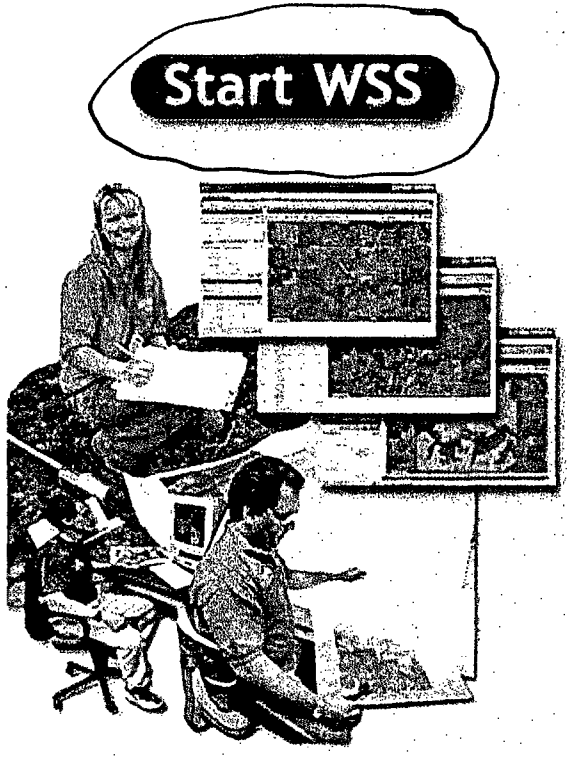
United States Department of Agriculture
NRCS Natural Resources Conservation Service

Access to soil survey information is provided through maps. All text and tables relate to the map symbols and the areas delineated on these maps. Persons with disabilities who require alternative means for communication of soil survey information should contact the NRCS at the USDA Service Center that services the county of interest. See also the NRCS Accessibility Statement.

Before you start, see:

"Web Soil Survey—How To Use It" (PDF)



Web Soil Survey

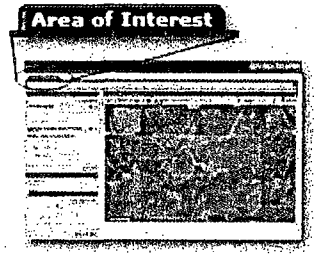
Version 1.1

Maintenance Schedule
Supported Browsers

Welcome to the NCSS Web Soil Survey.

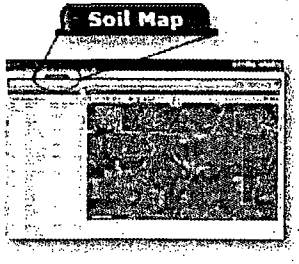
3 Basic Steps make WSS a simple yet powerful way to access and use soil data.

1 Define.



Use the Area of Interest tab to define the area you are interested in. You can define an area by zooming in on a map and drawing a box around your area or by selecting from a choice list. You must complete this step before you can go on to the next two steps.

2 View.



Next, click on the Soil Map tab to view and print a map of the soils in your area.

3 Explore.

Third, click on the Soil Data Explorer tab to access soil data for your area.

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Web Soil Survey

Contact Us | Download Soils Data | Preferences | Logout | Help

A A A

Area of Interest | Soil Map | Soil Data Explorer

Quick Navigation

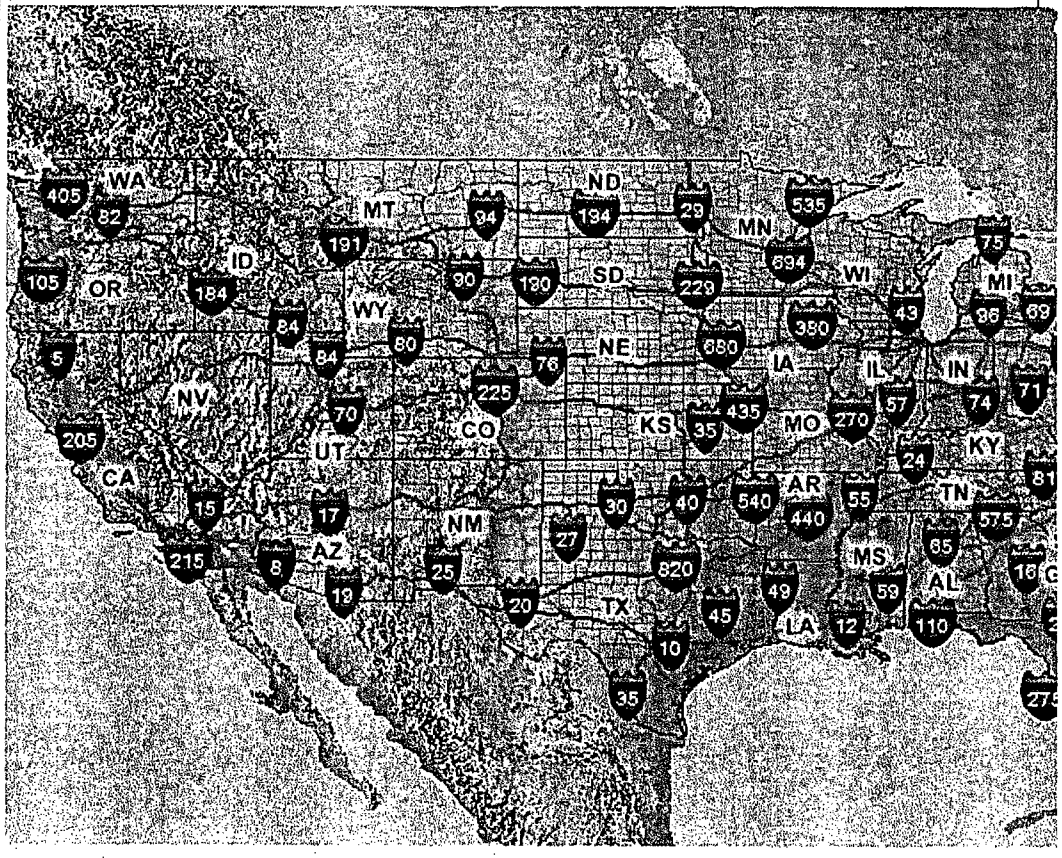
Navigate By...

- Address
- County
- Soil Survey Area
- Latitude and Longitude
- PLSS (Township and Range)
- Hydrologic Unit

Area of Interest Interactive Map

View Extent: Continental U.S.

Scale: (not to scale)



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Web Soil Survey

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A A A

Area of Interest | Soil Map | Soil Data Explorer

Quick Navigation

Navigate By...

- Address
- County

View

State: New Jersey

County: Ocean

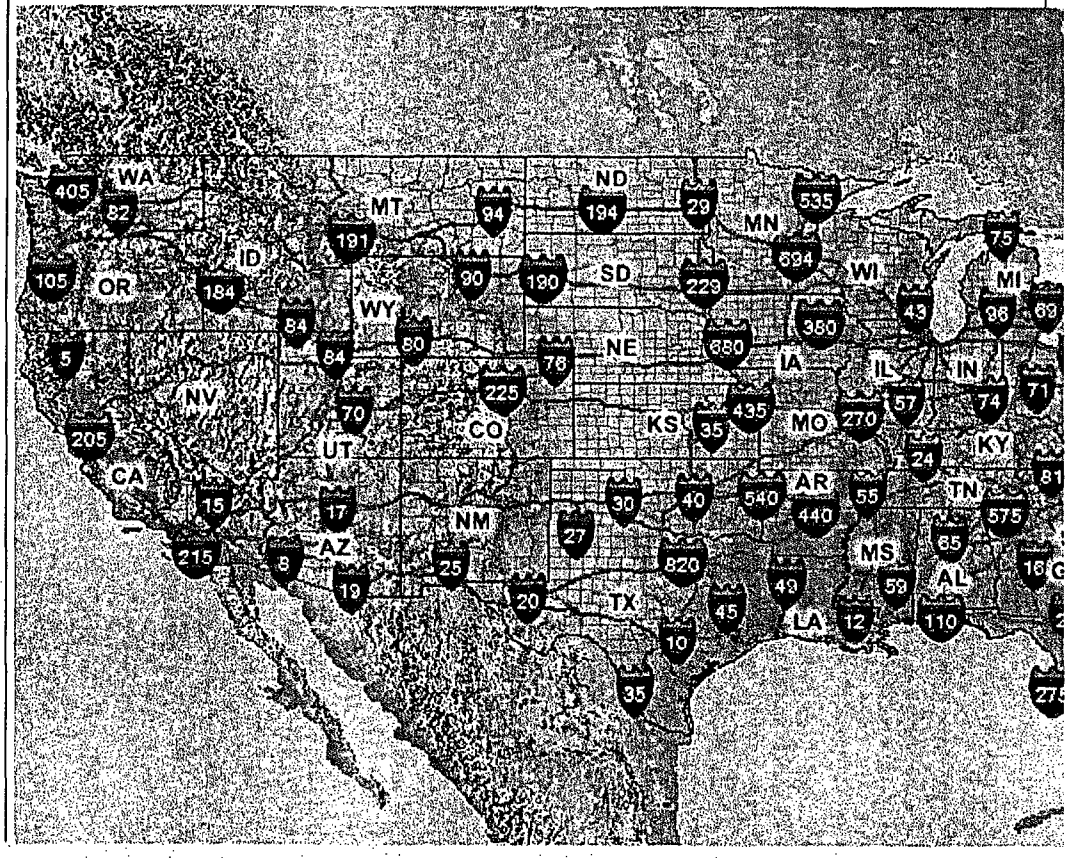
View

- Soil Survey Area
- Latitude and Longitude
- PLSS (Township and Range)
- Hydrologic Unit

Area of Interest Interactive Map

View Extent: Continental U.S.

Scale: (not to scale)



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Web Soil Survey

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A A A

Area of Interest | Soil Map | Soil Data Explorer

Quick Navigation

Navigate By...

- Address
- County

View

State: New Jersey

County: Ocean

View

- Soil Survey Area
- Latitude and Longitude
- PLSS (Township and Range)
- Hydrologic Unit

Area of Interest Interactive Map

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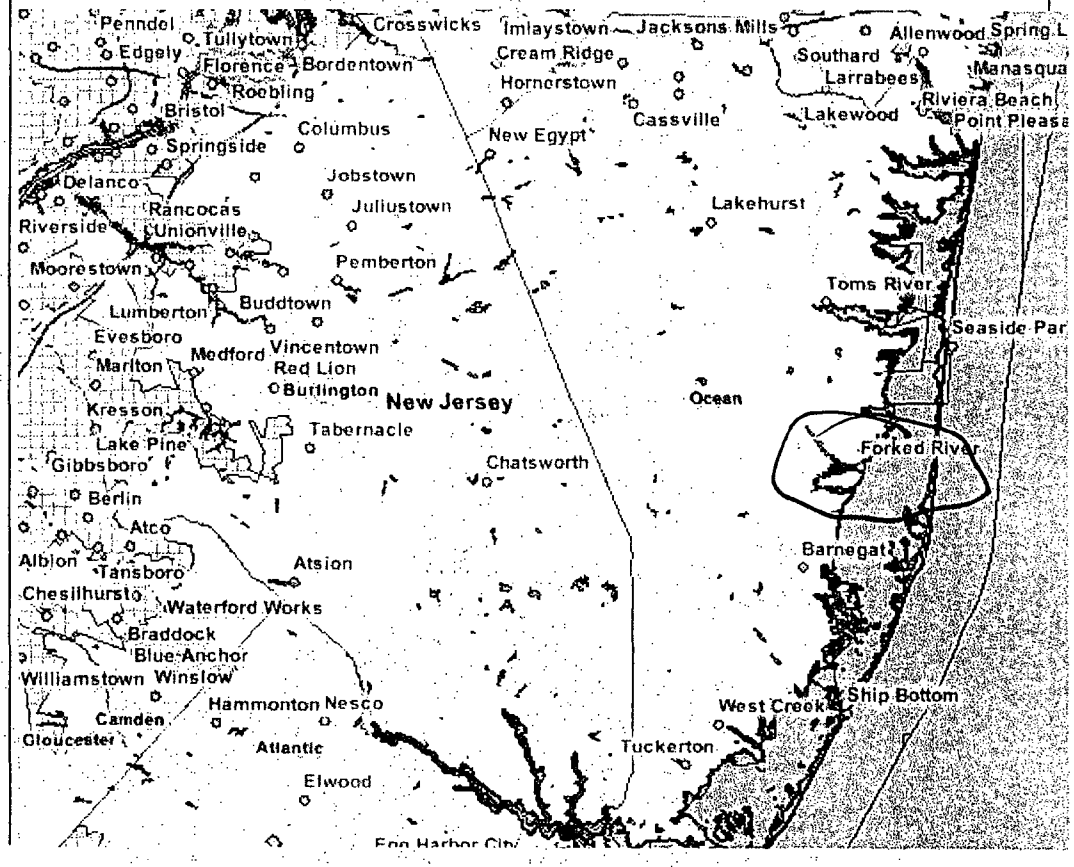

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A A A

Area of Interest | Soil Map | Soil Data Explorer

Quick Navigation

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- Address
- County

View

State: New Jersey

County: Ocean

View

- Soil Survey Area
- Latitude and Longitude
- PLSS (Township and Range)
- Hydrologic Unit

Area of Interest Interactive Map

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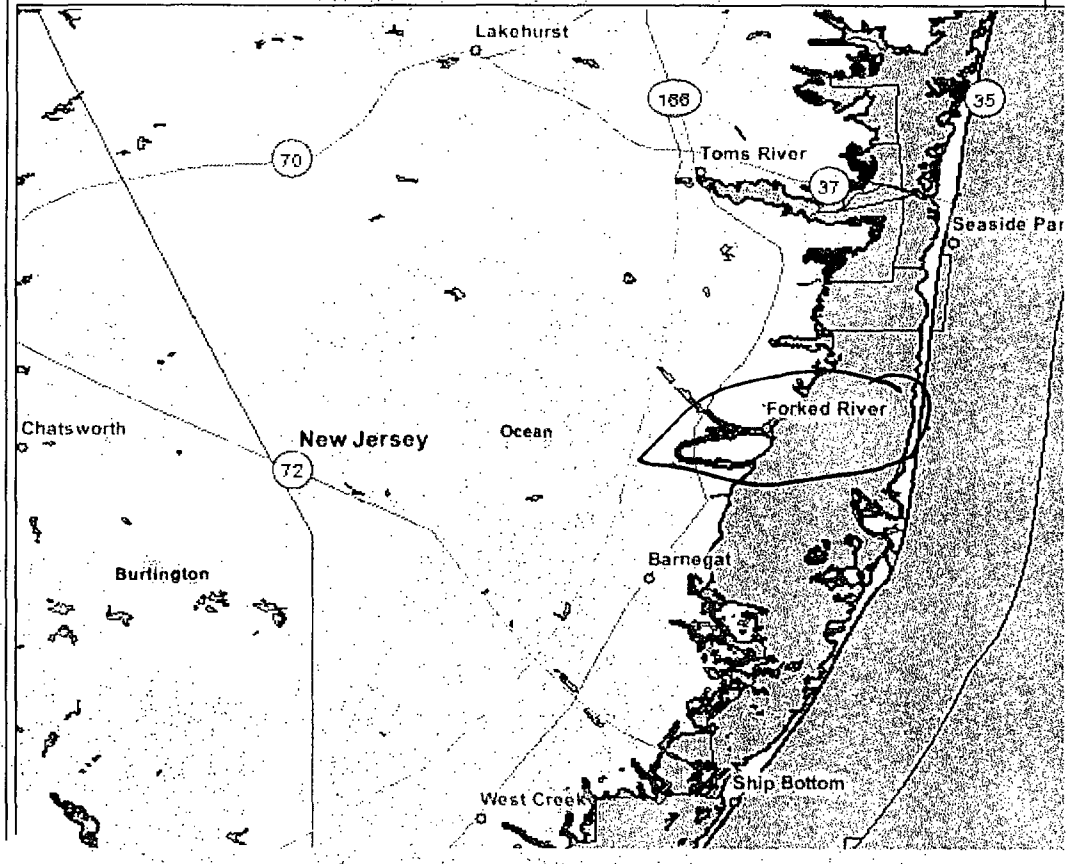
Scale (not to scale)



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Web Soil Survey

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A A A

Area of Interest | Soil Map | Soil Data Explorer

Quick Navigation

Navigate By...

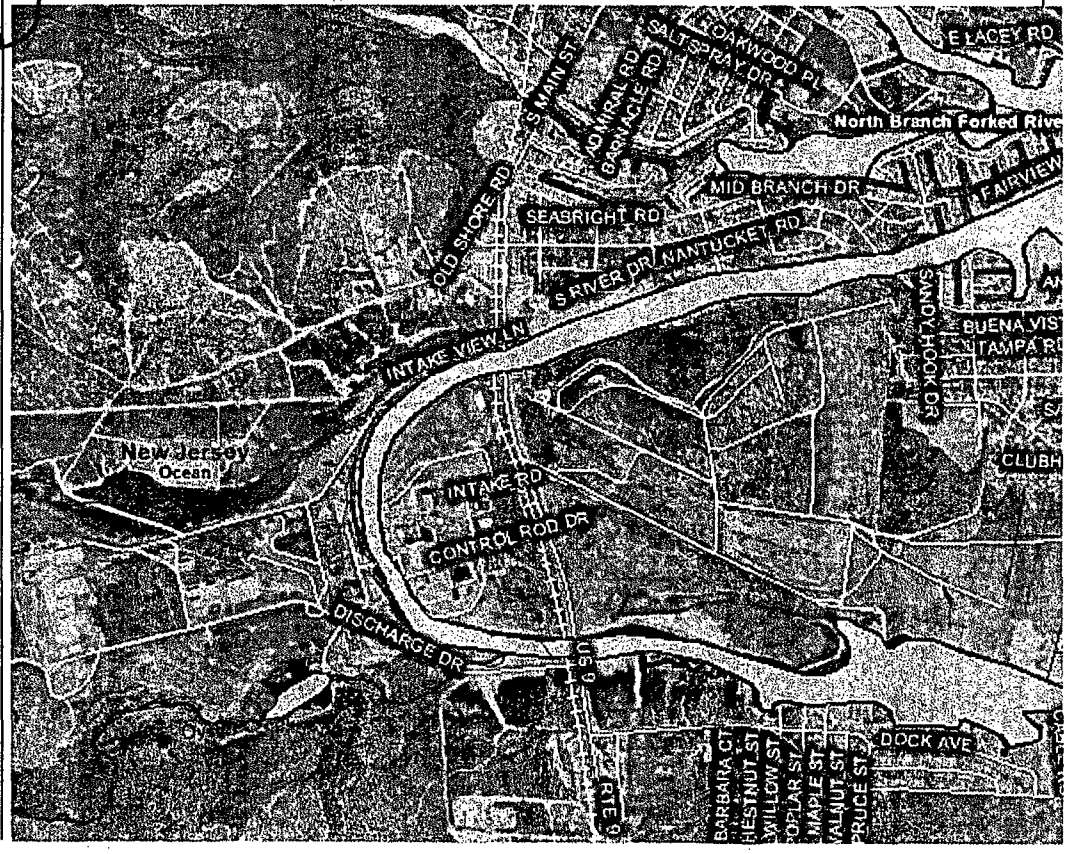
- Address
- County
  - View
  - State: New Jersey
  - County: Ocean
  - View
- Soil Survey Area
- Latitude and Longitude
- PLSS (Township and Range)
- Hydrologic Unit

Layers

Area of Interest Interactive Map

View Extent: Continental U.S.

Scale: (not to scale)



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A A A

Area of Interest | Soil Map | Soil Data Explorer

Layers

Map Layers

- AOI
- Soils
  - Soil Survey Areas
- Political Features
  - Federal Lands
  - Postal Code
  - Township and Range
  - States
  - Counties
  - Municipal
- Hydrography
  - Lakes
  - Waterways
  - Water
  - Hydrography
  - 8-Digit Hydrologic Units
  - Oceans
- Transportation
  - Rails
  - Roads
- Background
  - Orthophotography
  - USGS Shaded Relief

Area of Interest Interactive Map

View Extent Continental U.S.

Scale (not to scale)

United States Department of Agriculture
NRCS Natural Resources Conservation Service
Web Soil Survey
Contact Us | Download Soils Data | Preferences | Logout | Help
A A A
Area of Interest | Soil Map | Soil Data Explorer
Layers
Map Layers
AOI
Soils
Soil Survey Areas
Political Features
Federal Lands
Postal Code
Township and Range
States
Counties
Municipal
Hydrography
Lakes
Waterways
Water
Hydrography
8-Digit Hydrologic Units
Oceans
Transportation
Rails
Roads
Background
Orthophotography
Area of Interest Interactive Map
View Extent Continental U.S.
Scale
North Branch Forked Rive
Ocean

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A A A

Area of Interest | Soil Map | Soil Data Explorer

Area of Interest Properties

Clear AOI

AOI Information

Name

Area (acres) 2,136.6

Soil Data Available from Web Soil Survey

Ocean County, New Jersey (NJ029)

Soil Maps yes

Soil Data yes

Archived Soil Survey Publication: Manuscript no; Maps no

Clear AOI

Quick Navigation

Navigate By...

Address

County

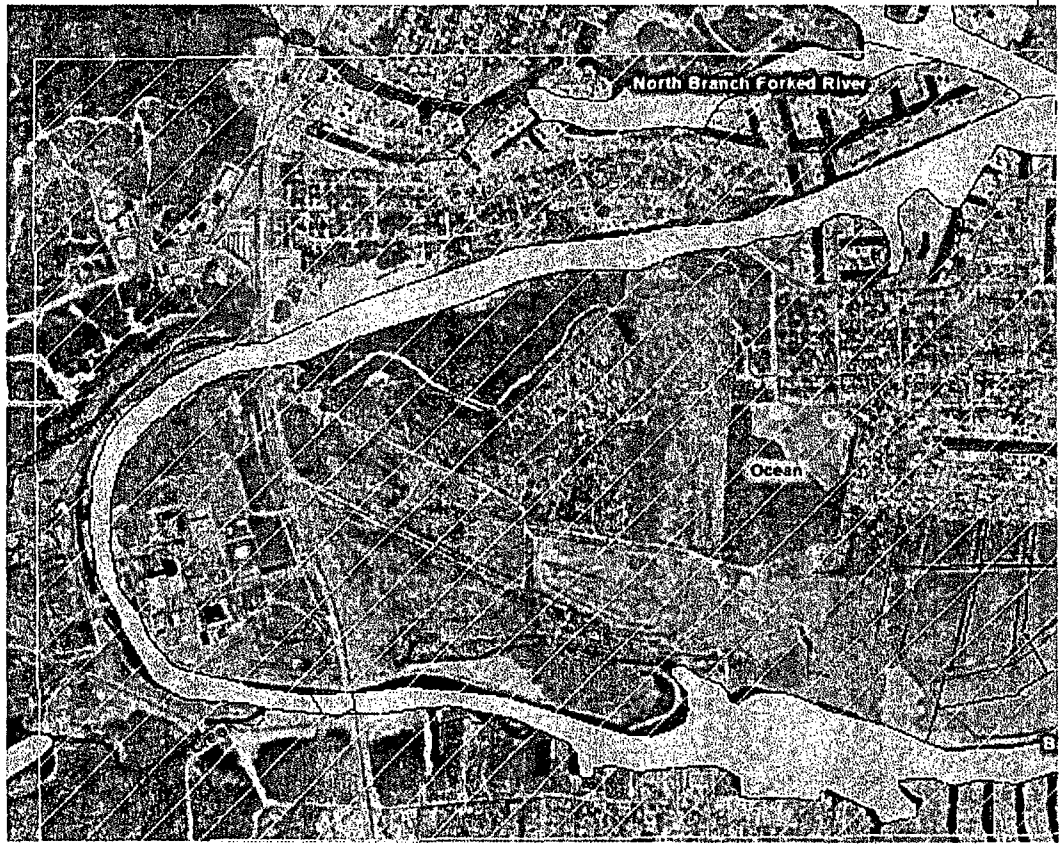
View

State New Jersey

Area of Interest Interactive Map

View Extent Continental U.S.

Scale (not to scale)



United States Department of Agriculture NRCS Natural Resources Conservation Service

Web Soil Survey

Suitabilities and Limitations Ratings

Open All | Close All

- Building Site Development
- Construction Materials
- Disaster Recovery Planning
- Land Classifications
- Land Management
- Military Operations
- Recreational Development
- Sanitary Facilities
- Vegetative Productivity
- Waste Management
- Water Management

Instructions

Viewing Suitabilities and Limitations Ratings

Suitabilities and limitations ratings are organized by category. Note that in cases where no ratings data is available for the AOI, folders and the ratings categories within folders may disappear.

1. Open a ratings category in the panel to the left, and select a rating.
2. To learn more about the rating, click **View Description**.
3. In the **View Options** pane, select the items you want to view. For more information, click the help button.
4. Optional: To change the aggregation method as well as other advanced parameters, click on the **Advanced Options** pane and make changes. For more information, click the help button.
5. When ready, click **View Ratings**.

Note: The ratings results you get in Web Soil Survey are identical to those in Soil Data Viewer 5.0 or later.

United States Department of Agriculture NRCS Natural Resources Conservation Service

Web Soil Survey

Contact Us | Download Soils Data | Preferences | Logout | Help

A | A | A

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

View Soil Information for: All Uses

Create Printable Document

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

Suitabilities and Limitations Ratings

Open All | Close All

- Building Site Development
- Construction Materials
- Disaster Recovery Planning
- **Land Classifications**
  - Conservation Tree and Shrub Group
  - Ecological Site ID
  - Ecological Site Name
  - Farmland Classification
  - Forage Suitability Group ID (Component Table)
  - Irrigated Capability Class
  - Irrigated Capability Subclass
  - Map Unit Hydric Rating
  - **Nonirrigated Capability Class**

View Description | View Ratings

View Options

Map ☑

Table

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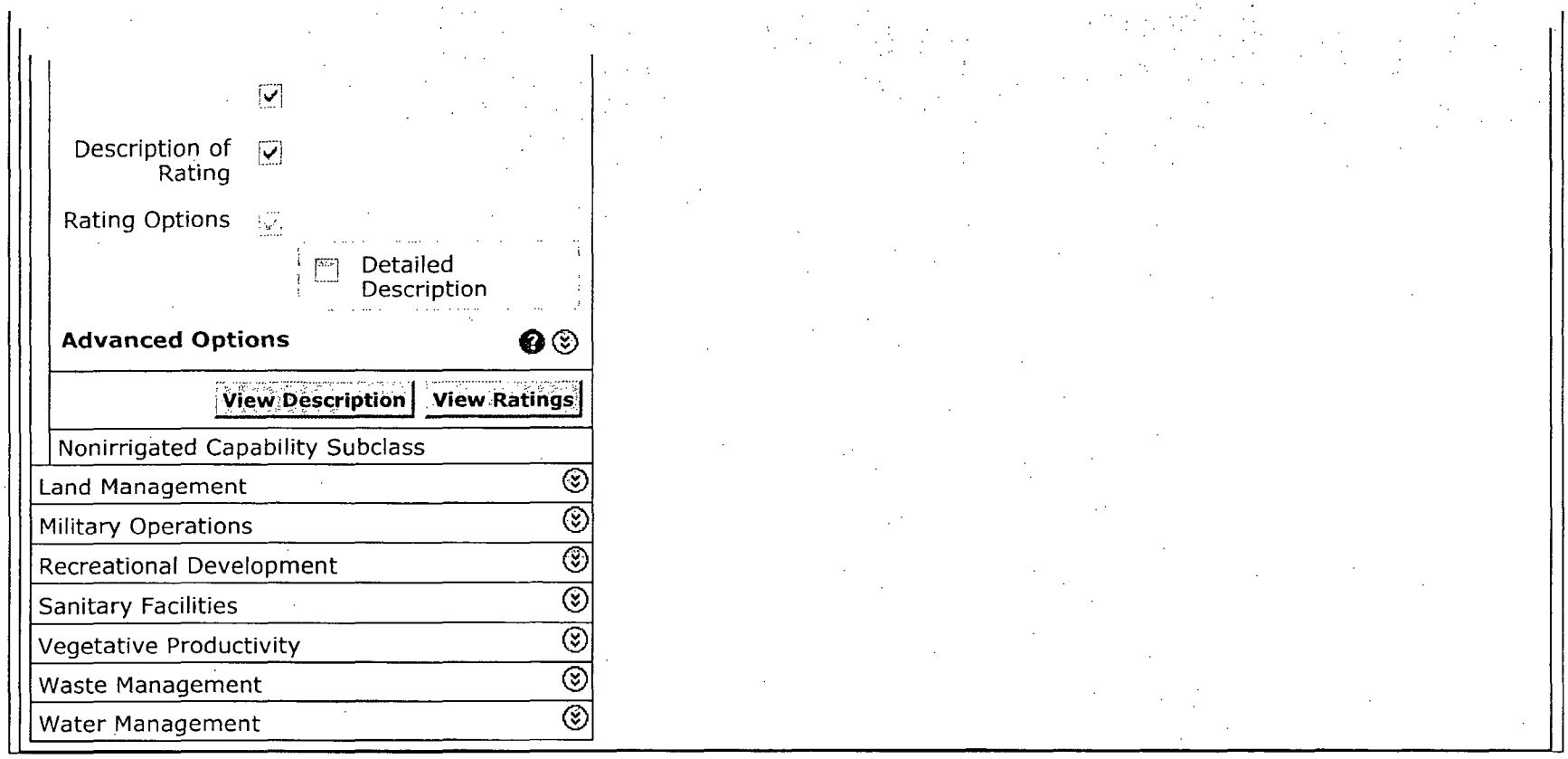

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A A A

Area of Interest | Soil Map | Soil Data Explorer

View Soil Information for: All Uses

Create Printable Document

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

Suitabilities and Limitations Ratings

Open All | Close All

- Building Site Development
- Construction Materials
- Disaster Recovery Planning
- **Land Classifications**
  - Conservation Tree and Shrub Group
  - Ecological Site ID
  - Ecological Site Name
  - Farmland Classification
  - Forage Suitability Group ID (Component Table)
  - Irrigated Capability Class
  - Irrigated Capability Subclass
  - Map Unit Hydric Rating
  - **Nonirrigated Capability Class**

View Description | View Ratings

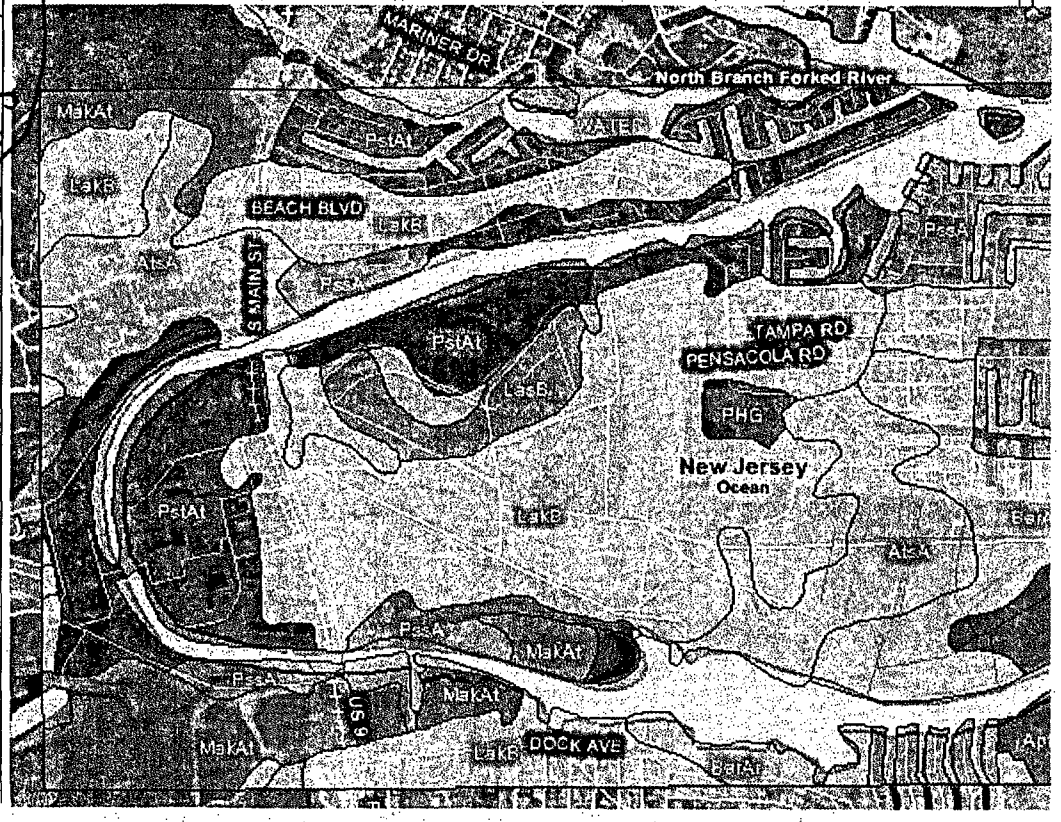
View Options

Map ☑

Table

Map - Nonirrigated Capability Class

Scale (not to scale)



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Web Soil Survey

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A A A

Area of Interest | Soil Map | Soil Data Explorer

View Soil Information for: All Uses

Create Printable Document

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

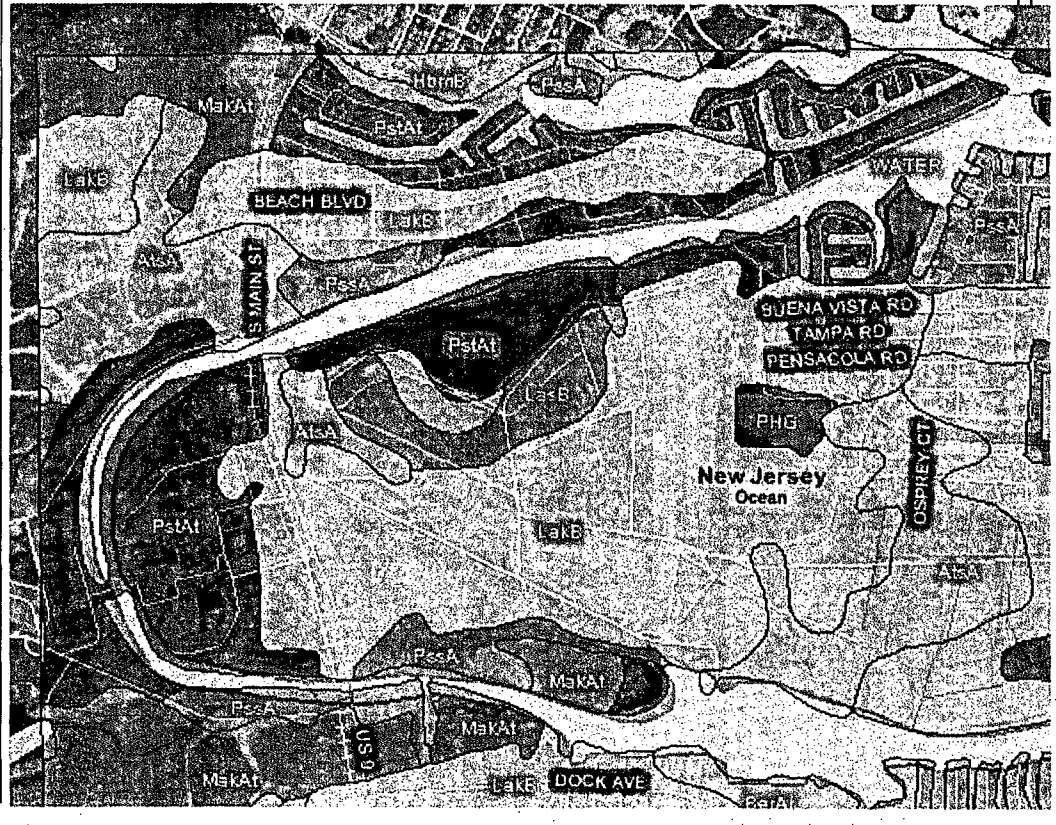
Map Legend

Soil Ratings
Capability Class - I
Capability Class - II
Capability Class - III
Capability Class - IV
Capability Class - V
Capability Class - VI
Capability Class - VII
Capability Class - VIII
Not rated or not available
Soil Map Units
Hydrography
Water
Roads
Rails
Interstate Highways
Cities
Detailed Counties
Detailed States
Oceans

Open All | Close All

Map - Nonirrigated Capability Class

Scale (not to scale)



Description of Rating

Rating Options

Detailed Description

Advanced Options

View Description | View Ratings

Nonirrigated Capability Subclass

Land Management

Military Operations

Recreational Development

Sanitary Facilities

Vegetative Productivity

Waste Management

Water Management

Tables - Nonirrigated Capability Class

Summary by Map Unit - Ocean County, New Jersey

Soil Survey Area Map Unit Symbol	Map Unit Name	Rating	Total Acres in AOI	Percent of AOI
AptAv	Appoquinimink-Transquaking-Mispillion complex, 0 to 1 percent slopes, very frequently flooded	8	135.0	6.3
AtsA	Atsion sand, 0 to 2 percent slopes	5	270.2	12.6
BerAr	Berryland sand, 0 to 2 percent slopes, rarely flooded	5	120.4	5.6
HbmB	Hammonton loamy sand, 0 to 5 percent slopes	2	12.9	0.6
LakB	Lakehurst sand, 0 to 5 percent slopes	4	494.1	23.1
LasB	Lakewood sand, 0 to 5 percent slopes	7	38.7	1.8
MakAt	Manahawkin muck, 0 to 2 percent slopes, frequently flooded	7	137.3	6.4
PHG	Pits, sand and gravel	8	10.8	0.5
PssA	Psamments, 0 to 3 percent slopes	7	190.9	8.9
PstAt	Psamments, sulfidic substratum, 0 to 3 percent slopes, frequently flooded	8	323.3	15.1

WATER	Water	Null	403.0	18.9

Description - Nonirrigated Capability Class

Land capability classification shows, in a general way, the suitability of soils for most kinds of field crops. Crops that require special management are excluded. The soils are grouped according to their limitations for field crops, the risk of damage if they are used for crops, and the way they respond to management. The criteria used in grouping the soils do not include major and generally expensive landforming that would change slope, depth, or other characteristics of the soils, nor do they include possible but unlikely major reclamation projects. Capability classification is not a substitute for interpretations that show suitability and limitations of groups of soils for rangeland, for woodland, and for engineering purposes.

In the capability system, soils are generally grouped at three levels — capability class, subclass, and unit. Only class and subclass are included in this dataset.

Capability classes, the broadest groups, are designated by the numbers 1 through 8. The numbers indicate progressively greater limitations and narrower choices for practical use. The classes are defined as follows:

Class 1 soils have few limitations that restrict their use.

Class 2 soils have moderate limitations that reduce the choice of plants or that require moderate conservation practices.

Class 3 soils have severe limitations that reduce the choice of plants or that require special conservation practices, or both.

Class 4 soils have very severe limitations that reduce the choice of plants or that require very careful management, or both.

Class 5 soils are subject to little or no erosion but have other limitations, impractical to remove, that restrict their use mainly to pasture, rangeland, forestland, or wildlife habitat.

Class 6 soils have severe limitations that make them generally unsuitable for cultivation and that restrict their use mainly to pasture, rangeland, forestland, or wildlife habitat.

Class 7 soils have very severe limitations that make them unsuitable for cultivation and that restrict their use mainly to grazing, forestland, or wildlife habitat.

Class 8 soils and miscellaneous areas have limitations that preclude commercial plant production and that restrict their use to recreational purposes, wildlife habitat, watershed, or esthetic purposes.

Rating Options - Nonirrigated Capability Class

Aggregation Method: Dominant Condition

Component Percent Cutoff:

Tie-break Rule: Higher

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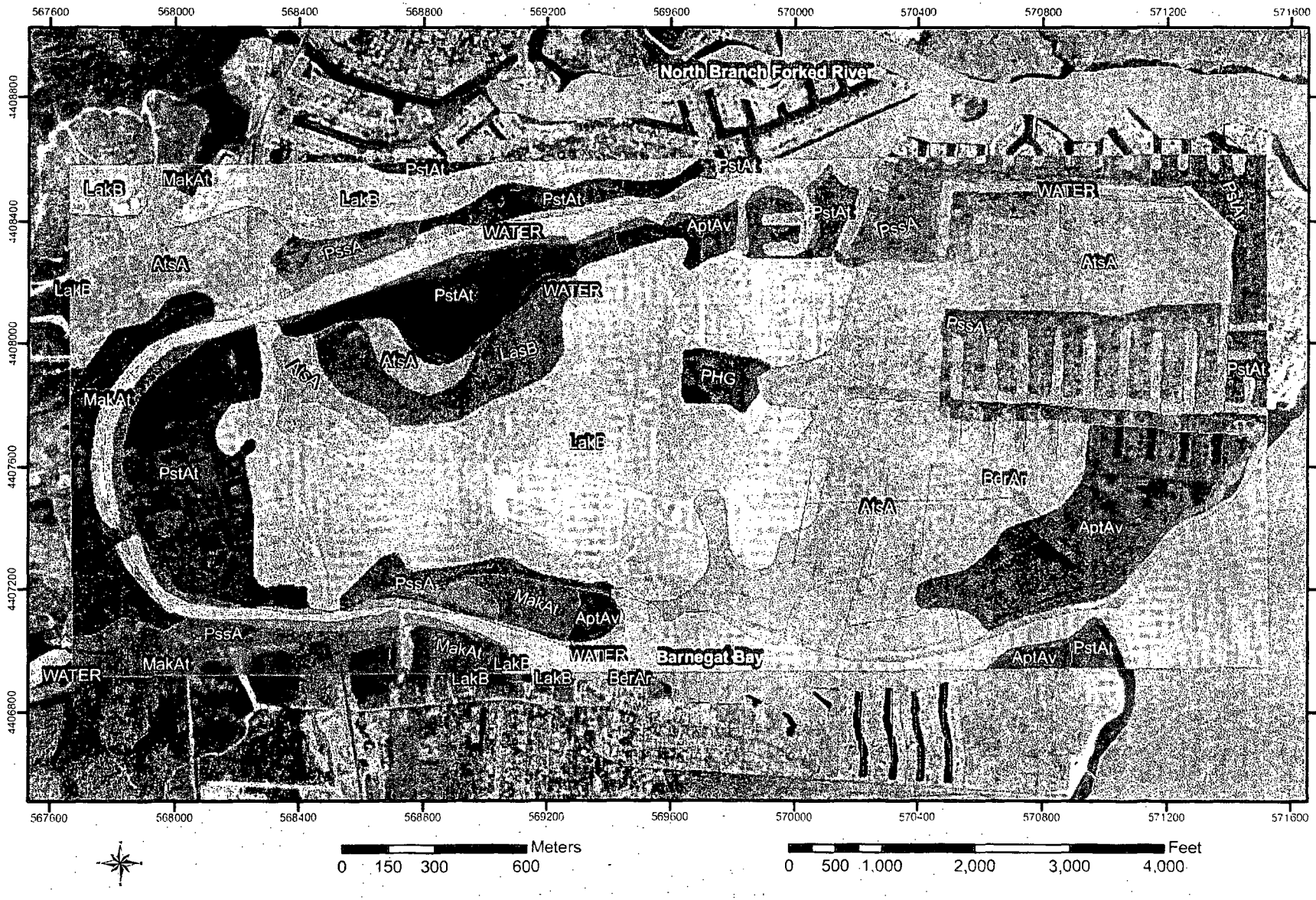
NONIRRIGATED CAPABILITY CLASS RATING FOR OCEAN COUNTY, NEW JERSEY

OCGS Soils Class



NONIRRIGATED CAPABILITY CLASS RATING FOR OCEAN COUNTY, NEW JERSEY

OCGS Soils Class

MAP LEGEND

Nonirrigated Capability Class

{Dominant Condition, >}

- Capability Class - I
- Capability Class - II
- Capability Class - III
- Capability Class - IV
- Capability Class - V
- Capability Class - VI
- Capability Class - VII
- Capability Class - VIII
- Not rated or not available

Soil Map Units

- 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 18

Soil Survey Area: Ocean County, New Jersey
Spatial Version of Data: 2
Soil Map Compilation Scale: 1:24000

Map comprised of aerial images photographed on these dates:
1995

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.

Tables - Nonirrigated Capability Class

Summary by Map Unit - Ocean County, New Jersey

Soil Survey Area Map Unit Symbol	Map Unit Name	Rating	Total Acres in AOI	Percent of AOI
AptAv	Appoquinimink-Transquaking-Mispillion complex, 0 to 1 percent slopes, very frequently flooded	8	99.7	6.2
AtsA	Atsion sand, 0 to 2 percent slopes	5	253.6	15.8
BerAr	Berryland sand, 0 to 2 percent slopes, rarely flooded	5	102.7	6.4
LakB	Lakehurst sand, 0 to 5 percent slopes	4	401.2	25.0
LasB	Lakewood sand, 0 to 5 percent slopes	7	38.7	2.4
MakAt	Manahawkin muck, 0 to 2 percent slopes, frequently flooded	7	53.7	3.3
PHG	Pits, sand and gravel	8	10.8	0.7
PssA	Psamments, 0 to 3 percent slopes	7	163.8	10.2
PstAt	Psamments, sulfidic substratum, 0 to 3 percent slopes, frequently flooded	8	242.7	15.1
WATER	Water	Null	238.6	14.9

Description - Nonirrigated Capability Class

Land capability classification shows, in a general way, the suitability of soils for most kinds of field crops. Crops that require special management are excluded. The soils are grouped according to their limitations for field crops, the risk of damage if they are used for crops, and the way they respond to management. The criteria used in grouping the soils do not include major and generally expensive landforming that would change slope, depth, or other characteristics of the soils, nor do they include possible but unlikely major reclamation projects. Capability classification is not a substitute for interpretations that show suitability and limitations of groups of soils for rangeland, for woodland, and for engineering purposes.

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Parameter Summary - Nonirrigated Capability Class

Aggregation Method: Dominant Condition

Aggregation is the process by which a set of component attribute values is reduced to a single value that represents the map unit as a whole.

A map unit is typically composed of one or more "components". A component is either some type of soil or some nonsoil entity, e.g., rock outcrop. For the attribute being aggregated, the first step of the aggregation process is to derive one attribute value for each of a map unit's components. From this set of component attributes, the next step of the aggregation process derives a single value that represents the map unit as a whole. Once a single value for each map unit is derived, a thematic map for soil map units can be rendered. Aggregation must be done because, on any soil map, map units are delineated but components are not.

For each of a map unit's components, a corresponding percent composition is recorded. A percent composition of 60 indicates that the corresponding component typically makes up approximately 60% of the map unit. Percent composition is a critical factor in some, but not all, aggregation methods.

The aggregation method "Dominant Condition" first groups like attribute values for the components in a map unit. For each group, percent composition is set to the sum of the percent composition of all components participating in that group. These groups now represent "conditions" rather than components. The attribute value associated with the group with the highest cumulative percent composition is returned. If more than one group shares the highest cumulative percent composition, the corresponding "tie-break" rule determines which value should be returned. The "tie-break" rule indicates whether the lower or higher group value should be returned in the case of a percent composition tie.

The result returned by this aggregation method represents the dominant condition throughout the map unit only when no tie has occurred.

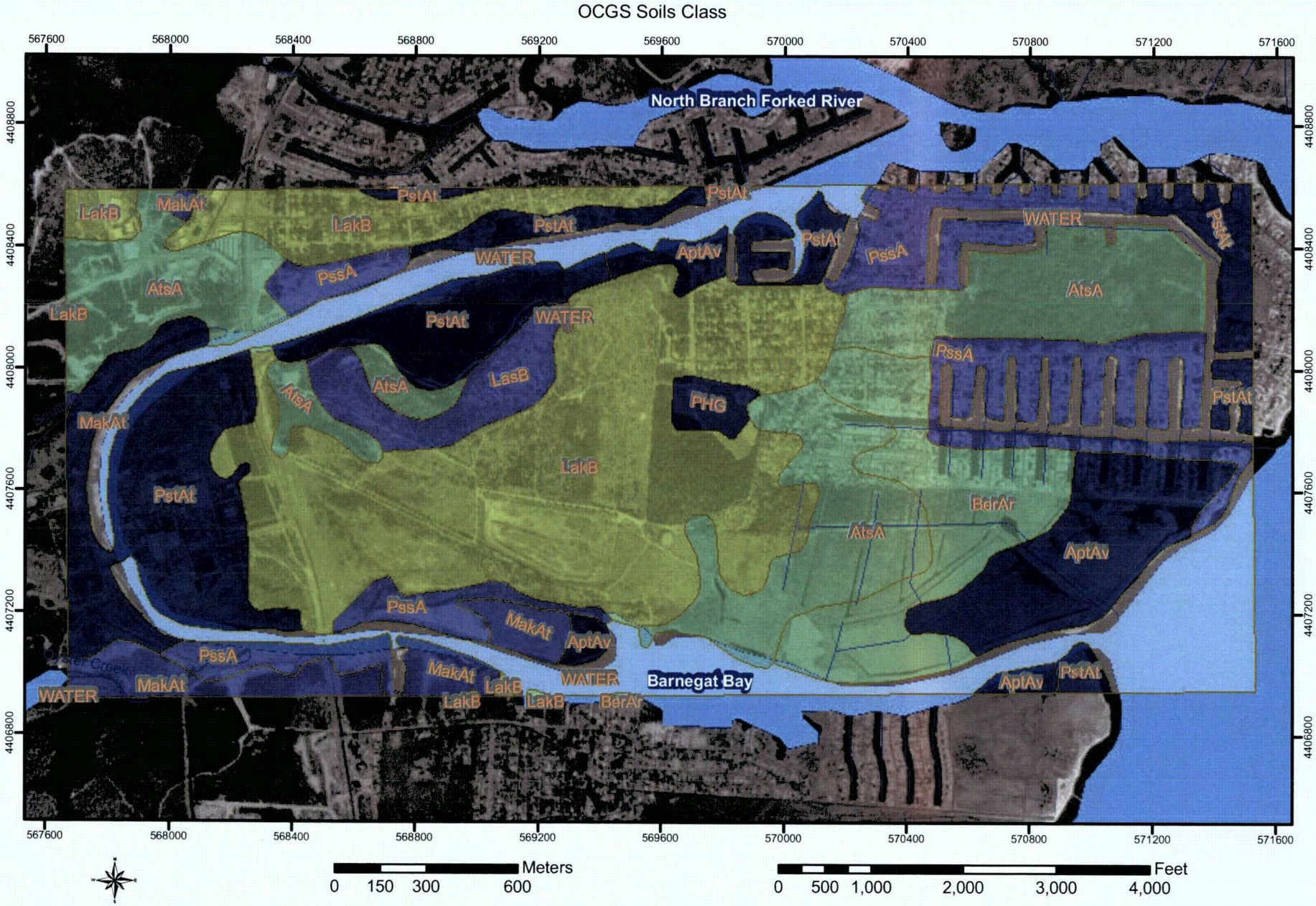
Component Percent Cutoff:

Components whose percent composition is below the cutoff value will not be considered. If no cutoff value is specified, all components in the database will be considered. The data for some contrasting soils of minor extent may not be in the database, and therefore are not considered.

Tie-break Rule: Higher

The tie-break rule indicates which value should be selected from a set of multiple candidate values, or which value should be selected in the event of a percent composition tie.

NONIRRIGATED CAPABILITY CLASS RATING FOR OCEAN COUNTY, NEW JERSEY



NONIRRIGATED CAPABILITY CLASS RATING FOR OCEAN COUNTY, NEW JERSEY

OCGS Soils Class

MAP LEGEND

Nonirrigated Capability Class

{Dominant Condition, >}

- Capability Class - I
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- Capability Class - VI
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WATER	Water	Null	238.6	14.9

Description - Nonirrigated Capability Class

Land capability classification shows, in a general way, the suitability of soils for most kinds of field crops. Crops that require special management are excluded. The soils are grouped according to their limitations for field crops, the risk of damage if they are used for crops, and the way they respond to management. The criteria used in grouping the soils do not include major and generally expensive landforming that would change slope, depth, or other characteristics of the soils, nor do they include possible but unlikely major reclamation projects. Capability classification is not a substitute for interpretations that show suitability and limitations of groups of soils for rangeland, for woodland, and for engineering purposes.

In the capability system, soils are generally grouped at three levels — capability class, subclass, and unit. Only class and subclass are included in this dataset.

Capability classes, the broadest groups, are designated by the numbers 1 through 8. The numbers indicate progressively greater limitations and narrower choices for practical use. The classes are defined as follows:

Class 1 soils have few limitations that restrict their use.

Class 2 soils have moderate limitations that reduce the choice of plants or that require moderate conservation practices.

Class 3 soils have severe limitations that reduce the choice of plants or that require special conservation practices, or both.

Class 4 soils have very severe limitations that reduce the choice of plants or that require very careful management, or both.

Class 5 soils are subject to little or no erosion but have other limitations, impractical to remove, that restrict their use mainly

to pasture, rangeland, forestland, or wildlife habitat.

Class 6 soils have severe limitations that make them generally unsuitable for cultivation and that restrict their use mainly to pasture, rangeland, forestland, or wildlife habitat.

Class 7 soils have very severe limitations that make them unsuitable for cultivation and that restrict their use mainly to grazing, forestland, or wildlife habitat.

Class 8 soils and miscellaneous areas have limitations that preclude commercial plant production and that restrict their use to recreational purposes, wildlife habitat, watershed, or esthetic purposes.

Parameter Summary - Nonirrigated Capability Class

Aggregation Method: Dominant Condition

Aggregation is the process by which a set of component attribute values is reduced to a single value that represents the map unit as a whole.

A map unit is typically composed of one or more "components". A component is either some type of soil or some nonsoil entity, e.g., rock outcrop. For the attribute being aggregated, the first step of the aggregation process is to derive one attribute value for each of a map unit's components. From this set of component attributes, the next step of the aggregation process derives a single value that represents the map unit as a whole. Once a single value for each map unit is derived, a thematic map for soil map units can be rendered. Aggregation must be done because, on any soil map, map units are delineated but components are not.

For each of a map unit's components, a corresponding percent composition is recorded. A percent composition of 60 indicates that the corresponding component typically makes up approximately 60% of the map unit. Percent composition is a critical factor in some, but not all, aggregation methods.

The aggregation method "Dominant Condition" first groups like attribute values for the components in a map unit. For each group, percent composition is set to the sum of the percent composition of all components participating in that group. These groups now represent "conditions" rather than components. The attribute value associated with the group with the highest cumulative percent composition is returned. If more than one group shares the highest cumulative percent composition, the corresponding "tie-break" rule determines which value should be returned. The "tie-break" rule indicates whether the lower or higher group value should be returned in the case of a percent composition tie.

The result returned by this aggregation method represents the dominant condition throughout the map unit only when no tie has occurred.

Component Percent Cutoff:

Components whose percent composition is below the cutoff value will not be considered. If no cutoff value is specified, all components in the database will be considered. The data for some contrasting soils of minor extent may not be in the database, and therefore are not considered.

Tie-break Rule: Higher

The tie-break rule indicates which value should be selected from a set of multiple candidate values, or which value should be selected in the event of a percent composition tie.