



# **3 Basic Steps to access Soils Data and Maps**

- 1) Define area of interest (AOI) interactively with pan/zoom features or by typing in specific address or county.**
- 2) View the AOI you've defined by clicking on Soil Map tab.**
- 3) Explore options for AOI under Soil Data Explorer tab.**

# Can change text size by using text sizing buttons on dark gray application toolbar.

The screenshot shows the 'Web Soil Survey' application running in Microsoft Internet Explorer. The browser's address bar displays the URL <http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx>. The application's header includes the NRCS logo and navigation links such as 'Contact Us', 'Download Soils Data', 'Preferences', 'Logout', and 'Help'. A dark gray toolbar is located below the header, featuring text sizing buttons (A, A, A) on the right side, which are highlighted by a red arrow. The main interface is divided into several sections: 'Area of Interest' (with sub-tabs for 'Soil Map' and 'Soil Data Explorer'), 'Area of Interest Selection Criteria' (listing 'Address', 'County', 'Hydrologic Unit', and 'Soil Survey Area'), and 'Area of Interest Interactive Map' (showing a map of the continental U.S. with state abbreviations and highway shields). The status bar at the bottom indicates 'Done' and 'Internet'.

# Type in County or specific address under Area of Interest Selection Criteria, then choose View button.

Report Data yes

Soil Survey Publication	Manuscript	no
	Maps	no

**Area of Interest Selection Criteria** ^

Select Criteria ^

Address

**County**

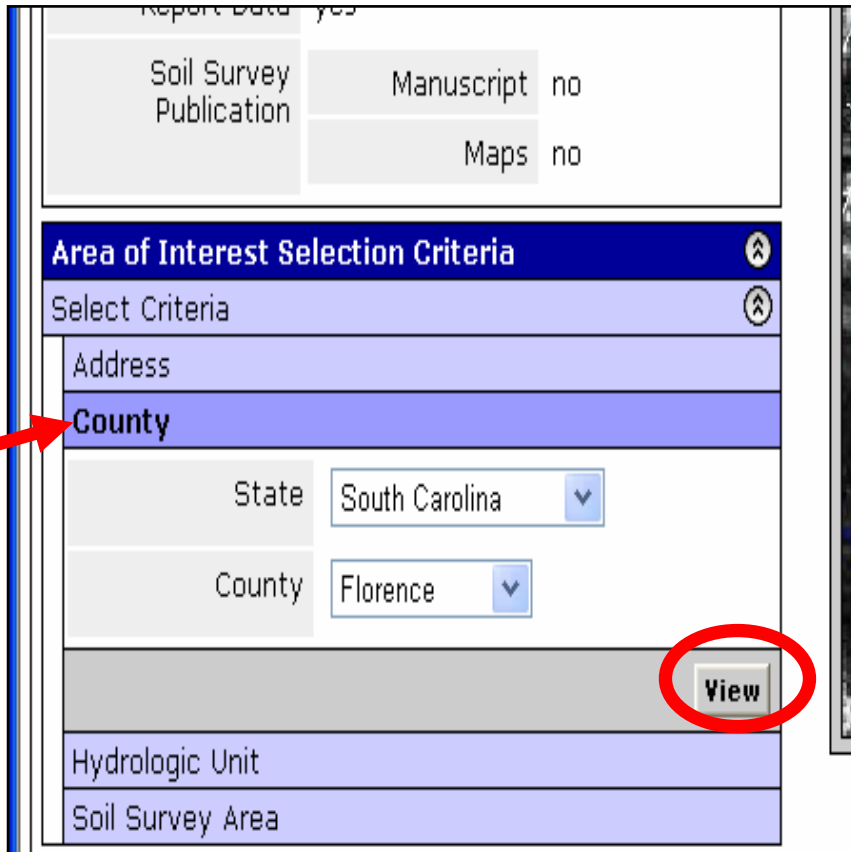
State South Carolina v

County Florence v

**View**

Hydrologic Unit

Soil Survey Area



Soil Survey Publication	Manuscript	no
	Maps	no

**Area of Interest Selection Criteria** ^

Select Criteria ^

**Address** ?

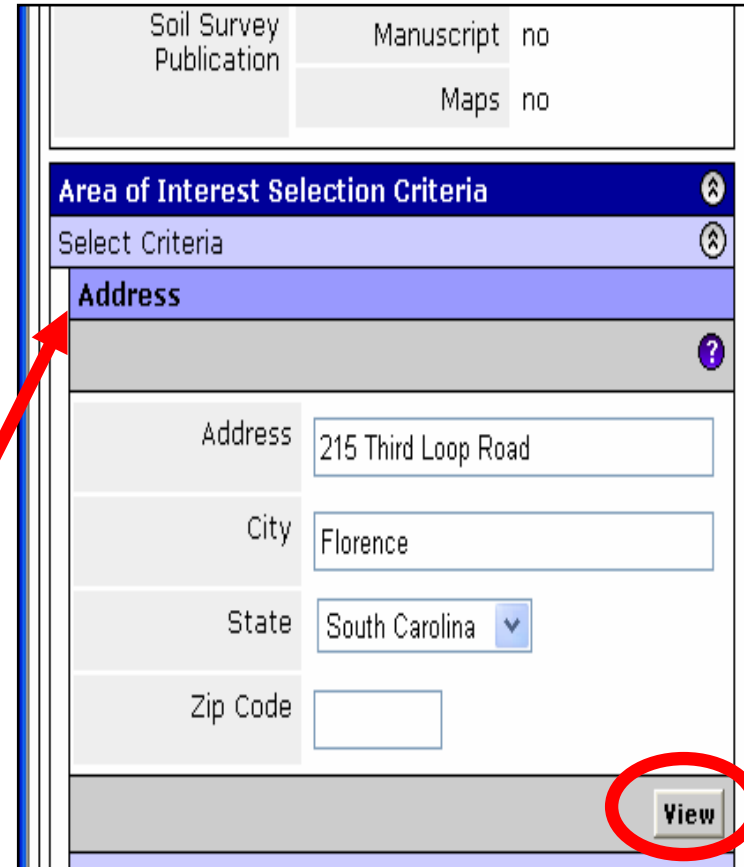
Address 215 Third Loop Road



City Florence

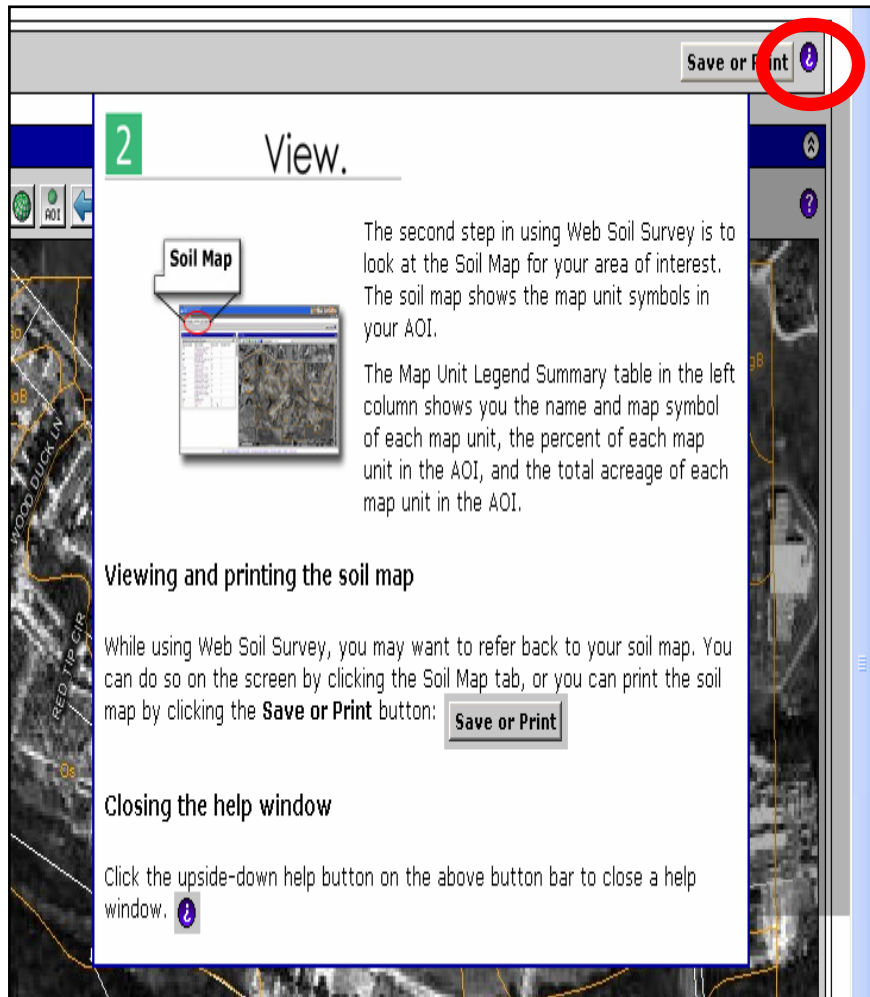
State South Carolina v

Zip Code

**View**



To add or remove help screen from viewable areas of application, click on  or  sign on upper right side of window.



**2 View.**

**Soil Map**


The second step in using Web Soil Survey is to look at the Soil Map for your area of interest. The soil map shows the map unit symbols in your AOI.


The Map Unit Legend Summary table in the left column shows you the name and map symbol of each map unit, the percent of each map unit in the AOI, and the total acreage of each map unit in the AOI.

**Viewing and printing the soil map**


While using Web Soil Survey, you may want to refer back to your soil map. You can do so on the screen by clicking the Soil Map tab, or you can print the soil map by clicking the **Save or Print** button: **Save or Print**

**Closing the help window**

Click the upside-down help button on the above button bar to close a help window. 



**Save or Print** 

**View Extent** Continental U.S. 

**Soil Map**

604ft

# 1) Define Area of interest (AOI)



Define area of interest using the two AOI buttons on right side of toolbar. Options include using rectangle AOI button or interactively defining a polygon via polygon AOI button.

**Soils information can be obtained for AOI's up to 10,000 acres. Note Acreage total of query under AOI Information.**

The screenshot displays the NRCS Soils Data Explorer interface. At the top, the NRCS logo and navigation links are visible. The main content area is divided into several sections:

- Area of Interest Properties:**
  - AOI Information:** A table showing the area of interest. The "Area (acres)" field is highlighted with a red circle and contains the value "156.6".
  - Soil Data Available from Web Soil Survey:** A table showing the availability of soil data for the selected area.
- Area of Interest Selection Criteria:** A section for selecting criteria, including an address form.

The address form contains the following information:

Address	215 Third Loop Road
City	Florence
State	South Carolina
Zip Code	

On the right side of the interface, there is a map view showing a satellite image of the area of interest. The map includes a legend and a layers panel. The legend identifies the area of interest as "DEERFIELD DR" and "W. WOOD DUCK LN".

## 2) View the AOI you've defined by clicking on Soil Map tab.

**Web Soil Survey - Microsoft Internet Explorer**

File Edit View Favorites Tools Help

Address <http://websurveys.nrcs.usda.gov/app/WebSoilSurvey.aspx>

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Natural Resources Conservation Service

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Area of Interest | **Soil Map** | Soil Data Explorer

### Area of Interest Properties

**AOI Information**

Name	Florence County Soil Survey Area		
Area (acres)	319.5		

**Soil Data Available from Web Soil Survey**

**Florence County, South Carolina (SC041)**

Map Data	yes	
Report Data	yes	
Soil Survey Publication	Manuscript	no
	Maps	no

### Area of Interest Selection Criteria

Select Criteria

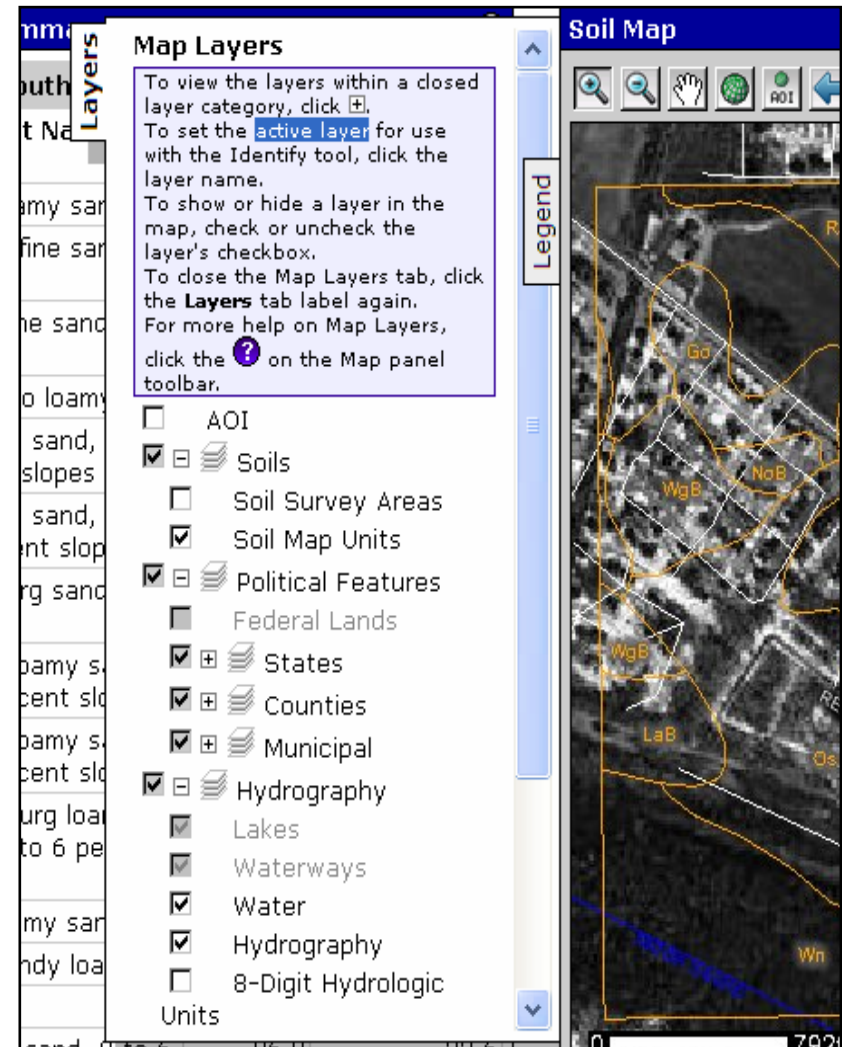
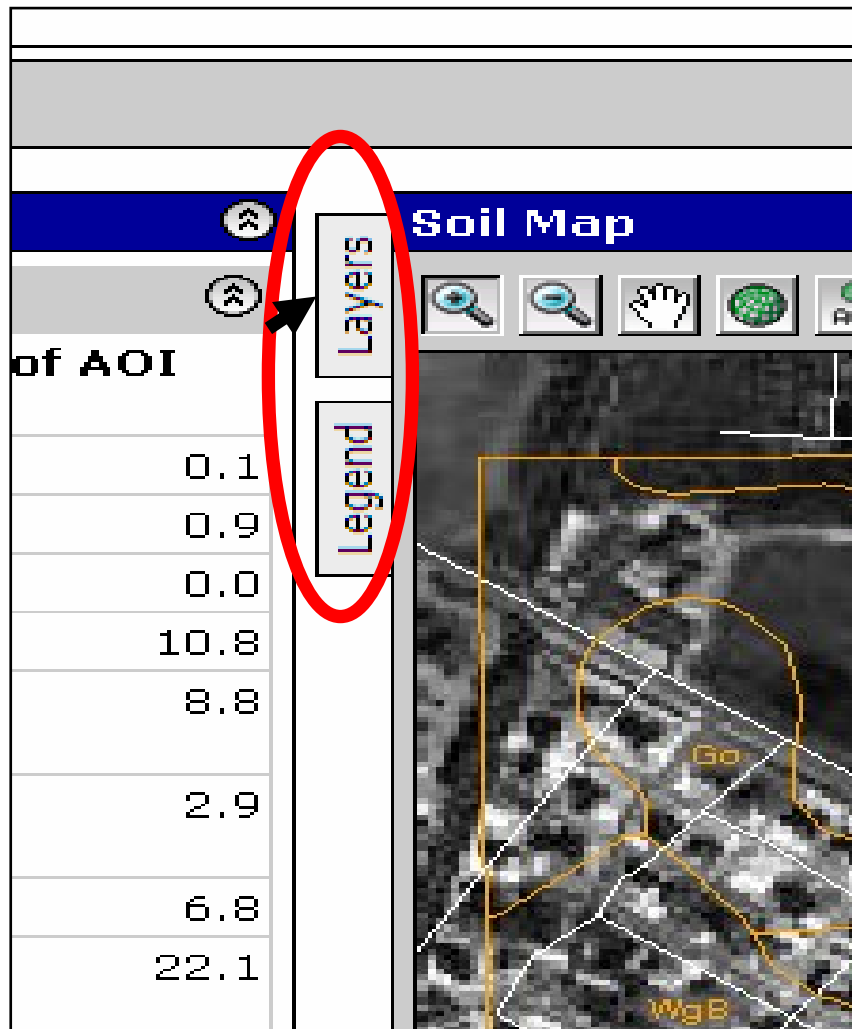
Address

### Area of Interest Interactive

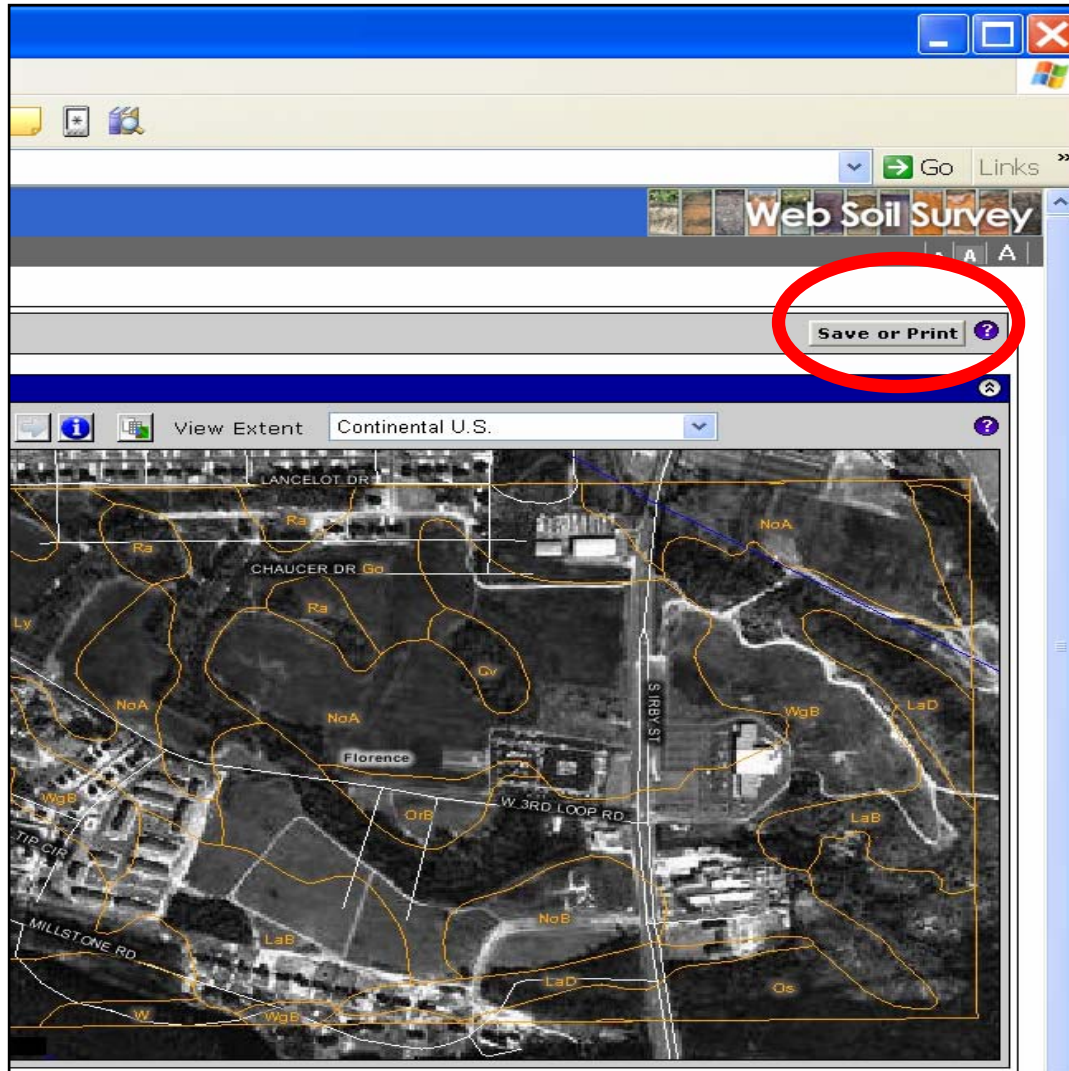
Layers Legend



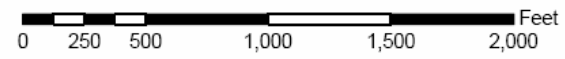
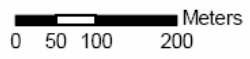
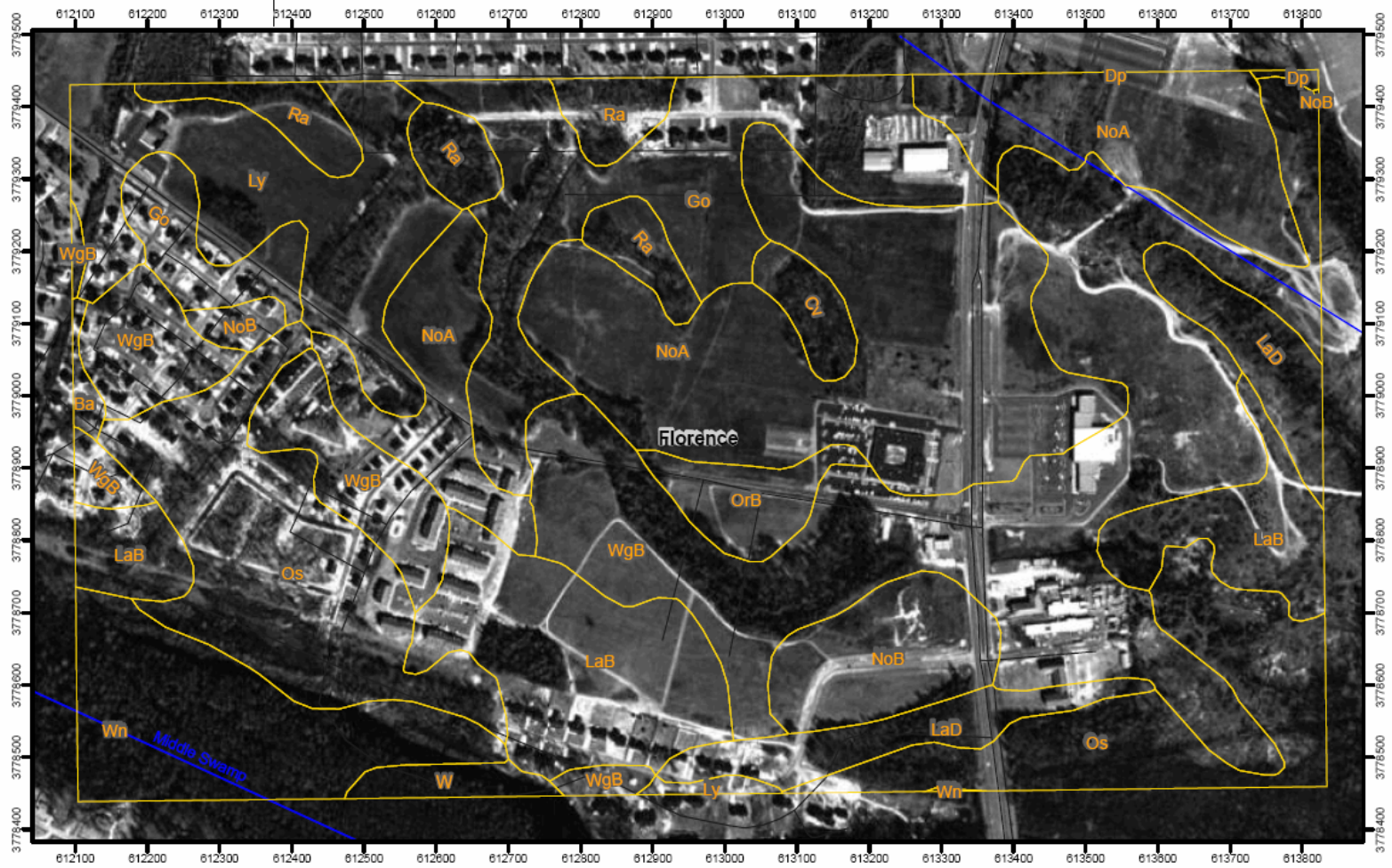
**Make Legend or Layers visible by clicking on tabs on upper-left side of canvas. Turn individual layers on or off by clicking on layer checkbox.**



Options include printing and/or saving Soils Map. The map document and accompanying data are bundled into a \*.pdf format.












# SOIL SURVEY OF FLORENCE COUNTY, SOUTH CAROLINA



# SOIL SURVEY OF FLORENCE COUNTY, SOUTH CAROLINA

## MAP LEGEND

-  Soil Map Units
-  Cities
-  Detailed Counties
-  Interstate Highways
-  Roads
-  Rails
-  Water
-  Hydrography
-  Oceans

## MAP INFORMATION

Source of Map: Natural Resources Conservation Service  
Web Soil Survey URL: <http://websoilsurvey.nrcs.usda.gov>

Coordinate System: UTM Zone 17

Soil Survey Area: Florence County, South Carolina  
Spatial Version of Data: 3  
Soil Map Compilation Scale: 1:20000

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 Summary

## Florence County, South Carolina

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
Ba	Barth loamy sand	1.1	0.3
Cv	Coxville fine sandy loam	3.6	0.9
Dp	Duplin fine sandy loam	0.4	0.1
Go	Goldsboro loamy sand	42.2	9.9
LaB	Lakeland sand, 0 to 6 percent slopes	38.2	8.9
LaD	Lakeland sand, 6 to 15 percent slopes	15.8	3.7
Ly	Lynchburg sandy loam	28.7	6.7
NoA	Norfolk loamy sand, 0 to 2 percent slopes	86.7	20.3
NoB	Norfolk loamy sand, 2 to 6 percent slopes	14.1	3.3
OrB	Orangeburg loamy sand, 2 to 6 percent slopes	6.2	1.4
Os	Osier loamy sand	53.1	12.4
Ra	Rains sandy loam	14.2	3.3
W	Water	2.9	0.7
WgB	Wagram sand, 0 to 6 percent slopes	96.8	22.6
Wn	Wehadkee and Johnston soils, frequently flooded	23.7	5.5

### 3) Explore options under Soil Data Explorer tab for AOI defined.

Address <http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx>

United States Department of Agriculture  
Natural Resources Conservation Service

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Area of Interest | **Soil Map** | Soil Data Explorer

**Map Unit Legend Summary**

Florence County, South Carolina

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
Cv	Coxville fine sandy loam	3.6	2.3
Go	Goldsboro loamy sand	15.0	9.6
LaB	Lakeland sand, 0 to 6 percent slopes	10.7	6.8
Ly	Lynchburg sandy loam	9.9	6.3
NoA	Norfolk loamy sand, 0 to 2 percent slopes	53.2	34.0
NoB	Norfolk loamy sand, 2 to 6 percent slopes	5.5	3.5
OrB	Orangeburg loamy sand, 2 to 6 percent slopes	6.2	3.9
Os	Osier loamy sand	14.6	9.3
Ra	Rains sandy loam	3.4	2.2
WgB	Wagram sand, 0 to 6 percent slopes	34.4	22.0

**Soil Map**

Layers Legend

Information about a particular use can be obtained utilizing drop-down lists or by choosing a particular tab.

Web Soil Survey - Microsoft Internet Explorer

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Area of Interest | Soil Map | **Soil Data Explorer**

View Soil Information for: **All Uses**

- All Uses
- Cropland
- Forestland
- Hayland/Pastureland
- Horticulture
- Rangeland
- Recreation
- Urban

Intro to Soils | Soil Suitability | Use | Soil Properties and Quality | **Soil Reports** | Soil Survey Publications

**Table of Contents**

- Introduction to Soils
  - Soils 101
    - What is soil? (basic terminology)
    - What is soil? (more technical)
  - How does soil form?
    - Parent Material
    - Climate
    - Living organisms
    - Landscape position
    - Time
  - What are soil horizons?
  - What is a soil scientist?
  - What is a soil survey?
  - Who uses a soil survey?
  - What is a map unit?
  - What is a consociation, complex, association, undifferentiated group, or miscellaneous area?
  - What is an Official Series Description?
- Information for Land Users
  - Homebuyers
  - Land Use Planners
  - Appraisers
  - Developers and Builders
- Waste Disposal Entities
  - Septic tank absorption fields
  - Sewage lagoons
  - Sanitary landfills
  - Disposing of other kinds of waste
- Park Boards and Recreation Area Planners
  - Why soil data are needed
  - Selecting recreation areas

**Intro to Soils**

**Viewing Topics**

A Table of Contents appears in the navigation panel

- Click an item in the Table of Contents
- To view an entire section, click the item

**Saving or Printing Topics**

The topics displayed in the view panel

- Choose the topics you want to view

**Headings under the various tabs include Intro to Soils, Suitabilities and Limitations for Use, Soil Properties and Qualities, Soil Reports, and Soil Survey Publications.**

**Web Soil Survey - Microsoft Internet Explorer**

File Edit View Favorites Tools Help

Back Forward Stop Refresh Home Search Favorites RSS Print Mail W Yellow Tag Phone

Address <http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx>

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Natural Resources Conservation Service

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Area of Interest Soil Map **Soil Data Explorer**

View Soil Information for: All Uses

**Intro to Soils** Suitabilities and Limitations for Use Soil Properties and Qualities Soil Reports Soil Survey Publications

**Table of Contents**

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  - Who uses a soil survey?
  - What is a map unit?

**Intro to Soils**

**Viewing Topics**

A Table of Contents appears in the navigation panel to the left of the view panel. It lists the topics that are available in the view panel.

- Click an item in the Table of Contents to make it the active topic.
- To view an entire section, click the name of the section.

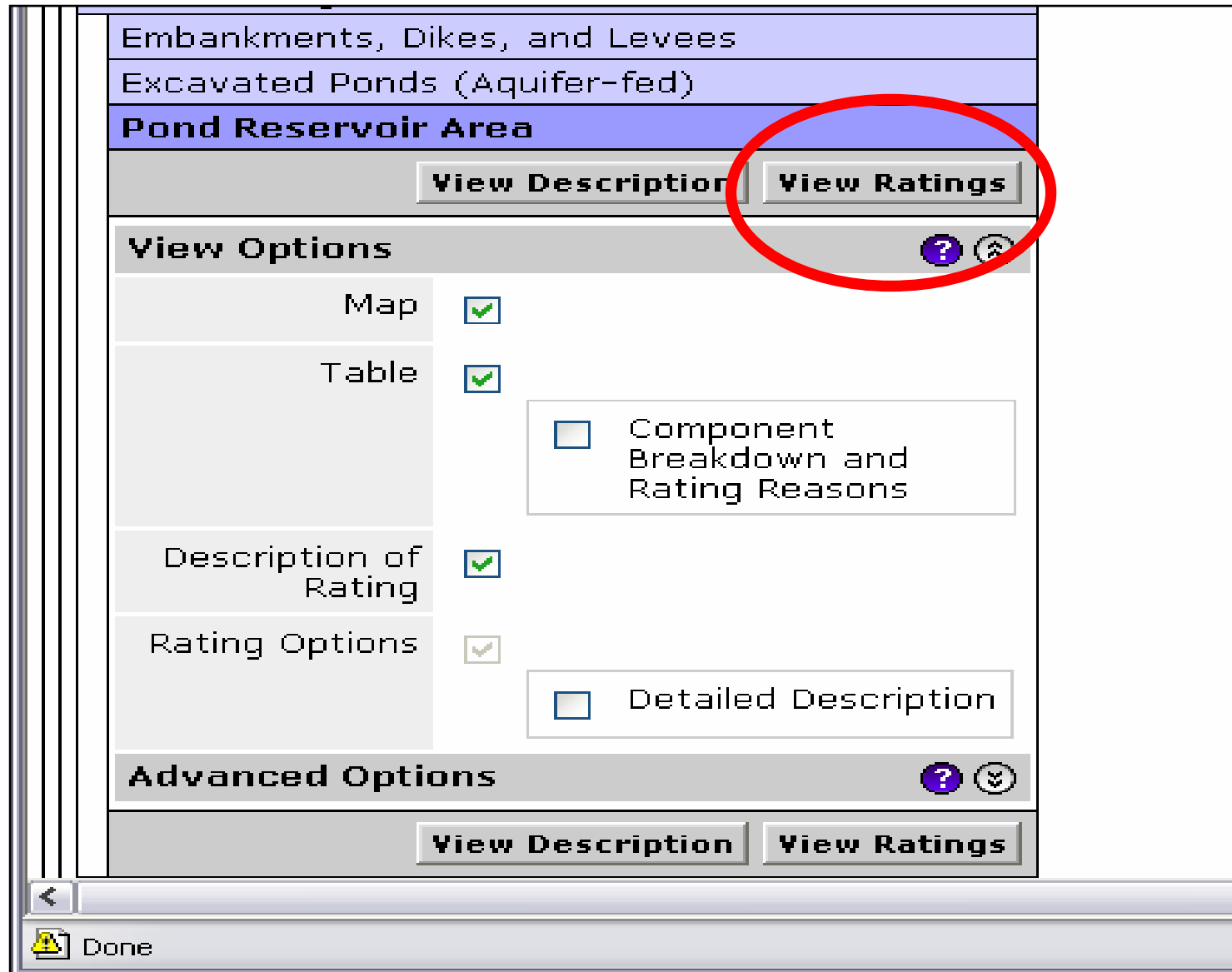
**Saving or Printing Topics**

The topics displayed in the view panel will appear in a PDF report. You can save or print the report.



- Choose the topics you want to view, so they appear in the report.



To view specific maps of AOI click on View Ratings button.



# To find out more about a rating, choose View Description.

Farmland Classification
Irrigated Capability Class
Irrigated Capability Subclass
<b>Map Unit Hydric Rating</b>
<a href="#">View Description</a> <a href="#">View Ratings</a>
<b>View Options</b>  
Map <input checked="" type="checkbox"/>
Table <input checked="" type="checkbox"/>

s and Limitations Ratings

Information

**i** Description - Map Unit Hydric Rating

This rating provides an indication of the proportion of the map unit that meets criteria for hydric soils. Map units that are dominantly made up of hydric soils may have small areas, or inclusions, of nonhydric soils in the higher positions on the landform, and map units dominantly made up of nonhydric soils may have inclusions of hydric soils in the lower positions on the landform.

Hydric soils are defined by the National Technical Committee for Hydric Soils (NTCHS) as soils that formed under conditions of saturation, flooding, or ponding long enough during the growing season to develop anaerobic conditions in the upper part (Federal Register, 1994). These soils, under natural conditions, are either saturated or inundated long enough during the growing season to support the growth and reproduction of hydrophytic vegetation.

The NTCHS definition identifies general soil properties that are associated with wetness. In order to determine whether a specific soil is a hydric soil or nonhydric soil, however, more specific information, such as information about the depth and duration of the water table, is needed. Thus, criteria that identify those estimated soil properties unique to hydric soils have been established (Federal Register, 2002). These criteria are used to identify map unit components that normally are associated with wetlands. The criteria used are selected estimated soil properties that are described in "Soil Taxonomy" (Soil Survey Staff, 1999) and "Keys to Soil Taxonomy" (Soil Survey Staff, 2003) and in the "Soil Survey Manual" (Soil Survey Division Staff, 1993).

If soils are wet enough for a long enough period of time to be considered hydric, they should exhibit certain properties that can be easily observed in the field. These visible properties are indicators of hydric soils. The indicators used to make onsite determinations of hydric soils are specified in "Field Indicators of Hydric Soils in the United States" (Hurt and others, 2002).

[Close](#)

# Example below is a map of Hydric Soils along with attribute table for AOI defined.

Web Soil Survey - Microsoft Internet Explorer

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Area of Interest | Soil Map | **Soil Data Explorer**

View Soil Information for: All Uses Save or Print

Intro to Soils | **Suitabilities and Limitations for Use** | Soil Properties and Qualities | Soil Reports | Soil Survey Publications

**Suitabilities and Limitations Ratings**

- Building Site Development
- Construction Materials
- Cropland Productivity
- Forestland Management
- Forestland Productivity
- Land Classifications
- Ecological Site ID
- Ecological Site Name
- Farmland Classification
- Irrigated Capability Class
- Irrigated Capability Subclass
- Map Unit Hydric Rating**

**View Options**

Map

Table

Description of Rating

Rating Options

Detailed

**Advanced Options**

- Nonirrigated Capability Class
- Nonirrigated Capability Subclass
- Rangeland Productivity
- Recreational Development
- Urban Disposal
- Water Management

**Map Legend**

To close the Map Legend tab, click the Legend tab label again.

**Soil Ratings**

- All Hydric
- Partially Hydric
- Not Hydric
- Unknown Hydric
- Not rated or not available
- Soil Map Units

**Hydrography**

- Water
- Roads
- Rails
- Interstate Highways
- Cities
- Detailed Counties
- Oceans

**Map - Map Unit Hydric Rating**

View Extent Continental U.S.

**Tables - Map Unit Hydric Rating**

Summary by Map Unit - Florence County, South Carolina

Soil Survey Area Map Unit Symbol	Map Unit Name	Rating	Total Acres in AOI	Percent of AOI
Cv	Coxville fine sandy loam	All Hydric	3.6	2.3
Go	Goldsboro loamy sand	Partially Hydric	15.0	9.6
LaB	Lakeland sand, 0 to 6 percent slopes	Not Hydric	10.7	6.8
Ly	Lynchburg sandy loam	Partially Hydric	9.9	6.3

Done Internet

# Associated tables along with description of Map Unit Hydric Rating.

0 379ft

**Tables - Map Unit Hydric Rating**

**Summary by Map Unit - Florence County, South Carolina**

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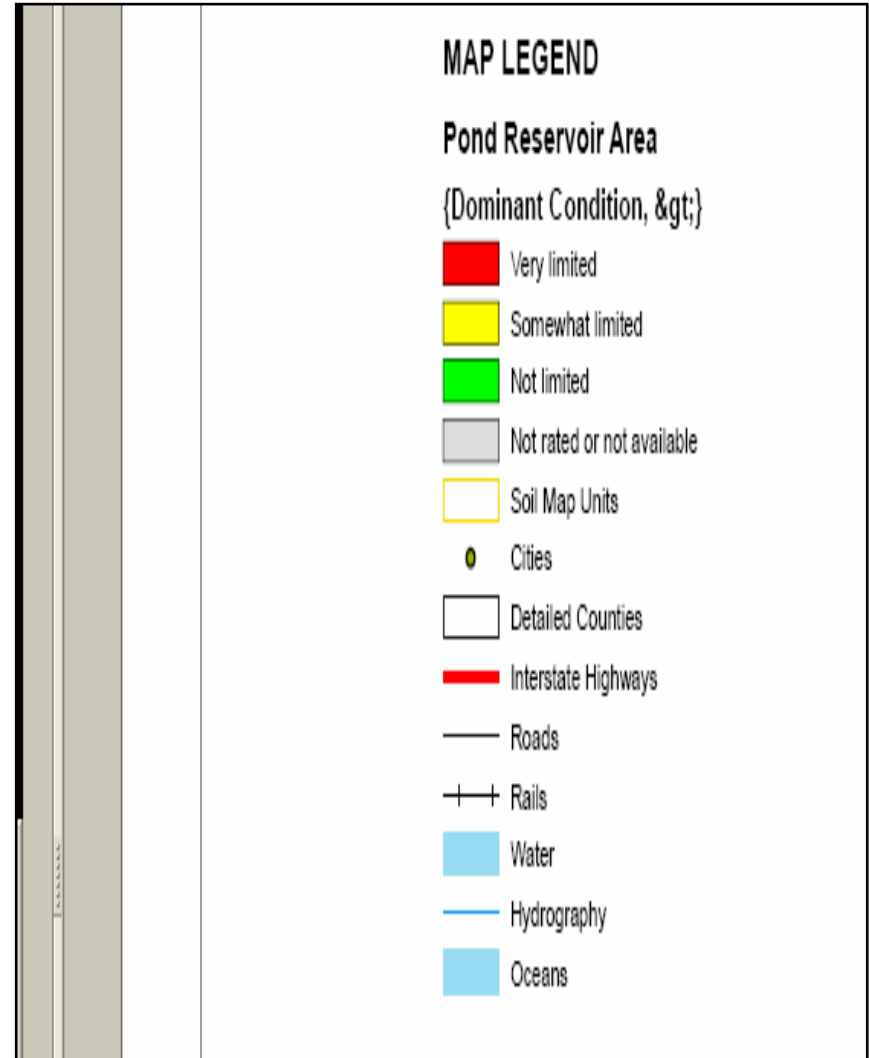
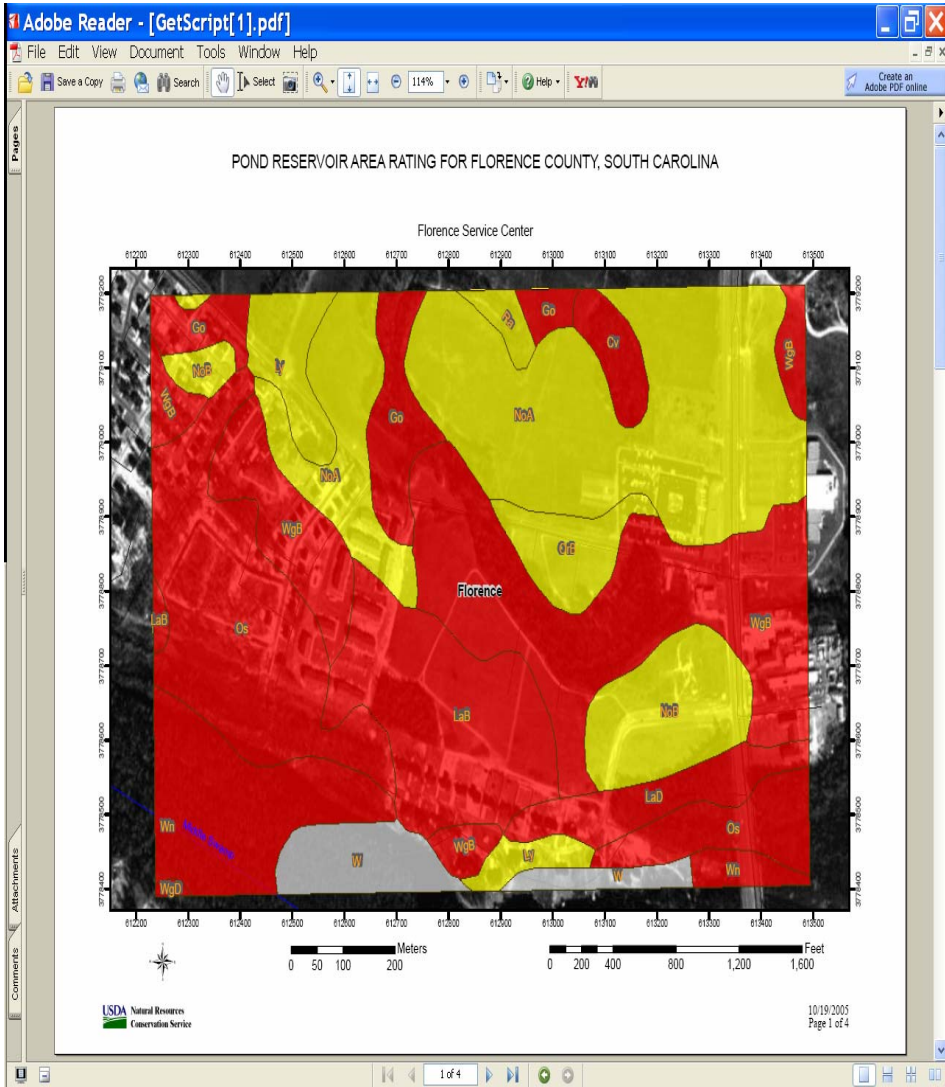
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Hydric soils are defined by the National Technical Committee for Hydric Soils (NTCHS) as soils that formed under conditions of saturation, flooding, or ponding long enough during the growing season to develop anaerobic conditions in the upper part (Federal Register, 1994). These soils, under natural conditions, are either saturated or inundated long enough during the growing season to support the growth and reproduction of hydrophytic vegetation.

The NTCHS definition identifies general soil properties that are associated with wetness. In order to determine whether a specific soil is a

# Pond Reservoir Area Rating for same AOI



Demo of Web Soil Survey

<http://websoilsurvey.nrcs.usda.gov>