



United States  
Department of  
Agriculture

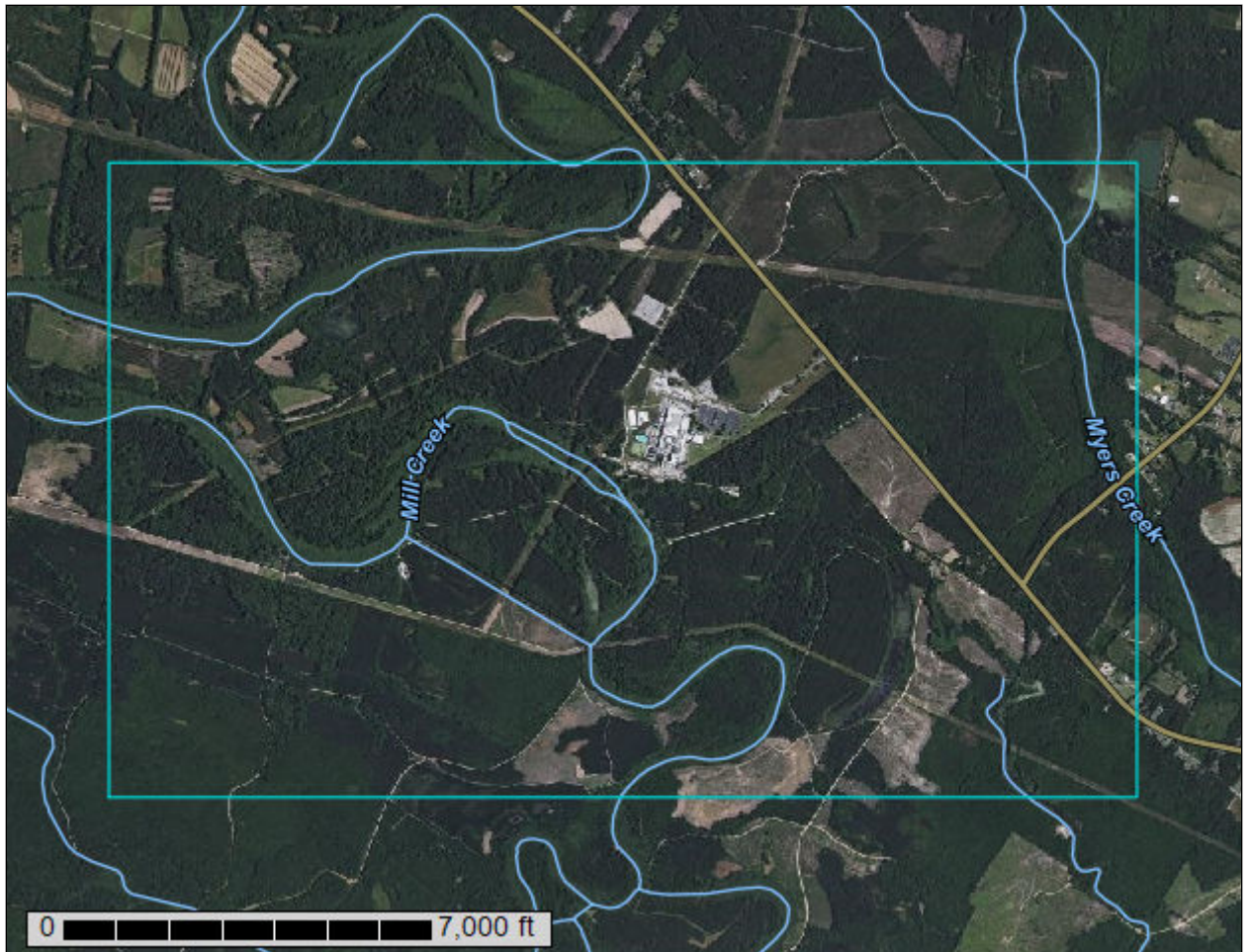
**NRCS**

Natural  
Resources  
Conservation  
Service

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

# Custom Soil Resource Report for Richland County, South Carolina

## CFFF Site and Vicinity



# 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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# How Soil Surveys Are Made

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Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They observed and described many soil profiles. A soil profile is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA.

The soils and miscellaneous areas in a survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil

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scientists classified and named the soils in the survey area, they compared the individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

The objective of soil mapping is not to delineate pure map unit components; the objective is to separate the landscape into landforms or landform segments that have similar use and management requirements. Each map unit is defined by a unique combination of soil components and/or miscellaneous areas in predictable proportions. Some components may be highly contrasting to the other components of the map unit. The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The delineation of such landforms and landform segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Soil scientists make many field observations in the process of producing a soil map. The frequency of observation is dependent upon several factors, including scale of mapping, intensity of mapping, design of map units, complexity of the landscape, and experience of the soil scientist. Observations are made to test and refine the soil-landscape model and predictions and to verify the classification of the soils at specific locations. Once the soil-landscape model is refined, a significantly smaller number of measurements of individual soil properties are made and recorded. These measurements may include field measurements, such as those for color, depth to bedrock, and texture, and laboratory measurements, such as those for content of sand, silt, clay, salt, and other components. Properties of each soil typically vary from one point to another across the landscape.

Observations for map unit components are aggregated to develop ranges of characteristics for the components. The aggregated values are presented. Direct measurements do not exist for every property presented for every map unit component. Values for some properties are estimated from combinations of other properties.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and

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identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

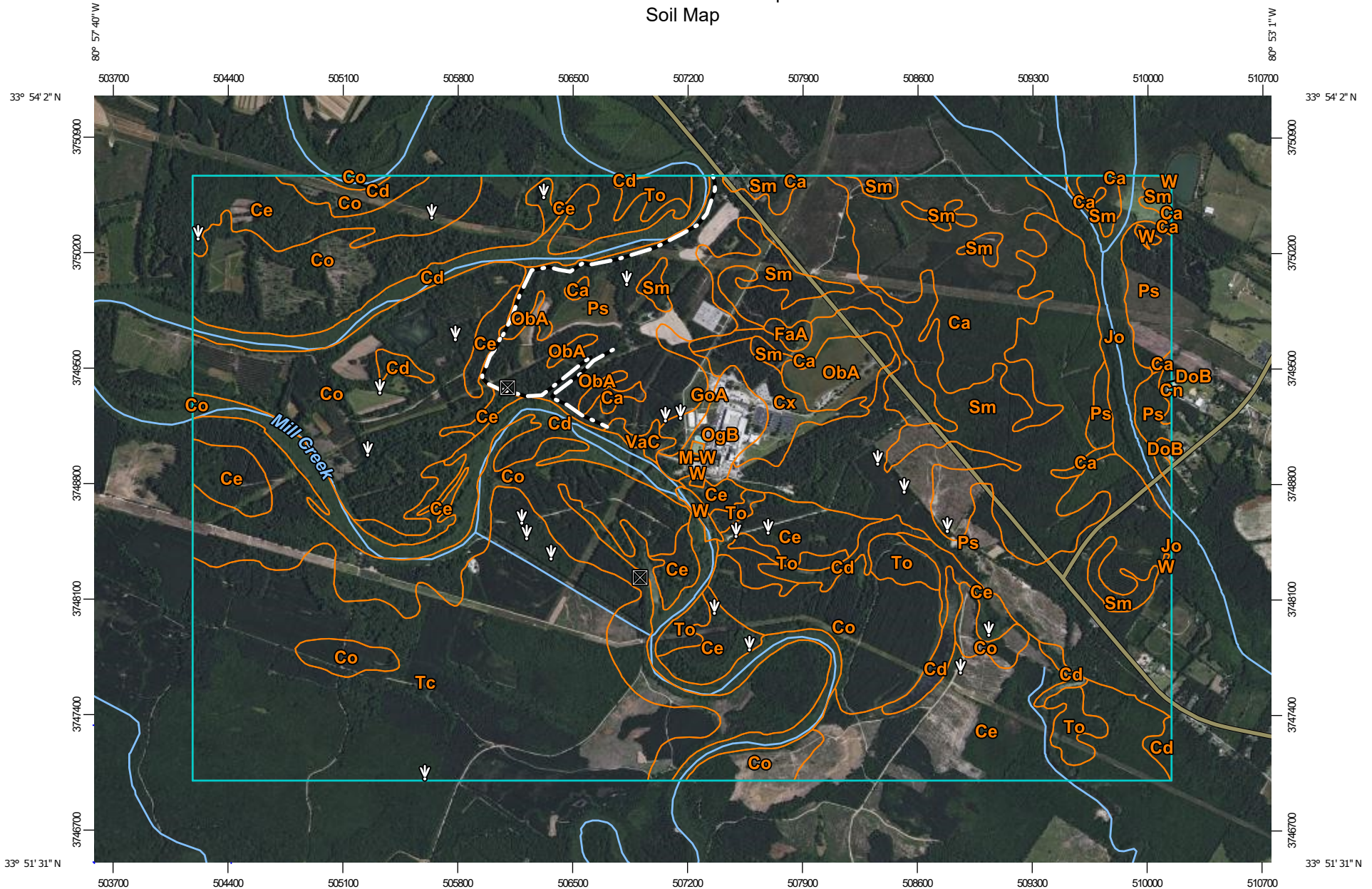
# Soil Map

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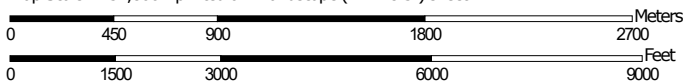
The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.



# Custom Soil Resource Report Soil Map




Map Scale: 1:32,800 if printed on A landscape (11" x 8.5") sheet.



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.

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: Richland County, South Carolina  
 Survey Area Data: Version 22, Jun 3, 2020

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

Date(s) aerial images were photographed: May 7, 2020—Jul 5, 2020

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

## Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
Ca	Cantey loam	336.4	6.2%
Cd	Chastain silty clay loam	398.1	7.3%
Ce	Chewacla loam, 0 to 2 percent slopes, frequently flooded	668.6	12.3%
Cn	Clarendon sandy loam	0.0	0.0%
Co	Congaree loam	1,336.3	24.6%
Cx	Coxville fine sandy loam	54.2	1.0%
DoB	Dothan loamy sand, 2 to 6 percent slopes	6.7	0.1%
FaA	Faceville sandy loam, 0 to 2 percent slopes	9.1	0.2%
GoA	Goldsboro sandy loam, 0 to 2 percent slopes	21.4	0.4%
Jo	Johnston loam	109.8	2.0%
M-W	Miscellaneous Water	1.3	0.0%
ObA	Orangeburg loamy sand, 0 to 2 percent slopes	71.0	1.3%
OgB	Orangeburg-Urban land complex, 2 to 6 percent slopes	56.0	1.0%
Ps	Persanti very fine sandy loam	901.1	16.6%
Sm	Smithboro loam	463.0	8.5%
Tc	Tawcaw silty clay loam	868.0	16.0%
To	Toccoa loam	103.1	1.9%
VaC	Vaucluse loamy sand, 6 to 10 percent slopes	10.4	0.2%
W	Water	11.7	0.2%
<b>Totals for Area of Interest</b>		<b>5,426.1</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

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characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

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

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

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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.

## Richland County, South Carolina

### Ca—Cantey loam

#### Map Unit Setting

*National map unit symbol:* 4ddh

*Elevation:* 80 to 550 feet

*Mean annual precipitation:* 44 to 55 inches

*Mean annual air temperature:* 61 to 70 degrees F

*Frost-free period:* 230 to 265 days

*Farmland classification:* Farmland of statewide importance

#### Map Unit Composition

*Cantey and similar soils:* 100 percent

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

#### Description of Cantey

##### Setting

*Landform:* Depressions, flats, marine terraces

*Landform position (three-dimensional):* Tread

*Down-slope shape:* Linear

*Across-slope shape:* Convex

*Parent material:* Clayey marine deposits

##### Typical profile

*A - 0 to 5 inches:* loam

*BEg - 5 to 8 inches:* sandy loam

*Btg - 8 to 81 inches:* clay

##### Properties and qualities

*Slope:* 0 to 2 percent

*Depth to restrictive feature:* More than 80 inches

*Drainage class:* Poorly drained

*Runoff class:* Very high

*Capacity of the most limiting layer to transmit water (Ksat):* Moderately high (0.20 to 0.57 in/hr)

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

*Frequency of flooding:* None

*Frequency of ponding:* None

*Available water capacity:* Low (about 5.8 inches)

##### Interpretive groups

*Land capability classification (irrigated):* None specified

*Land capability classification (nonirrigated):* 3w

*Hydrologic Soil Group:* C/D

*Hydric soil rating:* Yes

## **Cd—Chastain silty clay loam**

### **Map Unit Setting**

*National map unit symbol:* 4ddj  
*Elevation:* 80 to 550 feet  
*Mean annual precipitation:* 44 to 55 inches  
*Mean annual air temperature:* 61 to 70 degrees F  
*Frost-free period:* 230 to 265 days  
*Farmland classification:* Not prime farmland

### **Map Unit Composition**

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

### **Description of Chastain**

#### **Setting**

*Landform:* Flood plains  
*Down-slope shape:* Linear  
*Across-slope shape:* Linear  
*Parent material:* Clayey alluvium

#### **Typical profile**

*A - 0 to 4 inches:* silty clay loam  
*Bg - 4 to 18 inches:* silty clay loam  
*Bg - 18 to 41 inches:* clay  
*Cg - 41 to 82 inches:* loamy sand

#### **Properties and qualities**

*Slope:* 0 to 2 percent  
*Depth to restrictive feature:* More than 80 inches  
*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:* FrequentNone  
*Frequency of ponding:* None  
*Available water capacity:* Moderate (about 6.7 inches)

#### **Interpretive groups**

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 6w  
*Hydrologic Soil Group:* C/D  
*Hydric soil rating:* Yes

## **Ce—Chewacla loam, 0 to 2 percent slopes, frequently flooded**

### **Map Unit Setting**

*National map unit symbol:* 2sclw

*Elevation:* 90 to 1,930 feet

*Mean annual precipitation:* 40 to 69 inches

*Mean annual air temperature:* 50 to 66 degrees F

*Frost-free period:* 180 to 280 days

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

### **Map Unit Composition**

*Chewacla, frequently flooded, and similar soils:* 80 percent

*Minor components:* 20 percent

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

### **Description of Chewacla, Frequently Flooded**

#### **Setting**

*Landform:* Flood plains

*Landform position (two-dimensional):* Toeslope

*Landform position (three-dimensional):* Talf

*Down-slope shape:* Linear

*Across-slope shape:* Linear

*Parent material:* Alluvium

#### **Typical profile**

*A - 0 to 10 inches:* loam

*Bw - 10 to 80 inches:* sandy clay loam

#### **Properties and qualities**

*Slope:* 0 to 2 percent

*Depth to restrictive feature:* More than 80 inches

*Drainage class:* Somewhat poorly drained

*Runoff class:* Low

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

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

*Frequency of flooding:* Frequent

*Frequency of ponding:* None

*Available water capacity:* High (about 10.8 inches)

#### **Interpretive groups**

*Land capability classification (irrigated):* None specified

*Land capability classification (nonirrigated):* 4w

*Hydrologic Soil Group:* B/D

*Hydric soil rating:* No

### **Minor Components**

#### **Toccoa, frequently flooded**

*Percent of map unit:* 15 percent



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*Landform:* Flood plains  
*Landform position (two-dimensional):* Toeslope  
*Down-slope shape:* Linear  
*Across-slope shape:* Linear  
*Hydric soil rating:* No

### **Wehadkee, ponded**

*Percent of map unit:* 5 percent  
*Landform:* Flood plains  
*Landform position (two-dimensional):* Toeslope  
*Down-slope shape:* Linear  
*Across-slope shape:* Linear  
*Hydric soil rating:* Yes

## **Cn—Clarendon sandy loam**

### **Map Unit Setting**

*National map unit symbol:* 4ddm  
*Elevation:* 80 to 550 feet  
*Mean annual precipitation:* 44 to 55 inches  
*Mean annual air temperature:* 61 to 70 degrees F  
*Frost-free period:* 230 to 265 days  
*Farmland classification:* All areas are prime farmland

### **Map Unit Composition**

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

### **Description of Clarendon**

#### **Setting**

*Landform:* Marine terraces  
*Landform position (three-dimensional):* Tread  
*Down-slope shape:* Linear  
*Across-slope shape:* Convex  
*Parent material:* Loamy marine deposits

#### **Typical profile**

*A - 0 to 6 inches:* sandy loam  
*E - 6 to 10 inches:* sandy loam  
*Bt - 10 to 36 inches:* sandy clay loam  
*Btg - 36 to 73 inches:* sandy clay loam

#### **Properties and qualities**

*Slope:* 0 to 2 percent  
*Depth to restrictive feature:* More than 80 inches  
*Drainage class:* Moderately well drained  
*Runoff class:* Low  
*Capacity of the most limiting layer to transmit water (Ksat):* Moderately high (0.20 to 0.57 in/hr)  
*Depth to water table:* About 24 inches

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*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Available water capacity:* Moderate (about 7.0 inches)

### Interpretive groups

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

## Co—Congaree loam

### Map Unit Setting

*National map unit symbol:* 4ddn  
*Elevation:* 80 to 550 feet  
*Mean annual precipitation:* 44 to 55 inches  
*Mean annual air temperature:* 61 to 70 degrees F  
*Frost-free period:* 230 to 265 days  
*Farmland classification:* Prime farmland if protected from flooding or not frequently flooded during the growing season

### Map Unit Composition

*Tawcaw and similar soils:* 85 percent  
*Minor components:* 4 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

### Description of Tawcaw

#### Setting

*Landform:* Flood plains  
*Landform position (three-dimensional):* Tread  
*Down-slope shape:* Linear  
*Across-slope shape:* Concave  
*Parent material:* Clayey alluvium

#### Typical profile

*A - 0 to 4 inches:* silty clay loam  
*B1 - 4 to 22 inches:* silty clay  
*B2 - 22 to 61 inches:* silty clay loam

#### Properties and qualities

*Slope:* 0 to 2 percent  
*Depth to restrictive feature:* More than 80 inches  
*Drainage class:* Somewhat poorly drained  
*Runoff class:* Very high  
*Capacity of the most limiting layer to transmit water (Ksat):* Very low to moderately high (0.00 to 0.57 in/hr)  
*Depth to water table:* About 18 inches  
*Frequency of flooding:* OccasionalNone  
*Frequency of ponding:* None  
*Available water capacity:* High (about 9.8 inches)

**Interpretive groups**

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

**Minor Components**

**Chastain**

*Percent of map unit:* 2 percent  
*Landform:* Flood plains  
*Down-slope shape:* Linear  
*Across-slope shape:* Linear  
*Hydric soil rating:* Yes

**Congaree**

*Percent of map unit:* 2 percent  
*Landform:* Flood plains  
*Landform position (three-dimensional):* Tread  
*Down-slope shape:* Linear  
*Across-slope shape:* Concave  
*Hydric soil rating:* No

**Cx—Coxville fine sandy loam**

**Map Unit Setting**

*National map unit symbol:* 4ddp  
*Elevation:* 80 to 550 feet  
*Mean annual precipitation:* 44 to 55 inches  
*Mean annual air temperature:* 61 to 70 degrees F  
*Frost-free period:* 230 to 265 days  
*Farmland classification:* Farmland of statewide importance

**Map Unit Composition**

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

**Description of Coxville**

**Setting**

*Landform:* Depressions, flats, marine terraces  
*Landform position (three-dimensional):* Tread  
*Down-slope shape:* Linear  
*Across-slope shape:* Convex  
*Parent material:* Clayey marine deposits

**Typical profile**

*A - 0 to 7 inches:* fine sandy loam  
*Eg - 7 to 9 inches:* fine sandy loam  
*Btg - 9 to 65 inches:* sandy clay

## Custom Soil Resource Report

*BCg - 65 to 80 inches: sandy clay loam*

### **Properties and qualities**

*Slope: 0 to 2 percent*

*Depth to restrictive feature: More than 80 inches*

*Drainage class: Poorly drained*

*Runoff class: Very high*

*Capacity of the most limiting layer to transmit water (Ksat): Moderately high (0.20 to 0.57 in/hr)*

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

*Frequency of flooding: None*

*Frequency of ponding: None*

*Available water capacity: High (about 9.5 inches)*

### **Interpretive groups**

*Land capability classification (irrigated): None specified*

*Land capability classification (nonirrigated): 3w*

*Hydrologic Soil Group: C/D*

*Hydric soil rating: Yes*

## **DoB—Dothan loamy sand, 2 to 6 percent slopes**

### **Map Unit Setting**

*National map unit symbol: 2wb94*

*Elevation: 50 to 660 feet*

*Mean annual precipitation: 40 to 69 inches*

*Mean annual air temperature: 55 to 70 degrees F*

*Frost-free period: 190 to 310 days*

*Farmland classification: All areas are prime farmland*

### **Map Unit Composition**

*Dothan and similar soils: 82 percent*

*Minor components: 18 percent*

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

### **Description of Dothan**

#### **Setting**

*Landform: Interfluves*

*Landform position (two-dimensional): Shoulder*

*Landform position (three-dimensional): Interfluve*

*Down-slope shape: Convex*

*Across-slope shape: Linear*

*Parent material: Loamy marine deposits*

#### **Typical profile**

*Ap - 0 to 7 inches: loamy sand*

*E - 7 to 13 inches: loamy sand*

*Bt - 13 to 40 inches: sandy clay loam*

*Btv - 40 to 79 inches: sandy clay loam*

### **Properties and qualities**

*Slope: 2 to 6 percent*

## Custom Soil Resource Report

*Depth to restrictive feature:* More than 80 inches  
*Drainage class:* Well drained  
*Capacity of the most limiting layer to transmit water (Ksat):* Moderately high (0.20 to 0.57 in/hr)  
*Depth to water table:* About 36 to 59 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Maximum salinity:* Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)  
*Available water capacity:* Moderate (about 6.8 inches)

### Interpretive groups

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 2e  
*Hydrologic Soil Group:* B  
*Forage suitability group:* Loamy and clayey soils on rises and knolls of mesic uplands (G133AA321FL)  
*Other vegetative classification:* Loamy and clayey soils on rises and knolls of mesic uplands (G133AA321FL)  
*Hydric soil rating:* No

### Minor Components

#### Norfolk

*Percent of map unit:* 8 percent  
*Landform:* Interfluves  
*Landform position (two-dimensional):* Shoulder  
*Landform position (three-dimensional):* Interfluve  
*Down-slope shape:* Convex  
*Across-slope shape:* Linear  
*Hydric soil rating:* No

#### Fuquay

*Percent of map unit:* 5 percent  
*Landform:* Interfluves  
*Landform position (two-dimensional):* Shoulder  
*Landform position (three-dimensional):* Interfluve  
*Down-slope shape:* Convex  
*Across-slope shape:* Linear  
*Hydric soil rating:* No

#### Orangeburg

*Percent of map unit:* 5 percent  
*Landform:* Marine terraces  
*Landform position (two-dimensional):* Backslope, shoulder, summit  
*Landform position (three-dimensional):* Side slope  
*Down-slope shape:* Linear  
*Across-slope shape:* Convex, linear  
*Hydric soil rating:* No

## **FaA—Faceville sandy loam, 0 to 2 percent slopes**

### **Map Unit Setting**

*National map unit symbol:* 4ddv  
*Elevation:* 80 to 550 feet  
*Mean annual precipitation:* 44 to 55 inches  
*Mean annual air temperature:* 61 to 70 degrees F  
*Frost-free period:* 230 to 265 days  
*Farmland classification:* All areas are prime farmland

### **Map Unit Composition**

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

### **Description of Faceville**

#### **Setting**

*Landform:* Marine terraces  
*Landform position (three-dimensional):* Tread  
*Down-slope shape:* Linear  
*Across-slope shape:* Convex  
*Parent material:* Clayey marine deposits

#### **Typical profile**

*A - 0 to 7 inches:* sandy loam  
*BA - 7 to 12 inches:* sandy clay loam  
*Bt - 12 to 84 inches:* sandy clay

#### **Properties and qualities**

*Slope:* 0 to 2 percent  
*Depth to restrictive feature:* More than 80 inches  
*Drainage class:* Well drained  
*Runoff class:* Low  
*Capacity of the most limiting layer to transmit water (Ksat):* Moderately high to high  
(0.57 to 1.98 in/hr)  
*Depth to water table:* More than 80 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Available water capacity:* Moderate (about 8.4 inches)

#### **Interpretive groups**

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 1  
*Hydrologic Soil Group:* B  
*Hydric soil rating:* No

## GoA—Goldsboro sandy loam, 0 to 2 percent slopes

### Map Unit Setting

*National map unit symbol:* 4df2  
*Elevation:* 80 to 550 feet  
*Mean annual precipitation:* 44 to 55 inches  
*Mean annual air temperature:* 61 to 70 degrees F  
*Frost-free period:* 230 to 265 days  
*Farmland classification:* All areas are prime farmland

### Map Unit Composition

*Goldsboro and similar soils:* 90 percent  
*Minor components:* 4 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

### Description of Goldsboro

#### Setting

*Landform:* Marine terraces  
*Landform position (three-dimensional):* Tread  
*Down-slope shape:* Linear  
*Across-slope shape:* Convex  
*Parent material:* Loamy marine deposits

#### Typical profile

*A - 0 to 7 inches:* sandy loam  
*E - 7 to 13 inches:* sandy loam  
*BE - 13 to 18 inches:* sandy loam  
*Bt - 18 to 65 inches:* sandy clay loam  
*Cg - 65 to 80 inches:* sandy loam

#### Properties and qualities

*Slope:* 0 to 2 percent  
*Depth to restrictive feature:* More than 80 inches  
*Drainage class:* Moderately well drained  
*Runoff class:* Low  
*Capacity of the most limiting layer to transmit water (Ksat):* Moderately high to high  
(0.57 to 1.98 in/hr)  
*Depth to water table:* About 24 to 36 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Available water capacity:* Moderate (about 7.2 inches)

#### Interpretive groups

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

## Minor Components

### Coxville

*Percent of map unit:* 2 percent  
*Landform:* Flats, marine terraces, depressions  
*Landform position (three-dimensional):* Tread  
*Down-slope shape:* Linear  
*Across-slope shape:* Convex  
*Hydric soil rating:* Yes

### Rains

*Percent of map unit:* 2 percent  
*Landform:* Depressions, flats, marine terraces  
*Landform position (three-dimensional):* Tread  
*Down-slope shape:* Linear  
*Across-slope shape:* Convex  
*Hydric soil rating:* Yes

## Jo—Johnston loam

### Map Unit Setting

*National map unit symbol:* 4df6  
*Elevation:* 80 to 550 feet  
*Mean annual precipitation:* 44 to 55 inches  
*Mean annual air temperature:* 61 to 70 degrees F  
*Frost-free period:* 230 to 265 days  
*Farmland classification:* Not prime farmland

### Map Unit Composition

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

### Description of Johnston

#### Setting

*Landform:* Flood plains  
*Down-slope shape:* Linear  
*Across-slope shape:* Linear  
*Parent material:* Loamy alluvium

#### Typical profile

*A1 - 0 to 9 inches:* loam  
*A2 - 9 to 38 inches:* mucky loam  
*Cg - 38 to 66 inches:* fine sandy loam

#### Properties and qualities

*Slope:* 0 to 2 percent  
*Depth to restrictive feature:* More than 80 inches  
*Drainage class:* Very poorly drained  
*Runoff class:* Very high



## Custom Soil Resource Report

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

*Depth to water table:* About 0 inches

*Frequency of flooding:* FrequentNone

*Frequency of ponding:* None

*Available water capacity:* Moderate (about 8.8 inches)

### **Interpretive groups**

*Land capability classification (irrigated):* None specified

*Land capability classification (nonirrigated):* 7w

*Hydrologic Soil Group:* A/D

*Hydric soil rating:* Yes

## **M-W—Miscellaneous Water**

### **Map Unit Composition**

*Water:* 100 percent

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

### **Description of Water**

#### **Interpretive groups**

*Land capability classification (irrigated):* None specified

*Land capability classification (nonirrigated):* 8

*Hydric soil rating:* No

## **ObA—Orangeburg loamy sand, 0 to 2 percent slopes**

### **Map Unit Setting**

*National map unit symbol:* 4dfp

*Elevation:* 80 to 550 feet

*Mean annual precipitation:* 44 to 55 inches

*Mean annual air temperature:* 61 to 70 degrees F

*Frost-free period:* 230 to 265 days

*Farmland classification:* All areas are prime farmland

### **Map Unit Composition**

*Orangeburg and similar soils:* 100 percent

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

### **Description of Orangeburg**

#### **Setting**

*Landform:* Marine terraces

*Landform position (three-dimensional):* Tread

*Down-slope shape:* Linear

*Across-slope shape:* Convex

*Parent material:* Loamy marine deposits

## Custom Soil Resource Report

### Typical profile

*A - 0 to 5 inches:* loamy sand  
*E - 5 to 12 inches:* loamy sand  
*BE - 12 to 18 inches:* sandy loam  
*Bt - 18 to 90 inches:* sandy clay loam

### Properties and qualities

*Slope:* 0 to 2 percent  
*Depth to restrictive feature:* More than 80 inches  
*Drainage class:* Well drained  
*Runoff class:* Low  
*Capacity of the most limiting layer to transmit water (Ksat):* Moderately high to high  
(0.57 to 1.98 in/hr)  
*Depth to water table:* More than 80 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Available water capacity:* Moderate (about 7.1 inches)

### Interpretive groups

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 1  
*Hydrologic Soil Group:* B  
*Hydric soil rating:* No

## OgB—Orangeburg-Urban land complex, 2 to 6 percent slopes

### Map Unit Setting

*National map unit symbol:* 4dfs  
*Elevation:* 80 to 550 feet  
*Mean annual precipitation:* 44 to 55 inches  
*Mean annual air temperature:* 61 to 70 degrees F  
*Frost-free period:* 230 to 265 days  
*Farmland classification:* Not prime farmland

### Map Unit Composition

*Orangeburg and similar soils:* 60 percent  
*Urban land:* 40 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

### Description of Orangeburg

#### Setting

*Landform:* Marine terraces  
*Landform position (three-dimensional):* Tread  
*Down-slope shape:* Linear  
*Across-slope shape:* Convex  
*Parent material:* Loamy marine deposits

#### Typical profile

*A - 0 to 5 inches:* loamy sand  
*E - 5 to 12 inches:* loamy sand  
*BE - 12 to 18 inches:* sandy loam

## Custom Soil Resource Report

*Bt - 18 to 90 inches: sandy clay loam*

### Properties and qualities

*Slope: 2 to 6 percent*

*Depth to restrictive feature: More than 80 inches*

*Drainage class: Well drained*

*Runoff class: Low*

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

*Depth to water table: More than 80 inches*

*Frequency of flooding: None*

*Frequency of ponding: None*

*Available water capacity: Moderate (about 7.1 inches)*

### Interpretive groups

*Land capability classification (irrigated): None specified*

*Land capability classification (nonirrigated): 2e*

*Hydrologic Soil Group: B*

*Hydric soil rating: No*

### Description of Urban Land

#### Setting

*Down-slope shape: Linear*

*Across-slope shape: Linear*

*Parent material: Loamy marine deposits*

#### Interpretive groups

*Land capability classification (irrigated): None specified*

*Land capability classification (nonirrigated): 8s*

*Hydric soil rating: Unranked*

## Ps—Persanti very fine sandy loam

### Map Unit Setting

*National map unit symbol: 4dfy*

*Elevation: 80 to 550 feet*

*Mean annual precipitation: 44 to 55 inches*

*Mean annual air temperature: 61 to 70 degrees F*

*Frost-free period: 230 to 265 days*

*Farmland classification: All areas are prime farmland*

### Map Unit Composition

*Persanti and similar soils: 96 percent*

*Minor components: 4 percent*

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

### Description of Persanti

#### Setting

*Landform: Marine terraces*

## Custom Soil Resource Report

*Landform position (three-dimensional):* Tread  
*Down-slope shape:* Linear  
*Across-slope shape:* Convex  
*Parent material:* Clayey marine deposits

### Typical profile

*Ap - 0 to 5 inches:* very fine sandy loam  
*BE - 5 to 10 inches:* sandy clay loam  
*Bt - 10 to 75 inches:* clay

### Properties and qualities

*Slope:* 0 to 2 percent  
*Depth to restrictive feature:* More than 80 inches  
*Drainage class:* Moderately well drained  
*Runoff class:* Low  
*Capacity of the most limiting layer to transmit water (Ksat):* Moderately high (0.20 to 0.57 in/hr)  
*Depth to water table:* About 24 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Available water capacity:* Low (about 5.9 inches)

### Interpretive groups

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

### Minor Components

#### Cantey

*Percent of map unit:* 4 percent  
*Landform:* Depressions, flats, marine terraces  
*Landform position (three-dimensional):* Tread  
*Down-slope shape:* Linear  
*Across-slope shape:* Convex  
*Hydric soil rating:* Yes

## Sm—Smithboro loam

### Map Unit Setting

*National map unit symbol:* 4dg0  
*Elevation:* 80 to 550 feet  
*Mean annual precipitation:* 44 to 55 inches  
*Mean annual air temperature:* 61 to 70 degrees F  
*Frost-free period:* 230 to 265 days  
*Farmland classification:* Farmland of statewide importance

### Map Unit Composition

*Smithboro and similar soils:* 90 percent  
*Minor components:* 4 percent

## Custom Soil Resource Report

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

### Description of Smithboro

#### Setting

*Landform:* Marine terraces  
*Landform position (three-dimensional):* Tread  
*Down-slope shape:* Linear  
*Across-slope shape:* Convex  
*Parent material:* Clayey marine deposits

#### Typical profile

*A - 0 to 6 inches:* loam  
*BE - 6 to 10 inches:* loam  
*Btg1 - 10 to 29 inches:* clay loam  
*Btg2 - 29 to 67 inches:* clay  
*Btg3 - 67 to 78 inches:* silty clay

#### Properties and qualities

*Slope:* 0 to 2 percent  
*Depth to restrictive feature:* More than 80 inches  
*Drainage class:* Somewhat poorly drained  
*Runoff class:* Very high  
*Capacity of the most limiting layer to transmit water (Ksat):* Moderately high (0.20 to 0.57 in/hr)  
*Depth to water table:* About 6 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Available water capacity:* Moderate (about 7.4 inches)

#### Interpretive groups

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

### Minor Components

#### Cantey

*Percent of map unit:* 4 percent  
*Landform:* Marine terraces, depressions, flats  
*Landform position (three-dimensional):* Tread  
*Down-slope shape:* Linear  
*Across-slope shape:* Convex  
*Hydric soil rating:* Yes

### Tc—Tawcaw silty clay loam

#### Map Unit Setting

*National map unit symbol:* 4dg2  
*Elevation:* 80 to 550 feet

## Custom Soil Resource Report

*Mean annual precipitation:* 44 to 55 inches  
*Mean annual air temperature:* 61 to 70 degrees F  
*Frost-free period:* 230 to 265 days  
*Farmland classification:* Not prime farmland

### Map Unit Composition

*Tawcaw and similar soils:* 85 percent  
*Minor components:* 5 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

### Description of Tawcaw

#### Setting

*Landform:* Flood plains  
*Landform position (three-dimensional):* Tread  
*Down-slope shape:* Linear  
*Across-slope shape:* Concave  
*Parent material:* Clayey alluvium

#### Typical profile

*A - 0 to 4 inches:* silty clay loam  
*B1 - 4 to 22 inches:* silty clay  
*B2 - 22 to 61 inches:* silty clay loam

#### Properties and qualities

*Slope:* 0 to 2 percent  
*Depth to restrictive feature:* More than 80 inches  
*Drainage class:* Somewhat poorly drained  
*Runoff class:* Very high  
*Capacity of the most limiting layer to transmit water (Ksat):* Very low to moderately high (0.00 to 0.57 in/hr)  
*Depth to water table:* About 18 inches  
*Frequency of flooding:* OccasionalNone  
*Frequency of ponding:* None  
*Available water capacity:* High (about 9.8 inches)

#### Interpretive groups

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

### Minor Components

#### Chastain

*Percent of map unit:* 5 percent  
*Landform:* Flood plains  
*Down-slope shape:* Linear  
*Across-slope shape:* Linear  
*Hydric soil rating:* Yes

## To—Toccoa loam

### Map Unit Setting

*National map unit symbol:* 4dg3

*Elevation:* 80 to 550 feet

*Mean annual precipitation:* 44 to 55 inches

*Mean annual air temperature:* 61 to 70 degrees F

*Frost-free period:* 230 to 265 days

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

### Map Unit Composition

*Toccoa and similar soils:* 100 percent

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

### Description of Toccoa

#### Setting

*Landform:* Flood plains

*Landform position (three-dimensional):* Tread

*Down-slope shape:* Linear

*Across-slope shape:* Concave

*Parent material:* Loamy alluvium

#### Typical profile

*A - 0 to 4 inches:* loam

*C1 - 4 to 12 inches:* loam

*C2 - 12 to 45 inches:* fine sandy loam

*C3 - 45 to 60 inches:* loamy sand

*C4 - 60 to 68 inches:* fine sand

*C5 - 68 to 72 inches:* fine sandy loam

#### Properties and qualities

*Slope:* 0 to 2 percent

*Depth to restrictive feature:* More than 80 inches

*Drainage class:* Moderately well drained

*Runoff class:* Very low

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

*Depth to water table:* About 30 inches

*Frequency of flooding:* Occasional

*Frequency of ponding:* None

*Available water capacity:* Moderate (about 8.2 inches)

#### Interpretive groups

*Land capability classification (irrigated):* None specified

*Land capability classification (nonirrigated):* 3w

*Hydrologic Soil Group:* B

*Hydric soil rating:* No

## **VaC—Vaucluse loamy sand, 6 to 10 percent slopes**

### **Map Unit Setting**

*National map unit symbol:* 4dg7  
*Elevation:* 80 to 550 feet  
*Mean annual precipitation:* 44 to 55 inches  
*Mean annual air temperature:* 61 to 70 degrees F  
*Frost-free period:* 230 to 265 days  
*Farmland classification:* Not prime farmland

### **Map Unit Composition**

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

### **Description of Vaucluse**

#### **Setting**

*Landform:* Marine terraces  
*Landform position (three-dimensional):* Tread  
*Down-slope shape:* Convex  
*Across-slope shape:* Convex  
*Parent material:* Loamy marine deposits

#### **Typical profile**

*Ap - 0 to 6 inches:* loamy sand  
*E - 6 to 15 inches:* loamy sand  
*Bt - 15 to 29 inches:* sandy clay loam  
*Bx - 29 to 58 inches:* sandy clay loam  
*BC - 58 to 72 inches:* sandy loam

#### **Properties and qualities**

*Slope:* 6 to 10 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):* Very low to moderately high (0.00 to 0.57 in/hr)  
*Depth to water table:* More than 80 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Available water capacity:* Low (about 4.6 inches)

#### **Interpretive groups**

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 3e  
*Hydrologic Soil Group:* C  
*Ecological site:* F137XY006GA - Loamy Backslope Woodland - PROVISIONAL  
*Hydric soil rating:* No



## **W—Water**

### **Map Unit Setting**

*National map unit symbol:* 4dg9

*Elevation:* 80 to 550 feet

*Mean annual precipitation:* 44 to 55 inches

*Mean annual air temperature:* 61 to 70 degrees F

*Frost-free period:* 230 to 265 days

*Farmland classification:* Not prime farmland

### **Map Unit Composition**

*Water:* 100 percent

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

# **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.

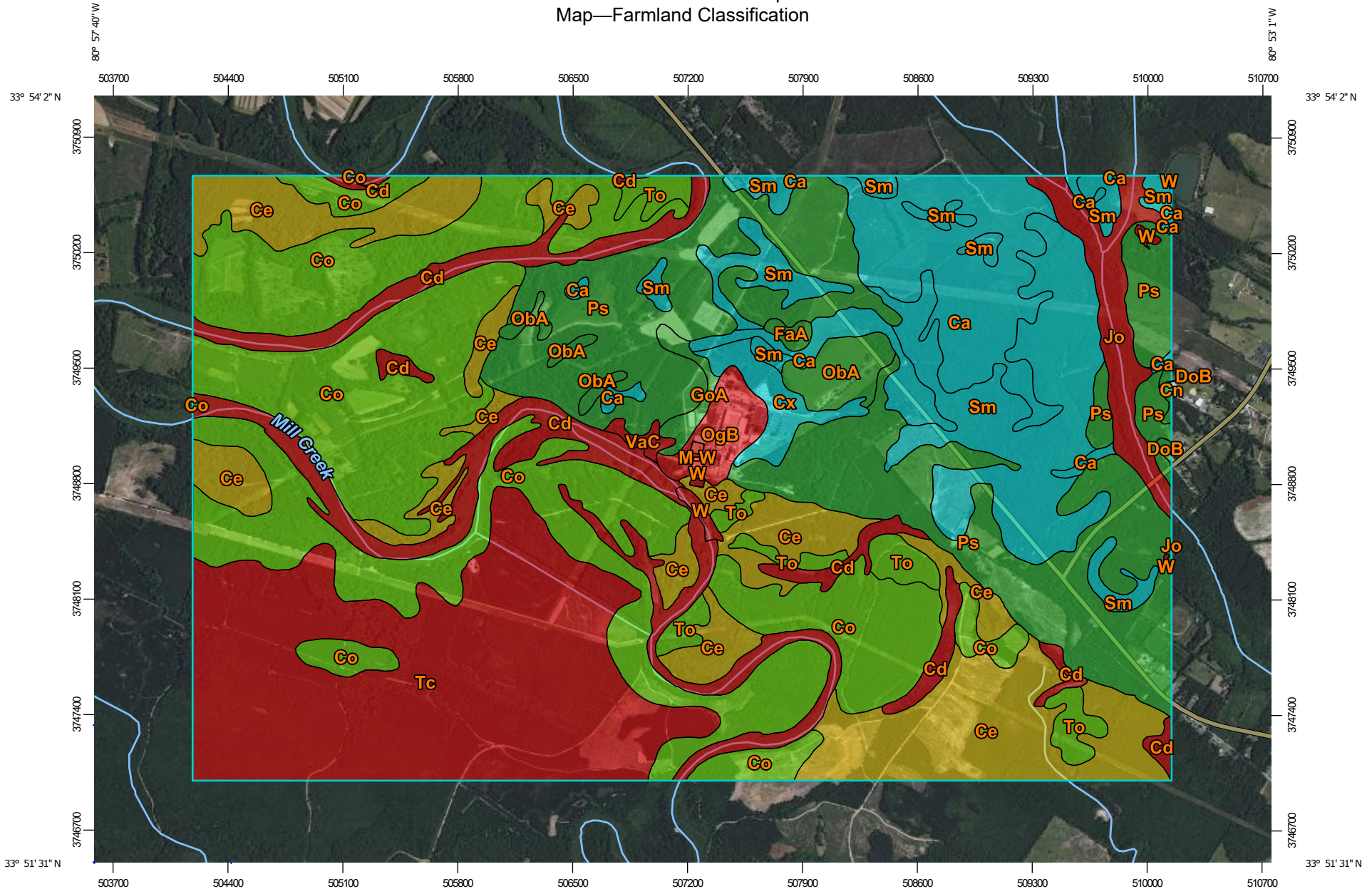
## **Land Classifications**

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.

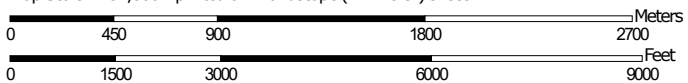
## **Farmland Classification**

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: 1:32,800 if printed on A landscape (11" x 8.5") sheet.




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

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<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 1:20,000.</p> <p>Please rely on the bar scale on each map sheet for map measurements.</p> <p>Source of Map: Natural Resources Conservation Service          Web Soil Survey URL:          Coordinate System: Web Mercator (EPSG:3857)</p> <p>Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.</p> <p>This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.</p> <p>Soil Survey Area: Richland County, South Carolina          Survey Area Data: Version 22, Jun 3, 2020</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: May 7, 2020—Jul 5, 2020</p> <p>The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.</p>
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**Table—Farmland Classification**

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
Ca	Cantey loam	Farmland of statewide importance	336.4	6.2%
Cd	Chastain silty clay loam	Not prime farmland	398.1	7.3%
Ce	Chewacla loam, 0 to 2 percent slopes, frequently flooded	Prime farmland if drained and either protected from flooding or not frequently flooded during the growing season	668.6	12.3%
Cn	Clarendon sandy loam	All areas are prime farmland	0.0	0.0%
Co	Congaree loam	Prime farmland if protected from flooding or not frequently flooded during the growing season	1,336.3	24.6%
Cx	Coxville fine sandy loam	Farmland of statewide importance	54.2	1.0%
DoB	Dothan loamy sand, 2 to 6 percent slopes	All areas are prime farmland	6.7	0.1%
FaA	Faceville sandy loam, 0 to 2 percent slopes	All areas are prime farmland	9.1	0.2%
GoA	Goldsboro sandy loam, 0 to 2 percent slopes	All areas are prime farmland	21.4	0.4%
Jo	Johnston loam	Not prime farmland	109.8	2.0%
M-W	Miscellaneous Water	Not prime farmland	1.3	0.0%
ObA	Orangeburg loamy sand, 0 to 2 percent slopes	All areas are prime farmland	71.0	1.3%
OgB	Orangeburg-Urban land complex, 2 to 6 percent slopes	Not prime farmland	56.0	1.0%
Ps	Persanti very fine sandy loam	All areas are prime farmland	901.1	16.6%
Sm	Smithboro loam	Farmland of statewide importance	463.0	8.5%
Tc	Tawcaw silty clay loam	Not prime farmland	868.0	16.0%
To	Toccoa loam	Prime farmland if protected from flooding or not frequently flooded during the growing season	103.1	1.9%
VaC	Vaucluse loamy sand, 6 to 10 percent slopes	Not prime farmland	10.4	0.2%
W	Water	Not prime farmland	11.7	0.2%
<b>Totals for Area of Interest</b>			<b>5,426.1</b>	<b>100.0%</b>

**Rating Options—Farmland Classification**

*Aggregation Method:* No Aggregation Necessary

*Tie-break Rule:* Lower



# References

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- American Association of State Highway and Transportation Officials (AASHTO). 2004. Standard specifications for transportation materials and methods of sampling and testing. 24th edition.
- American Society for Testing and Materials (ASTM). 2005. Standard classification of soils for engineering purposes. ASTM Standard D2487-00.
- Cowardin, L.M., V. Carter, F.C. Golet, and E.T. LaRoe. 1979. Classification of wetlands and deep-water habitats of the United States. U.S. Fish and Wildlife Service FWS/OBS-79/31.
- Federal Register. July 13, 1994. Changes in hydric soils of the United States.
- Federal Register. September 18, 2002. Hydric soils of the United States.
- Hurt, G.W., and L.M. Vasilas, editors. Version 6.0, 2006. Field indicators of hydric soils in the United States.
- National Research Council. 1995. Wetlands: Characteristics and boundaries.
- Soil Survey Division Staff. 1993. Soil survey manual. Soil Conservation Service. U.S. Department of Agriculture Handbook 18. [http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2\\_054262](http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_054262)
- Soil Survey Staff. 1999. Soil taxonomy: A basic system of soil classification for making and interpreting soil surveys. 2nd edition. Natural Resources Conservation Service, U.S. Department of Agriculture Handbook 436. [http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2\\_053577](http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_053577)
- Soil Survey Staff. 2010. Keys to soil taxonomy. 11th edition. U.S. Department of Agriculture, Natural Resources Conservation Service. [http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2\\_053580](http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_053580)
- Tiner, R.W., Jr. 1985. Wetlands of Delaware. U.S. Fish and Wildlife Service and Delaware Department of Natural Resources and Environmental Control, Wetlands Section.
- United States Army Corps of Engineers, Environmental Laboratory. 1987. Corps of Engineers wetlands delineation manual. Waterways Experiment Station Technical Report Y-87-1.
- United States Department of Agriculture, Natural Resources Conservation Service. National forestry manual. [http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/home/?cid=nrcs142p2\\_053374](http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/home/?cid=nrcs142p2_053374)
- United States Department of Agriculture, Natural Resources Conservation Service. National range and pasture handbook. <http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/landuse/rangepasture/?cid=stelprdb1043084>

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United States Department of Agriculture, Natural Resources Conservation Service. National soil survey handbook, title 430-VI. [http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/scientists/?cid=nrcs142p2\\_054242](http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/scientists/?cid=nrcs142p2_054242)

United States Department of Agriculture, Natural Resources Conservation Service. 2006. Land resource regions and major land resource areas of the United States, the Caribbean, and the Pacific Basin. U.S. Department of Agriculture Handbook 296. [http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2\\_053624](http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_053624)

United States Department of Agriculture, Soil Conservation Service. 1961. Land capability classification. U.S. Department of Agriculture Handbook 210. [http://www.nrcs.usda.gov/Internet/FSE\\_DOCUMENTS/nrcs142p2\\_052290.pdf](http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_052290.pdf)