.7%
FrB	Factoryville loamy fine sand, 2 to 8 percent slopes	All areas are prime farmland	1.2	0.9%
KyA	Kingsbury silty clay loam, 0 to 3 percent slopes	Farmland of statewide importance	0.6	0.5%
McA	Massena gravelly silt loam, 0 to 3 percent slopes	Prime farmland if drained	15.5	12.3%
McB	Massena gravelly silt loam, 3 to 8 percent slopes	Prime farmland if drained	15.4	12.2%
NeB	Nellis loam, 3 to 8 percent slopes	All areas are prime farmland	17.9	14.2%
RmA	Rippowam fine sandy loam, 0 to 3 percent slopes	Farmland of statewide importance	7.7	6.1%
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<b>Totals for Area of Interest</b>			<b>125.9</b>	<b>100.0%</b>

**Rating Options—Farmland Classification (Swinging K Soils)**

*Aggregation Method:* No Aggregation Necessary

*Tie-break Rule:* Lower