

Web Soil Survey

Carmen L. Santiago
USDA –NRCS, Caribbean Area
State Soil Scientist
carmen.santiago@pr.usda.gov

What is the Web Soil Survey?

- The Web Soil Survey (WSS) provides the **most current official soil data information produced by the National Cooperative Soil Survey.**
- Soil survey information is provided through maps.
- The site is updated and maintained online as the single authoritative source of soil survey information.

How do I access the Web Soil Survey?

- You can access the web soil survey by going to:
 - <http://soils.usda.gov/>
 - <http://websoilsurvey.nrcs.usda.gov/app/>
 - <http://www.pr.nrcs.usda.gov/>
- You can access the WSS brochure at:
 - ftp://ftp-fc.sc.egov.usda.gov/NSSC/pub/WSS_brochure.pdf

Search

Caribbean Area
Enter Keywords GO

Quick Access

- ▶ Earth Team
- ▶ Volunteers
- ▶ Electronic Government
- ▶ Employment
- ▶ Employee Directory
- ▶ Farm Bill
- ▶ Hurricane Preparedness
- ▶ Legislative
- ▶ NRCS en Español
- ▶ Photo Gallery
- ▶ Publications
- ▶ Site Map
- ▶ USDA en Español

▶ Find a Service Center

Welcome to the NRCS Caribbean Area: Puerto Rico & U.S. Virgin Islands Web Site!

- ▶ 2007 Caribbean Area Natural Resources Inventory now available!
- ▶ Caribbean Area NRCS: Proud to Celebrate USDA's 150th Anniversary! (en Español) (PDF, 92 KB)
- ▶ Highly Erodible Land Conservation and Wetland Conservation Compliance Factsheet (PDF, 163 KB) - NEW!
- ▶ NRCS "The Caribbean" Newsletter - March 2012 Issue now available! (PDF, 647 KB)



NRCS Announces National Water Quality Initiative Conserva...

NRCS Caribbean Area Director, Edwin Almodóvar, announces the launch of a new **National Water Quality Initiative** committed to improving impaired waterways in western Puerto Rico. USDA's Natural Resources Conservation Service (NRCS) will manage the initiative by making funds available to farmers, ranchers and forest landowners in the **Rio Grande de Añasco** watershed. All applications for funding consideration during this fiscal year must be received by **June 15, 2012**.

..More Info on NWQI (en Español)



NRCS Funds Emergency Watershed Protection in Puerto Rico (en Español)

NRCS Caribbean Area Director, Edwin Almodóvar, announces that the Caribbean Area NRCS has been allocated \$1,800,000 in Emergency Watershed Protection (EWP) funds to help nine (9) communities in Puerto Rico recover from damages caused by Hurricane Irene in August 2011.

..More Info on EWP (en Español)



New CRP Highly Erodible Cropland Conservation Initiative

USDA announces a new Conservation Reserve Program (CRP) initiative to protect up to 750,000 acres nationwide by helping producers identify their most highly erodible cropland (HEL). CRP provides resources to enable producers to plant wildlife-friendly cover on their land. Producers can enroll land on a continuous basis, beginning this summer, with their [local Farm Service Agency \(FSA\) county office](#). FSA local staff will be able to quickly determine a producer's eligibility in the initiative. For more information, [contact your local FSA office](#).

..More Info on Conservation Reserve Program



FY12 Conservation Program Sign-up Continues

The NRCS Caribbean Area announces that the Environmental Quality Incentives Program (EQIP) sign-up for 2012 is continuing and applications will be accepted year-round. Caribbean Area agricultural producers will also be able to apply for cost share funding for the EQIP Organic and On-Farm Energy Initiatives.

..More Info on EQIP



Information About:

- ▶ Soils
- ▶ Water
- ▶ Air
- ▶ Plants
- ▶ Animals

Information For:

- ▶ Communities
- ▶ Farmers and Ranchers
- ▶ Homeowners
- ▶ CB NRCS Employees
- ▶ Policy Makers
- ▶ Teachers and Students
- ▶ Technical Service Providers (en Español)
- ▶ Volunteers



Web Soil Survey



Search

Caribbean Area dropdown menu, Enter Keywords input field, GO button

Technical Resources

- ▶ Agronomy
- ▶ Biology
- ▶ Ecology
- ▶ eFOTG
- ▶ Engineering
- ▶ Natural Resources Inventory
- ▶ Plants
- ▶ Soils
- ▶ Water

▶ Find a Service Center

Caribbean Area Soils

Helping People Understand Soils

Updated June 18, 2012

The Caribbean Area, comprised of Puerto Rico and the United States Virgin Islands, is part of the National Cooperative Soil Survey (NCSS) program. The National Cooperative Soil Survey (NCSS) is a nationwide partnership of federal, regional, state, and local agencies and institutions. This partnership works together to cooperatively investigate, inventory, document, classify, and interpret soils and to disseminate, publish, and promote the use of information about the soils of the United States and its trust territories. The activities of the NCSS are carried out on national, regional, and state levels.

NEW! Unlock the Secrets of Soil - USDA-NRCS YouTube video



Caribbean Area Soils Information

Some of this information requires [Adobe Acrobat](#)

- [New San Germán Soil Survey Now Available!](#)
- [Soil Data Mart](#) - **The most current official soil information.** Determine and download soil tabular and spatial data for one soil survey area at a time. Generate a variety of reports for one soil survey area at a time.
- [Web Soil Survey](#) - 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.

Click on the Web Soil Survey link





USDA United States Department of Agriculture Natural Resources Conservation Service

Web Soil Survey

Home About Soils Help Contact Us

Start your Web Soil Survey session here



- Search
- Enter Keywords
- All NRCS Sites
- Browse by Subject
- Soils Home
 - National Cooperative Soil Survey (NCSS)
 - Archived Soil Surveys
 - Status Maps
 - Official Soil Series Descriptions (OSD)
 - Soil Series Extent Mapping Tool
 - Soil Data Mart
 - Geospatial Data Gateway
 - eFOTG
 - National Soil Characterization Data
 - Soil Geochemistry Spatial Database
 - Soil Quality
 - Soil Geography
 - Geospatial One Stop

- I Want To...
- Start Web Soil Survey (WSS)
 - Know the requirements for running Web Soil Survey — will Web Soil Survey work in my web browser?
 - Know the Web Soil Survey hours of operation
 - Find what areas of the U.S. have soil data

welcome to web Soil Survey (WSS)



Web Soil Survey (WSS) provides soil data and information produced by the National Cooperative Soil Survey. It is operated by the USDA Natural Resources Conservation Service (NRCS) and provides access to the largest natural resource information system in the world. NRCS has soil maps and data available online for more than 95 percent of the nation's counties and

anticipates having 100 percent in the near future. The site is updated and maintained online as the single authoritative source of soil survey information.

Four Basic Steps

1 Define.

Area of Interest (AOI)

Use the Area of Interest tab to define your area of interest.



Click to view larger image.

2 View.

Soil Map

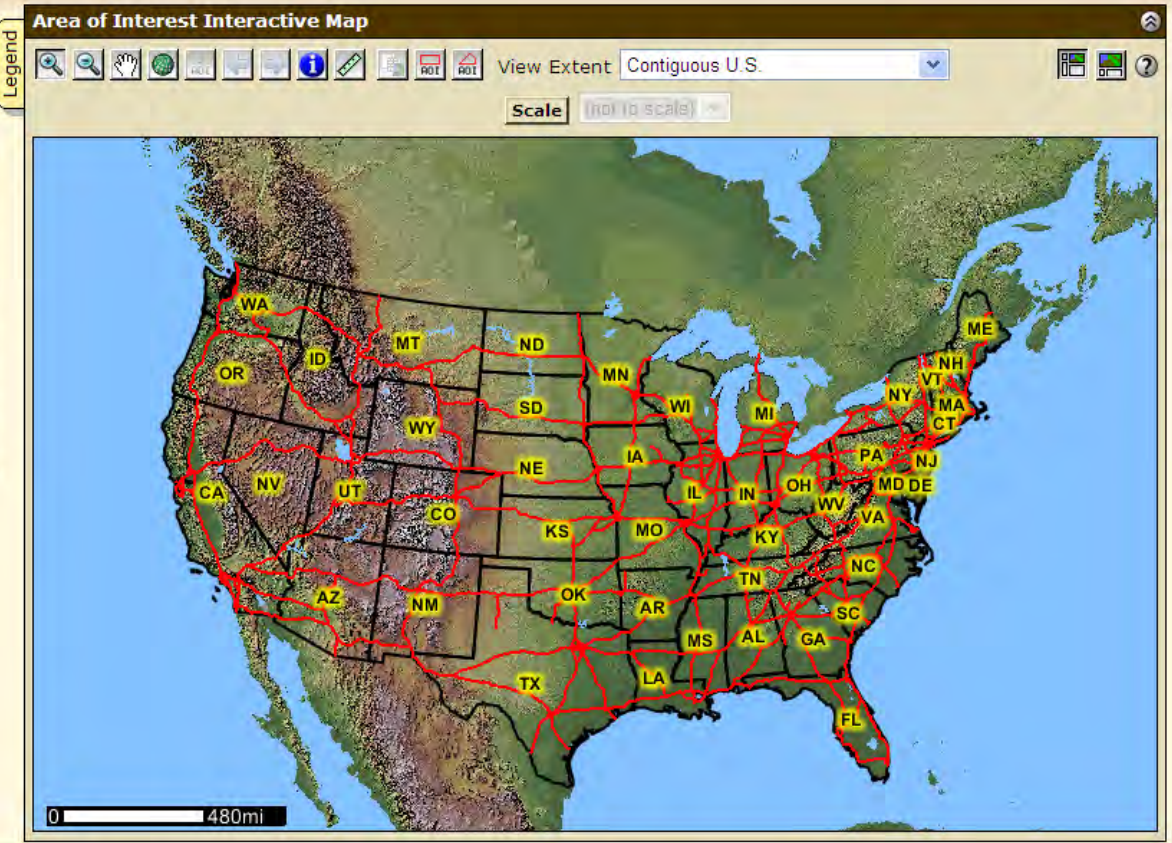
Click the Soil Map tab to view or print a soil map, and detailed descriptions of the soils in your Area of Interest.

- Announcements/Events
- Web Soil Survey 2.3 has been released! View description of new features.
 - Web Soil Survey Release History

- I Want Help With...
- Getting Started With Web Soil Survey
 - How to use Web Soil Survey
 - How to use Web Soil Survey Online Help
 - Known Problems and Workarounds
 - Frequently Asked Questions
 - Citing Web Soil Survey as a source of soils data

Select your Area of Interest (AOI)

- Search
- Area of Interest
 - Import AOI
- Quick Navigation
 - Address
 - State and County
 - Soil Survey Area
 - Latitude and Longitude
 - PLSS (Section, Township, Range)
 - Bureau of Land Management
 - Department of Defense
 - Forest Service
 - National Park Service
 - Hydrologic Unit



In the drop down arrow, select Puerto Rico or Virgin Islands

Search

Area of Interest

Import AOI

Quick Navigation

Address

State and County

Soil Survey Area

Latitude and Longitude

PLSS (Section, Township, Range)

Bureau of Land Management

Department of Defense

Forest Service

National Park Service

Hydrologic Unit

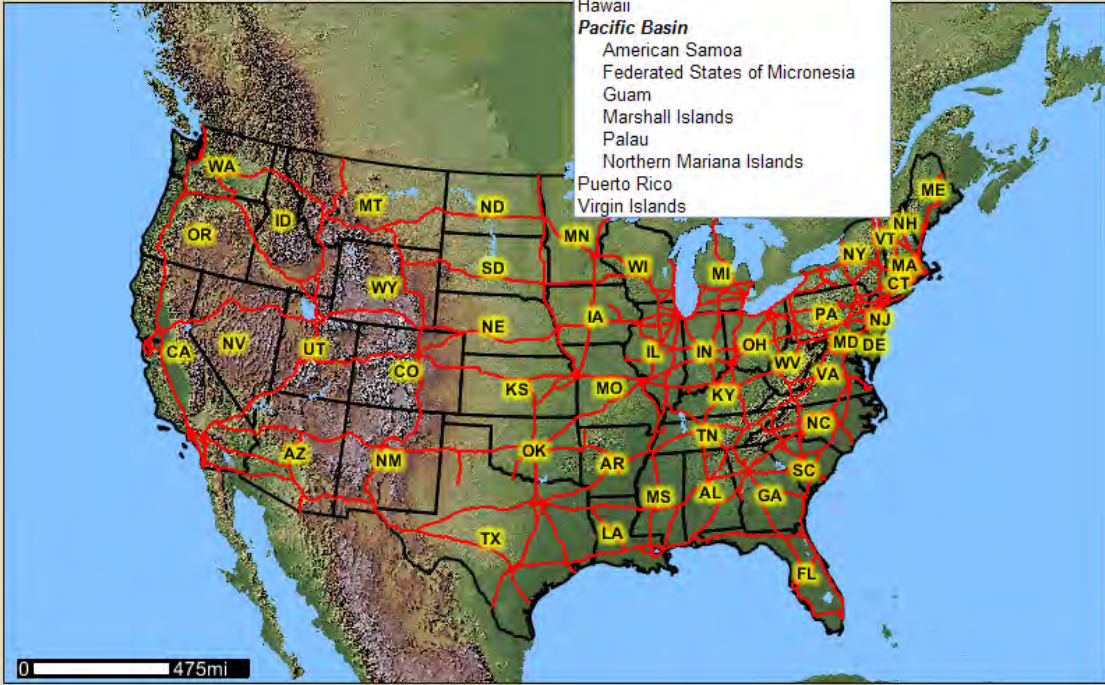
Area of Interest Interactive Map

Legend

View Extent

Scale

Contiguous U.S.
Contiguous U.S.
Alaska
Hawaii
Pacific Basin
American Samoa
Federated States of Micronesia
Guam
Marshall Islands
Palau
Northern Mariana Islands
Puerto Rico
Virgin Islands



Area of Interest (AOI)

You can import a shapefile or zipped shapefile with your AOI

Search

Area of Interest

Import AOI

Create AOI from Shapefile

Set AOI ?

.shp file Browse...

.prj file Browse...

Set AOI

Create AOI from Zipped Shapefile

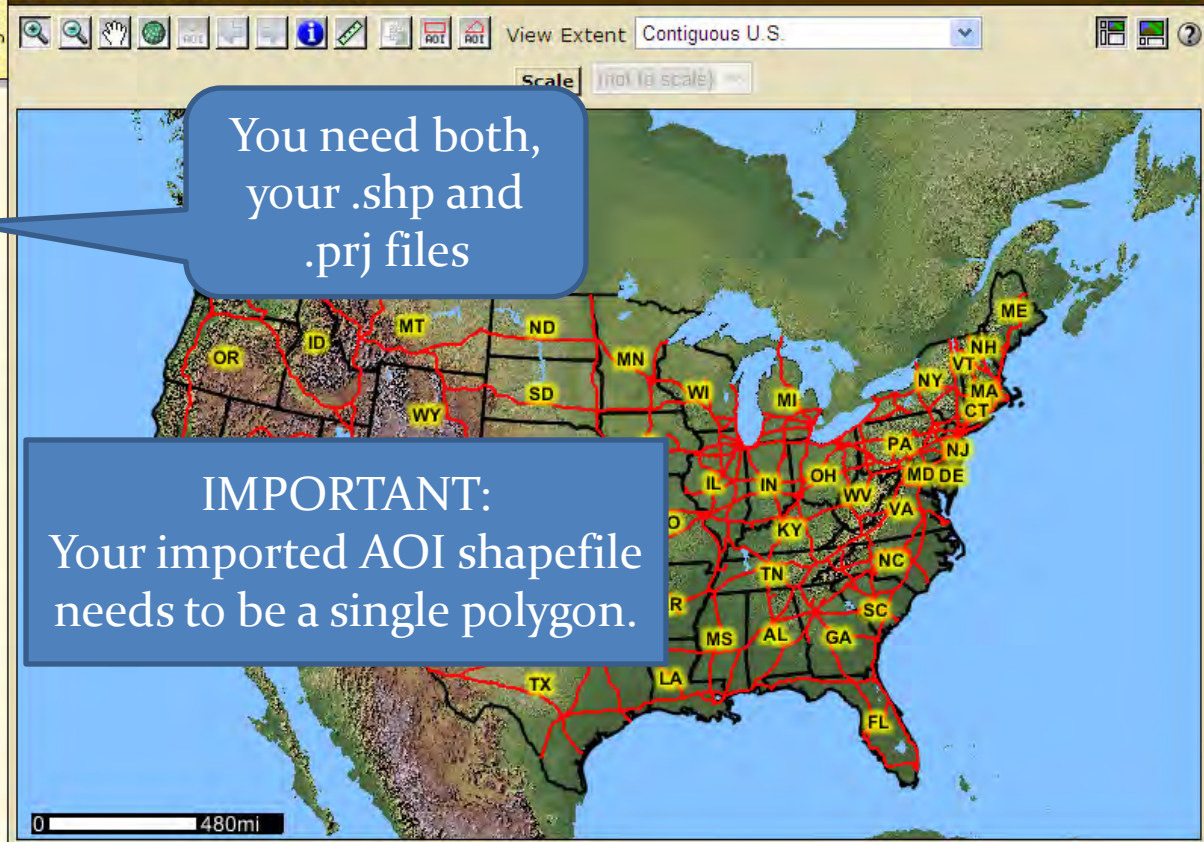
Quick Navigation

- Address
- State and County
- Soil Survey Area
- Latitude and Longitude
- PLSS (Section, Township, Range)
- Bureau of Land Management
- Department of Defense
- Forest Service
- National Park Service
- Hydrologic Unit

You need both, your .shp and .prj files

IMPORTANT:
Your imported AOI shapefile needs to be a single polygon.

Interactive Map



Area of Interest (AOI)

Soil Map

Soil Data Explorer

Shopping Cart (Free)

Search

Area of Interest

Import AOI

Create AOI from Shapefile

Create AOI from Zipped Shapefile

Quick Navigation

Address

State and County

Soil Survey Area

Latitude and Longitude

View ?

Latitude, Longitude 182742N,662440W

Show location marker

View

PLSS (Section, Township, Range)

Bureau of Land Management

Department of Defense

Forest Service

National Park Service

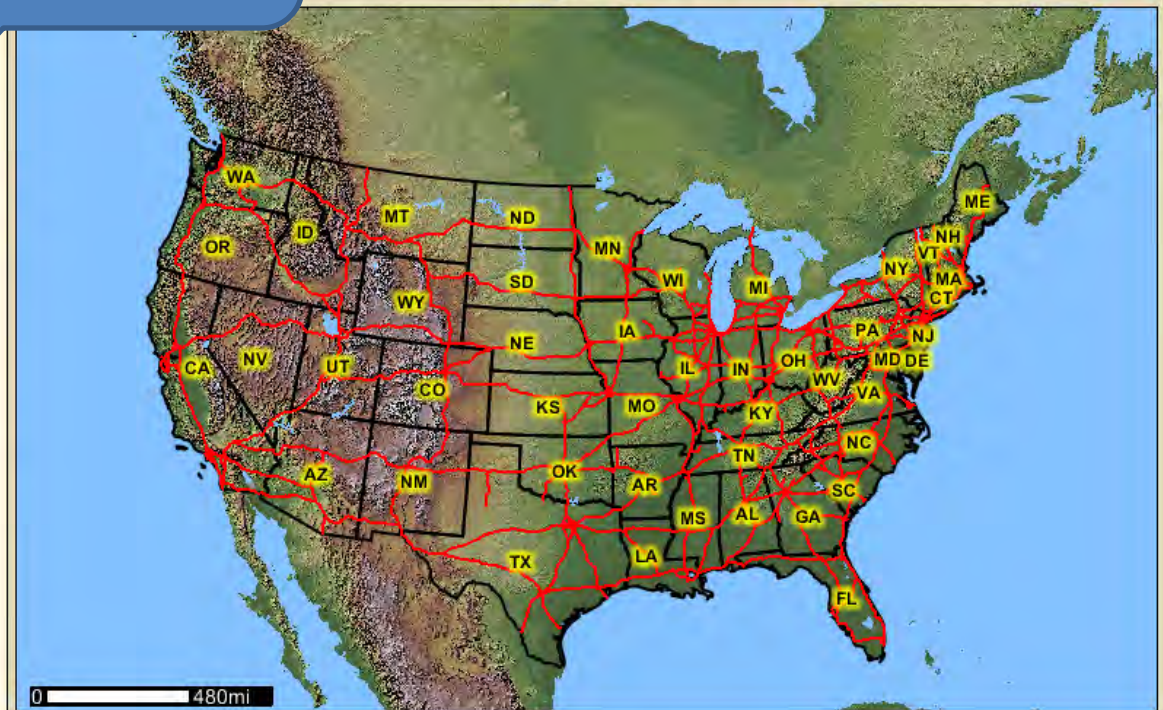
Hydrologic Unit

You can use the latitude and longitude for the AOI

Map

View Extent Contiguous U.S.

Scale 1:100,000



Area of Interest (AOI)

Soil Map

Soil Data Explorer

Shopping Cart (Free)

Search

Area of Interest

Import AOI

Quick Navigation

Address

State and County

Soil Survey Area

Set AOI

View

State Puerto Rico

County (optional)

Soil Survey Area San German Area, Southwestern Puert

Show Soil Survey Areas Layer in Map

Set AOI

View

Latitude and Longitude

PLSS (Section, Township, Range)

Bureau of Land Management

Department of Defense

Forest Service

National Park Service

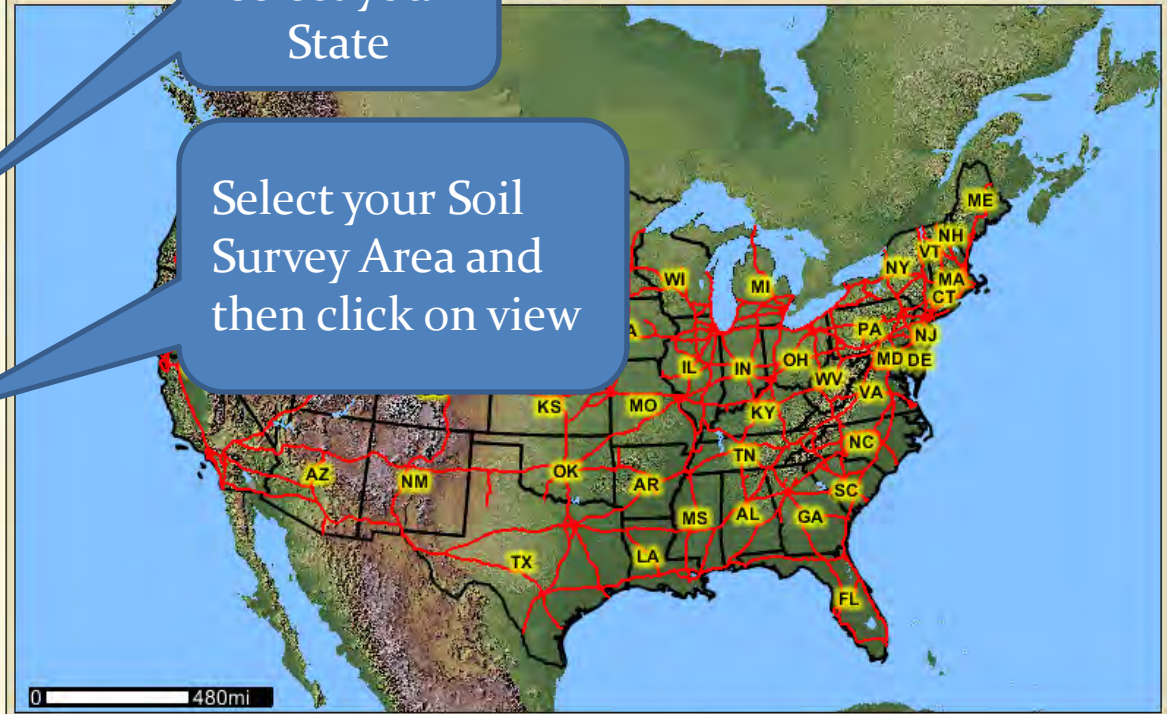
Hydrologic Unit

Area of Interest

Legend

View Extent Contiguous U.S.

Scale



You can select your State

Select your Soil Survey Area and then click on view



Area of Interest

Soil Data Explorer Shopping Cart (Free)

Search

Area of Interest

Import AOI

Quick Navigation

Address

State and County

Soil Survey Area

Set AOI View

State: Puerto Rico

County (optional)

Soil Survey Area: San German Area, Southwestern Puerto Rico

Show Soil Survey Areas Layer in Map

Set AOI View

Latitude and Longitude

PLSS (Section, Township, Range)

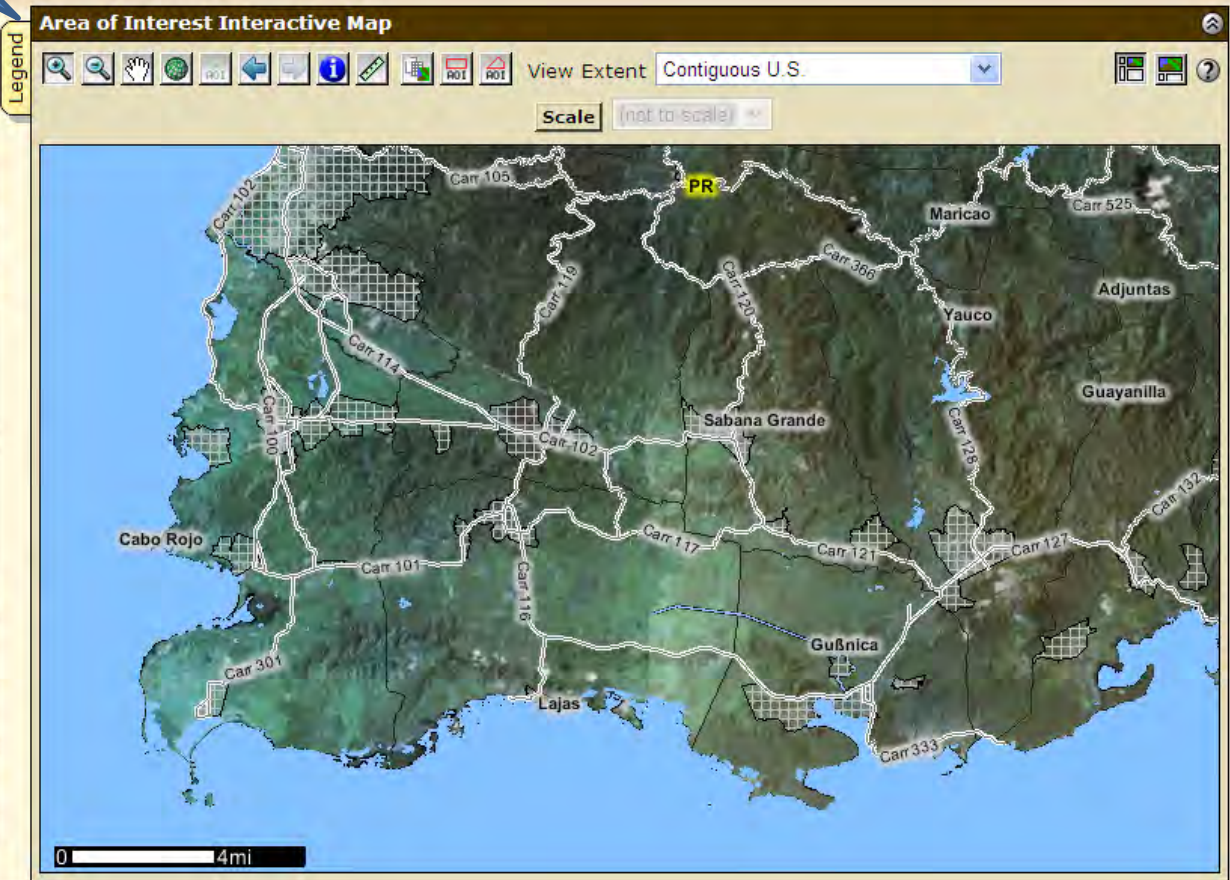
Bureau of Land Management

Department of Defense

Forest Service

National Park Service

Hydrologic Unit



You can see the available digital layers and change the background from aerial photo to topographic map.

Area of Interest (AOI) Soil Map Soil Data

Search Map Legend

Area of Interest

Quick Navigation

Address

State and County

Soil Survey

County

Soil Survey

Survey

Latitude

PLSS (Section, Range, Township)

Bureau of Land Management

Department of Agriculture

Forest Service

National Resources Conservation Service

Map Legend

- PLSS Township and Range
- PLSS Section
- Federal Land
 - Bureau of Land Management
 - Bureau of Reclamation
 - Department of Defense
 - Fish and Wildlife Service
 - Forest Service
 - National Park Service
 - Tennessee Valley Authority
- Water Features
 - Oceans
 - Water
 - Streams and Canals
 - 8-Digit Hydrologic Units
- Transportation
 - Rails
 - Interstate Highways
 - US Routes
 - Major Roads
 - Local Roads
- Background (only one is visible at a time)
 - Aerial Photography
 - Topographic Map
 - Shaded Relief

View Extent: Contiguous U.S.

Scale: (not to scale)

0 4mi

Web Soil Survey - Windows Internet Explorer

File Edit View Favorites Tools Help

http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx

Live Search

★ Favorites | ★ Free Hotmail | RealPlayer Enterpr...

Web Soil Survey

USDA United States Department of Agriculture
Natural Resources Conservation Service

Here is the interactive tool bar

Contact Us | Download Soils Data | Archived Soil Surveys | Soil Survey Status | Logout | Help

Area of Interest (AOI)

Soil Map

Soil Data Explorer

Show Soil Survey Area (Free)

Search

Area of Interest

Import AOI

Quick Navigation

Address

State and County

Soil Survey Area

Set AOI

View

State Puerto Rico

County (optional)

Soil Survey Area San German Area, Southwestern Puerto Rico

Show Soil Survey Areas Layer in Map

Set AOI

View

Latitude and Longitude

PLSS (Section, Township, Range)

Bureau of Land Management

Department of Defense

Forest Service

National Park Service

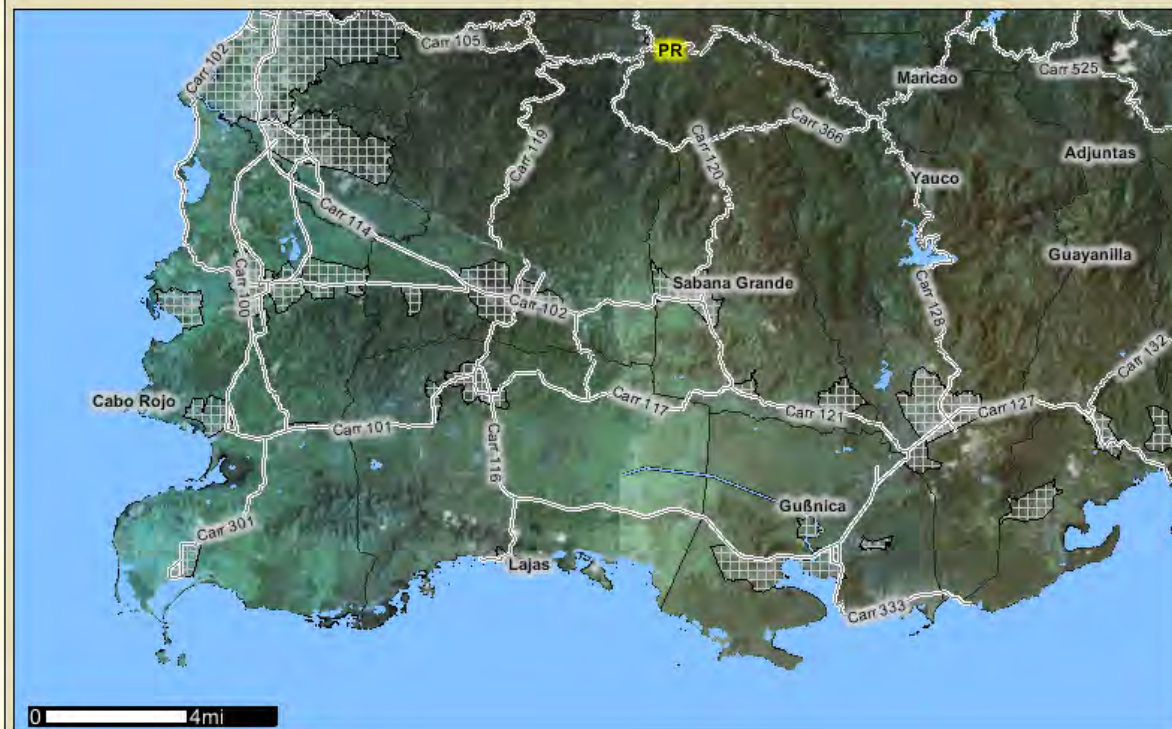
Hydrologic Unit

Area of Interest Interactive Map

View Extent Contiguous U.S.

Scale

(not to scale)



Area of Interest (AOI)

Soil Map

Soil Data Explorer

Shopping

Select the area with the rectangle AOI

Search

Area of Interest

Import AOI

Quick Navigation

Address

State and County

Soil Survey Area

Set AOI View

State Puerto Rico

County (optional)

Soil Survey Area San German Area, Southwestern Puerto Rico

Show Soil Survey Areas Layer in Map

Set AOI View

Latitude and Longitude

PLSS (Section, Township, Range)

Bureau of Land Management

Department of Defense

Forest Service

National Park Service

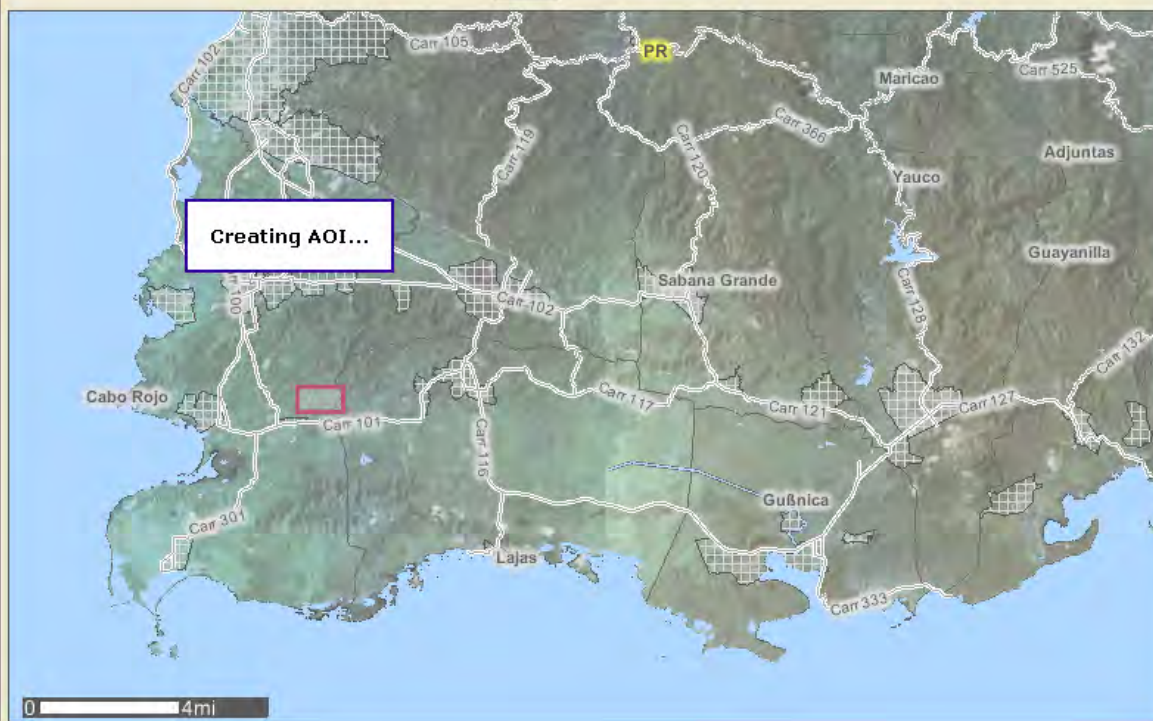
Hydrologic Unit

Area of Interest Interactive Map

View Extent Contiguous U.S.

Scale 1:100,000

Creating AOI...



0 4mi

Area of Interest (AOI)

Soil Map

Soil Data Explorer

Shopping Cart (Free)

Search

Area of Interest

Open All Close All

AOI Properties

AOI Information

Name

Map Unit Symbols

- Use Soil Survey Area Map Unit Symbols
- Use National Map Unit Symbols

Area (acres)

769.5

Soil Data Available from Web Soil Survey

San German Area, Southwestern Puerto Rico (PR787)

Spatial Data Version 1, Dec 17, 2007

Tabular Data Version 2, Dec 3, 2008

Clear AOI

Import AOI

Export AOI

Quick Navigation

Address

State and County

Soil Survey Area

Set AOI View

Area of Interest Interactive Map

Legend

View Extent Contiguous U.S.

Scale not in scale



The AOI is shown in a grid box

Using the Polygon AOI, draw the boundary of your site. Double click at the last point to close the boundary.

Area of Interest (AOI) Soil Map Soil Data Ex

Search

Area of Interest
Open All Close All

AOI Properties
Clear AOI

AOI Information

Name

Map Unit Symbols
 Use Soil Survey Area Map Unit Symbols
 Use National Map Unit Symbols

Area (acres) 769.5

Soil Data Available from Web Soil Survey

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Spatial Data Version 1, Dec 17, 2007
Tabular Data Version 2, Dec 3, 2008

Clear AOI

Import AOI
Export AOI

Quick Navigation

Address
State and County

Soil Survey Area
Set AOI View

Area of Interest Interactive Map

View Extent Contiguous U.S.
Scale [not to scale]

Creating AOI...

Area of Interest (AOI)

Soil Map

Soil Data Explorer

Shopping Cart (Free)

Search

Area of Interest

Open All Close All

AOI Properties

Clear AOI

AOI Information

Name

Map Unit Symbols

- Use Soil Survey Area Map Unit Symbols
- Use National Map Unit Symbols

Area (acres)

123.0

Soil Data Available from Web Soil Survey

San German Area, Southwestern Puerto Rico (PR787)

Spatial Data Version 1, Dec 17, 2007

Tabular Data Version 2, Dec 3, 2008

Clear AOI

Import AOI

Export AOI

Quick Navigation

Address

State and County

Soil Survey Area

Set AOI View

Your AOI is shown in the shaded area

Area of Interest

Legend

View Extent Contiguous U.S.

Scale not to scale



Now, go to the Soil Map tab

You can print the soil map

File Edit View Favorites
 http://websoil...urvey.aspx
 Web Soil Survey
 USDA United States Department of Agriculture
 Natural Resources Conservation Service
 Contact Us Download Soils Data Archived Soil Surveys Soil Survey Status Glossary Preferences Link Logout Help
 Area of Interest (AOI) **Soil Map** Soil Data Explorer Shopping Cart (Free)
 Printable Version Add to Shopping Cart

Search
Map Unit Legend

San German Area, Southwestern Puerto Rico (PR787)

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
CeA	Cartagena clay, 0 to 2 percent slopes	3.9	3.2%
DsD	Descalabrado clay, 12 to 20 percent slopes	6.2	5.1%
DsF	Descalabrado clay, 20 to 60 percent slopes	5.7	4.6%
FrA	Fraternidad clay, 0 to 2 percent slopes	21.4	17.4%
FrB	Fraternidad clay, 2 to 5 percent slopes	13.4	10.9%
JaB	Jacana clay, 0 to 5 percent slopes	6.7	5.4%
JaC	Jacana clay, 5 to 12 percent slopes	18.8	15.3%
ScA	San Anton clay loam, 0 to 2 percent slopes, occasionally flooded	12.2	9.9%
SdF	San German cobbly clay loam, 20 to 60 percent slopes	34.6	28.2%
Totals for Area of Interest		123.0	100.0%

Soil Map
 Legend
 Scale (not to scale)
 0 828ft
Warning: Soil Map may not be valid at this scale.
 You have zoomed in beyond the scale at which the soil map for this area is intended to be used. Mapping of soils is done at a particular scale. The soil surveys that comprise your AOI were mapped at 1:20,000. The design of map units and the level of detail shown in the resulting soil map are dependent on that map scale. Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and

Area of Interest (AOI)

Soil Map

Shopping Cart (Free)

Printable Version

Add to Shopping Cart

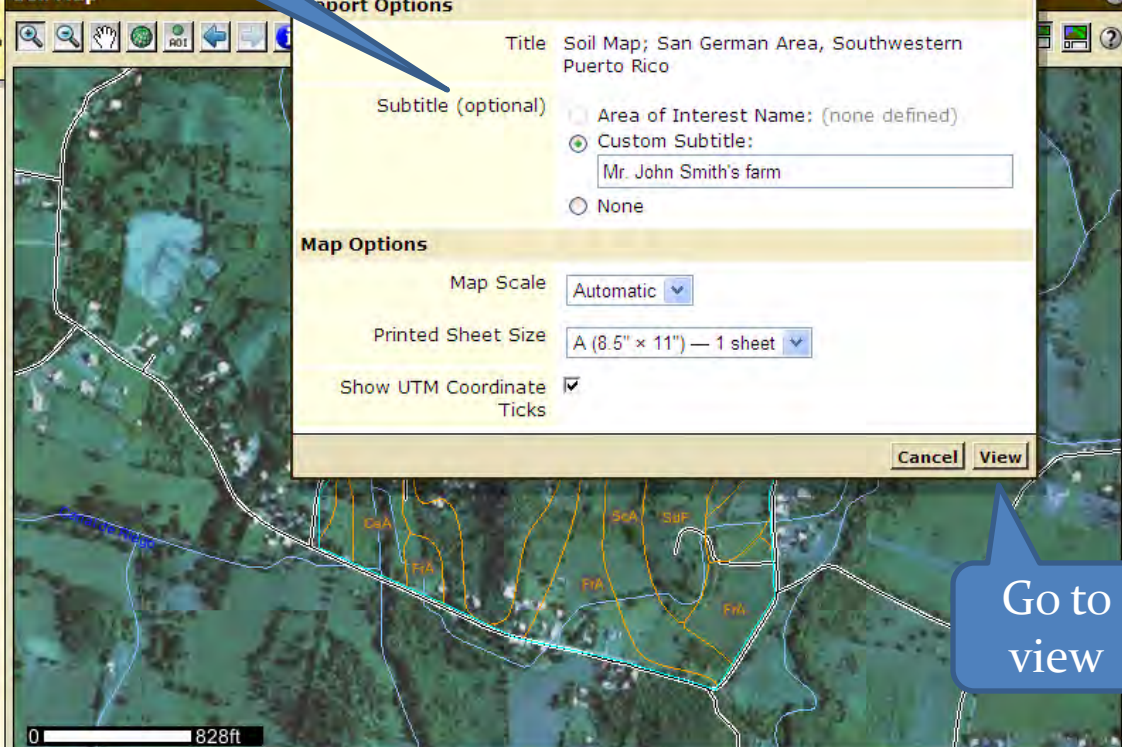
Search

Map Unit Legend

San German Area, Southwestern Puerto Rico (PR787)

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Totals for Area of Interest		123.0	100.0%

Soil Map



You can add a subtitle

Printable Version Options

Report Options

Title Soil Map; San German Area, Southwestern Puerto Rico

Subtitle (optional)

Area of Interest Name: (none defined)

Custom Subtitle:

Mr. John Smith's farm

None

Map Options

Map Scale Automatic

Printed Sheet Size A (8.5" x 11") - 1 sheet

Show UTM Coordinate Ticks

Cancel

View

Go to view

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

You have zoomed in beyond the scale at which the soil map for this area is intended to be used. Mapping of soils is done at a particular scale. The soil surveys that comprise your AOI were mapped at 1:20,000. The design of map units and the level of detail shown in the resulting soil map are dependent on that map scale. Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and

Soil Map—San German Area, Southwestern Puerto Rico
(Mr. John Smith's farm)



You can save or print your map

Web Soil Survey - Windows Internet Explorer

File Edit View Favorites Tools Help

http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx

Favorites Free Hotmail RealPlayer Enterpr...

Web Soil Survey

USDA United States Department of Agriculture
Natural Resources Conservation Service

Contact Us Download Soils Data Archived Soil Surveys Soil Survey Status Glossary Preferences Link Logout Help

Area of Interest (AOI) **Soil Map** Soil Data Explorer Shopping Cart (Free)

Printable Version Add to Shopping Cart

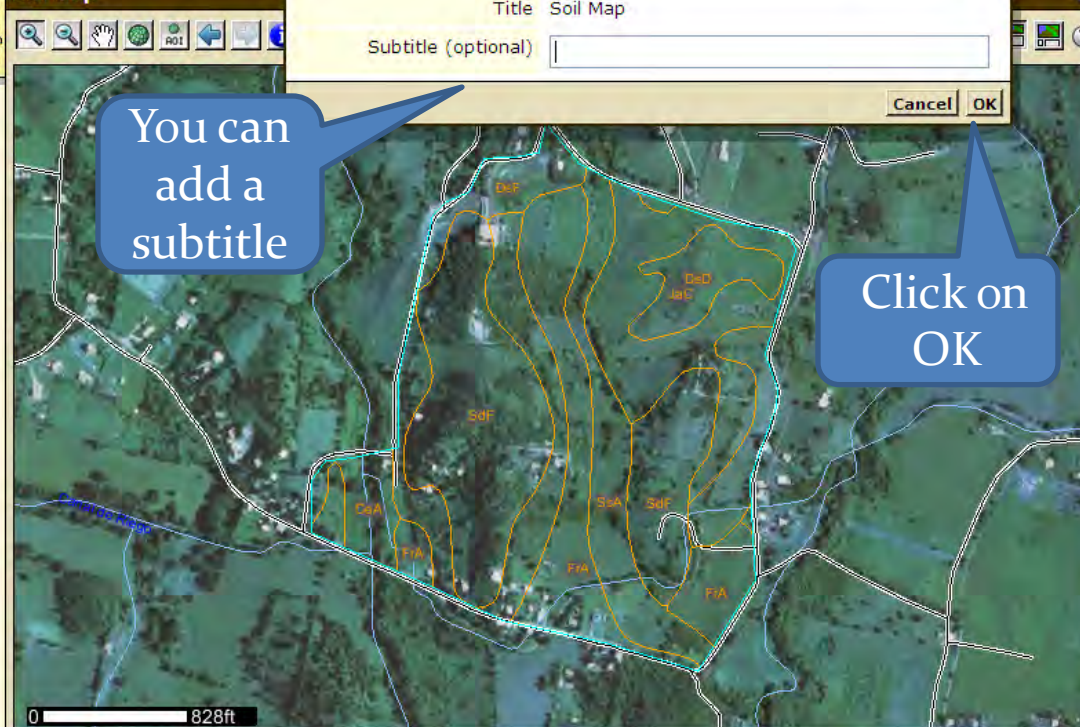
Search

Map Unit Legend

San German Area, Southwestern Puerto Rico (PR787)

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SdF	San German cobbly clay loam, 20 to 60 percent slopes	34.6	28.2%
Totals for Area of Interest		123.0	100.0%

Soil Map



Add to Shopping Cart Options

Title Soil Map

Subtitle (optional)

Cancel OK

You can add a subtitle

Click on OK

Warning: Soil Map may not be valid at this scale.
You have zoomed in beyond the scale at which the soil map for this area is intended to be used. Mapping of soils is done at a particular scale. The soil surveys that comprise your AOI were mapped at 1:20,000. The design of map units and the level of detail shown in the resulting soil map are dependent on that map scale. Enlargement of maps beyond the scale of mapping can cause misinterpretation of the detail of mapping and

Or add the map to the Shopping cart and download a complete document when done.

Search

Suitabilities and Limitations Ratings

Open All Close All

Building Site Development

- Corrosion of Concrete
- Corrosion of Steel
- Dwellings With Basements
- Dwellings Without Basements
- Lawns, Landscaping, and Golf Fairways
- Local Roads and Streets
- Shallow Excavations
- Small Commercial Buildings

Construction Materials

- Gravel Source
- Roadfill Source
- Sand Source
- Source of Reclamation Material
- Topsoil Source

Disaster Recovery Planning

- Catastrophic Mortality, Large Animal Disposal, Pit
- Catastrophic Mortality, Large Animal Disposal, Trench
- Clay Liner Material Source
- Composting Facility - Subsurface
- Composting Facility - Surface
- Composting Medium and Final Cover
- Rubble and Debris Disposal, Large-Scale Event

Land Classifications

Soil Map

Legend Scale (not to scale)



Warning: Soil Map may not be valid at this scale.
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Now, go to the Soil Data Explorer tab

Open all the available "Suitabilities and Limitations Ratings" reports

Remember that you can print or add your map and tables to the Shopping Cart

Web Soil Survey - Windows Internet Explorer

File Edit View Favorites Tools Help
 http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx

Free Hotmail RealPlayer Enterpr...

Web Soil Survey

Page Safety Tools

View Soil Information By Use: All Uses

Printable Version Add to Shopping Cart

Intro to Soils

Suitabilities and Limitations for Use

Soil Properties and Qualities

Ecological Site Assessment

Soil Reports

Search

Suitabilities and Limitations Ratings

Open All Close All

Building Site Development

- Corrosion of Concrete
- Corrosion of Steel
- Dwellings With Basements
- Dwellings Without Basements
- Lawns, Landscaping, and Golf Fairways
- Local Roads and Streets

Shallow Excavations

View Description View Rating

View Options

- Map
- Table
- Component Breakdown and Rating Reasons
 - Numeric Values
- Description of Rating
- Rating Options
 - Detailed Description

Advanced Options

View Description View Rating

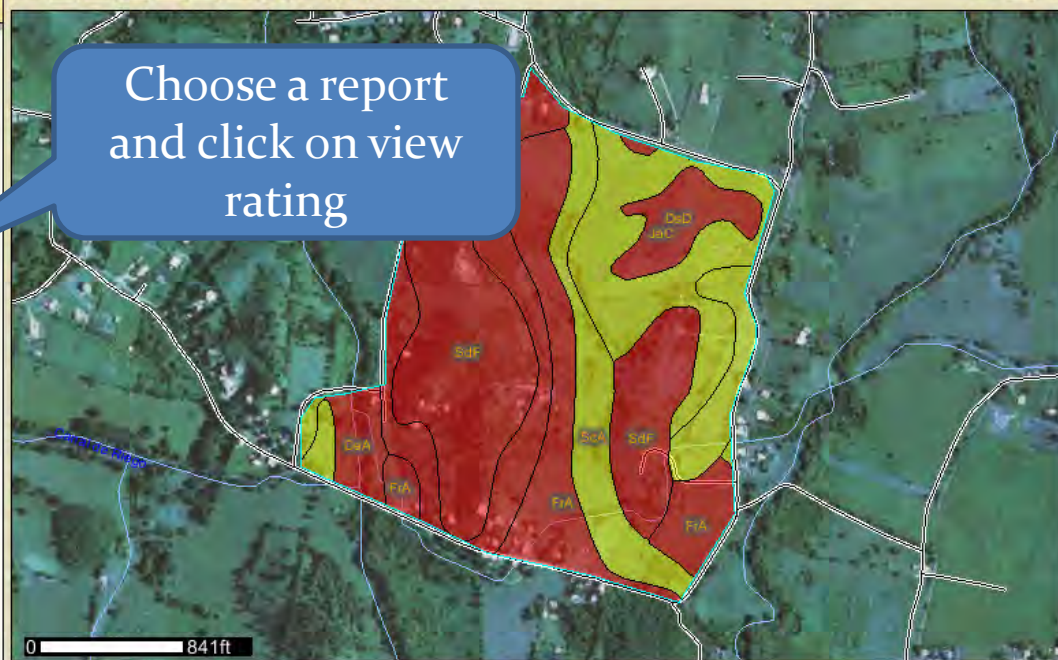
Small Commercial Buildings

Construction Materials

- Gravel Source
- Roadfill Source
- Sand Source

Map - Shallow Excavations

Scale 1:nd to scale



Choose a report and click on view rating

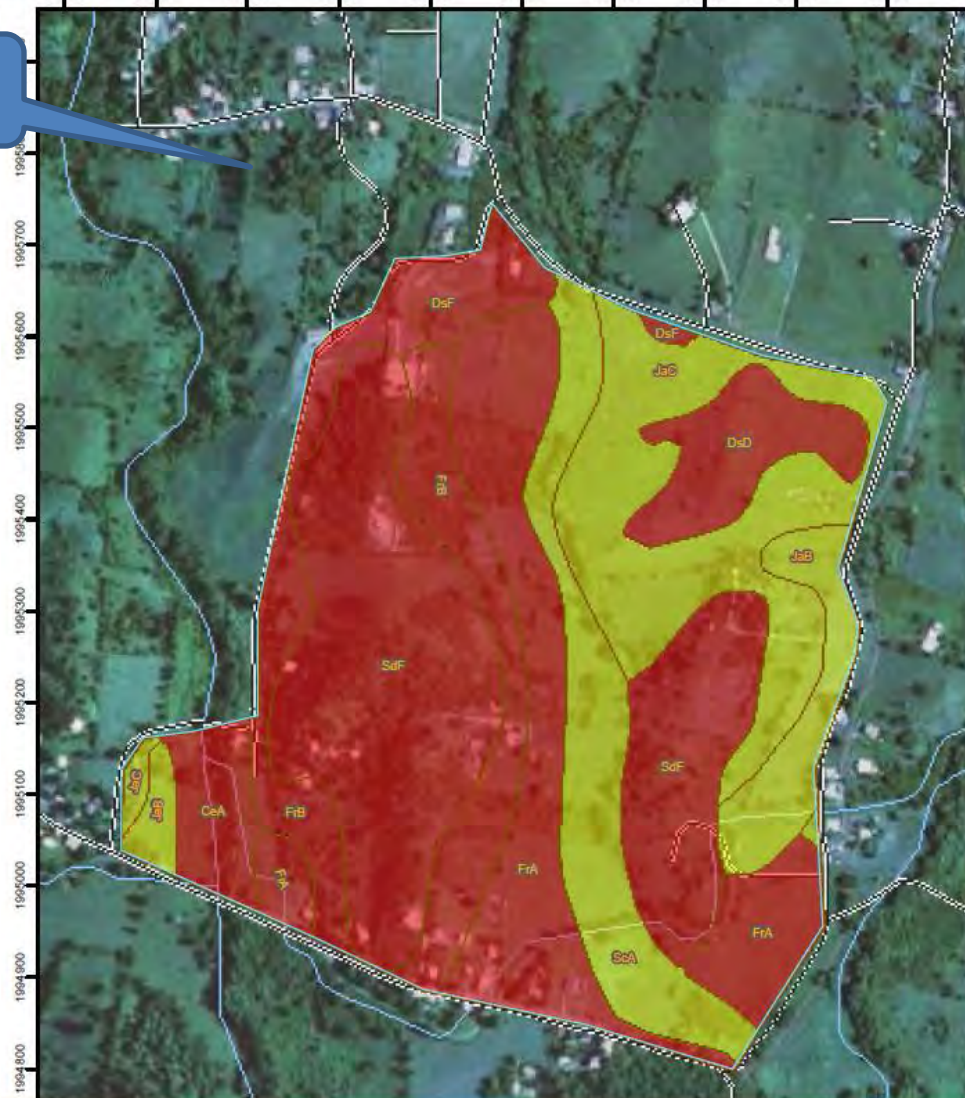
Tables - Shallow Excavations - Summary By Map Unit

Summary by Map Unit - San German Area, Southwestern Puerto Rico (PR787)

Map unit symbol	Map unit name	Rating	Component name (percent)	Rating reasons (numeric values)	Acres in AOI	Percent of AOI
CeA	Cartagena clay, 0 to 2 percent slopes	Very limited	Cartagena (85%)	Cutbanks cave (1.00)	3.9	3.2%

This is the report you obtain

The soil map



The map legend

Shallow Excavations—San German Area, Southwestern Puerto Rico
(Mr. John Smith's farm)

MAP LEGEND

- Area of Interest (AOI)**
 -  Area of Interest (AOI)
- Soils**
 -  Soil Map Units
- Soil Ratings**
 -  Very limited
 -  Somewhat limited
 -  Not limited
 -  Not rated or not available
- Political Features**
 -  Cities
- Water Features**
 -  Streams and Canals
- Transportation**
 -  Rails
 -  Interstate Highways
 -  US Routes
 -  Major Roads
 -  Local Roads

MAP INFORMATION

Map Scale: 1:6,540 if printed on A size (8.5" × 11") sheet.
The soil surveys that comprise your AOI were mapped at 1:20,000.

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

Please rely on the bar scale on each map sheet for accurate map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL: <http://websoilsurvey.nrcs.usda.gov>
Coordinate System: UTM Zone 19N NAD83

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: San German Area, Southwestern Puerto Rico
Survey Area Data: Version 3, Dec 8, 2008

Date(s) aerial images were photographed: 2004

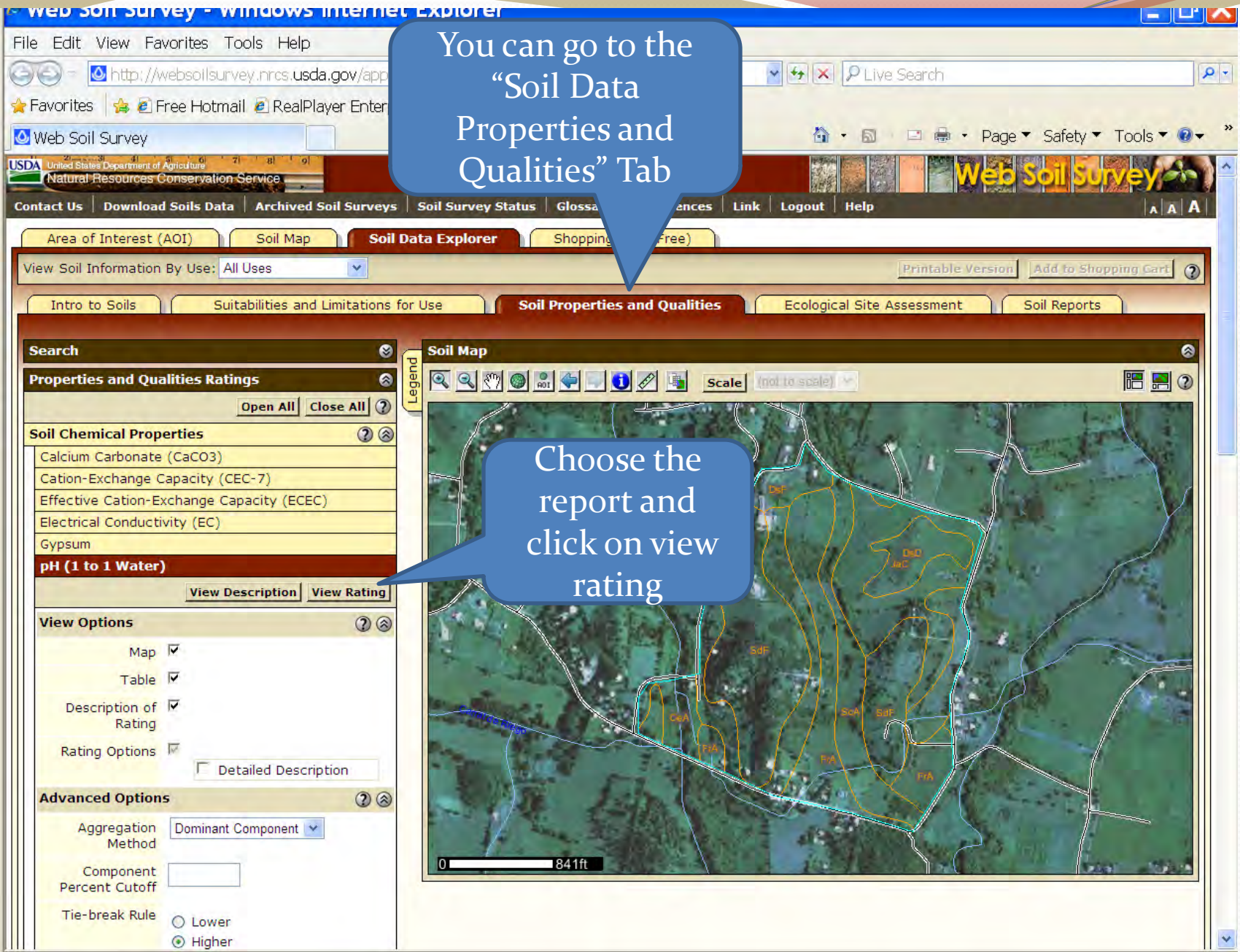
The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

The interpretative table

Shallow Excavations—San German Area, Southwestern Puerto Rico

Shallow Excavations

Shallow Excavations— Summary by Map Unit — San German Area, Southwestern Puerto Rico (PR787)						
Map unit symbol	Map unit name	Rating	Component name (percent)	Rating reasons (numeric values)	Acres in AOI	Percent of AOI
CeA	Cartagena clay, 0 to 2 percent slopes	Very limited	Cartagena (85%)	Cutbanks cave (1.00)	3.9	3.2%
				Too clayey (1.00)		
			Aguirre (15%)	Ponding (1.00)		
				Too clayey (1.00) Cutbanks cave (1.00)		
DsD	Descalabrado clay, 12 to 20 percent slopes	Very limited	Descalabrado (90%)	Depth to hard bedrock (1.00)	6.2	5.1%
				Depth to soft bedrock (1.00)		
				Slope (1.00)		
DsF	Descalabrado clay, 20 to 60 percent slopes	Very limited	Descalabrado (90%)	Depth to hard bedrock (1.00)	5.7	4.6%
				Depth to soft bedrock (1.00)		
				Slope (1.00)		
			San German (10%)	Depth to hard bedrock (1.00)		
				Slope (1.00)		
				Cutbanks cave (0.10)		
FrA	Fraternidad clay, 0 to 2 percent slopes	Very limited	Fraternidad (90%)	Cutbanks cave (1.00)	21.4	17.4%
				Too clayey (1.00)		
			Cartagena (5%)	Cutbanks cave (1.00)		



You can go to the "Soil Data Properties and Qualities" Tab

Choose the report and click on view rating

Search

Properties and Qualities Ratings

Open All Close All

Soil Chemical Properties

- Calcium Carbonate (CaCO3)
- Cation-Exchange Capacity (CEC-7)
- Effective Cation-Exchange Capacity (ECEC)
- Electrical Conductivity (EC)
- Gypsum

pH (1 to 1 Water)

View Description View Rating

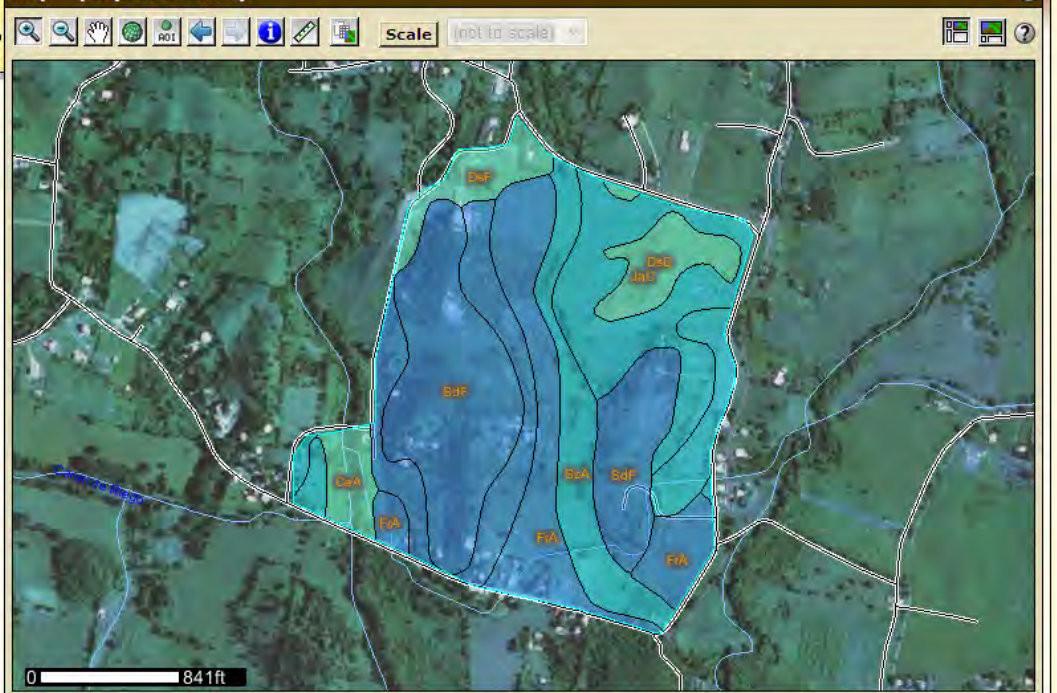
View Options

- Map
- Table
- Description of Rating
- Rating Options
- Detailed Description

Advanced Options

- Aggregation Method: Dominant Component
- Component Percent Cutoff:
- Tie-break Rule: Lower Higher

Map - pH (1 to 1 Water)



Warning: Soil Ratings Map may not be valid at this scale.
 You have zoomed in beyond the scale at which the soil map for this area is intended to be used. Mapping of soils is done at a particular scale. The soil surveys that comprise your AOI were mapped at 1:20,000. The

Remember to print, save or add to the Shopping Cart

Search

Soil Reports

Open All Close All

AOI Inventory

- Component Legend
- Map Unit Description
- Map Unit Description (Brief)
- Map Unit Description (Brief, Generated)**

View Description View Soil Report

This report has no options.

View Description View Soil Report

- Selected Soil Interpretations
- Selected Survey Area Interpretation Descriptions
- Survey Area Data Summary

Building Site Development

- Dwellings and Small Commercial Buildings
- Roads and Streets, Shallow Excavations, and Lawns and Landscaping

Construction Materials

- Source of Reclamation Material, Roadfill, and Topsoil
- Source of Sand and Gravel

Disaster Recovery Planning

- AWM - Large Animal Disposal, Pit

Land Classifications

- Conservation Tree and Shrub Suitability Groups
- Hydric Soils

Soil Map

Legend

Scale (not to scale)



Choose the report

Go to "Soil Reports"

Search

Soil Reports

Open All Close All

AOI Inventory

- Component Legend
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- Map Unit Description (Brief, Generated)**

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This report has no options.

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- Dwellings and Small Commercial Buildings
- Roads and Streets, Shallow Excavations, and Lawns and Landscaping

Construction Materials

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- Source of Sand and Gravel

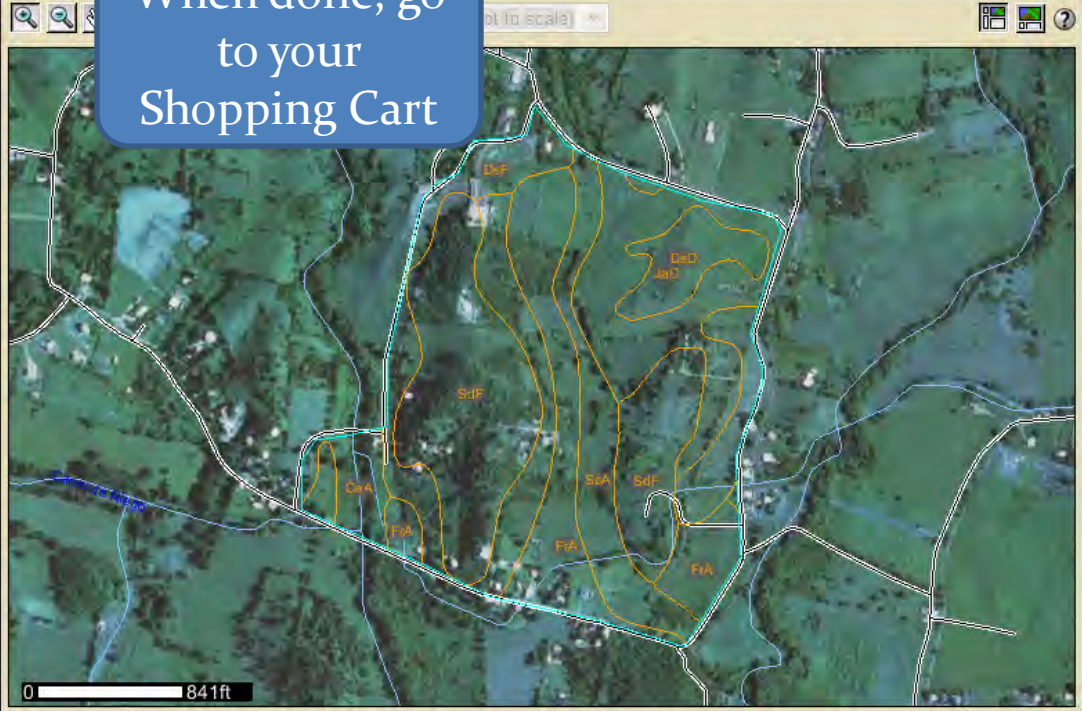
Disaster Recovery Planning

- AWM - Large Animal Disposal, Pit

Land Classifications

- Conservation Tree and Shrub Suitability Groups
- Hydric Soils

Soil Map



Report - Map Unit Description (Brief, Generated)

Minor map unit components are excluded from this report.

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Report Properties

Title

Title Custom Soil Resource Report for San German Area, Southwestern Puerto Rico

Subtitle
 Area of Interest Name: (none defined)
 Custom Subtitle:
Mr. John Smith's farm
 None

Size

Total Size 1,751 KB (1.7 MB)

Map Options

Map Scale Automatic

Printed Sheet Size A (8.5" x 11") — 1 sheet

Show UTM Coordinate Ticks

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<input checked="" type="checkbox"/>	Cover	518 KB
<input checked="" type="checkbox"/>	Preface	3 KB

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Delivery Options

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This is your custom report

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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 San German Area, Southwestern Puerto Rico

Mr. John Smith's farm



Includes a preface

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Preface

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://soils.usda.gov/sqi/>) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (<http://offices.sc.egov.usda.gov/locator/app?agency=nracs>) or your NRCS State Soil Scientist (http://soils.usda.gov/contact/state_offices/).

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

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Explains How Soil Surveys Are Made

How Soil Surveys Are Made

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.

Includes the Soil Map

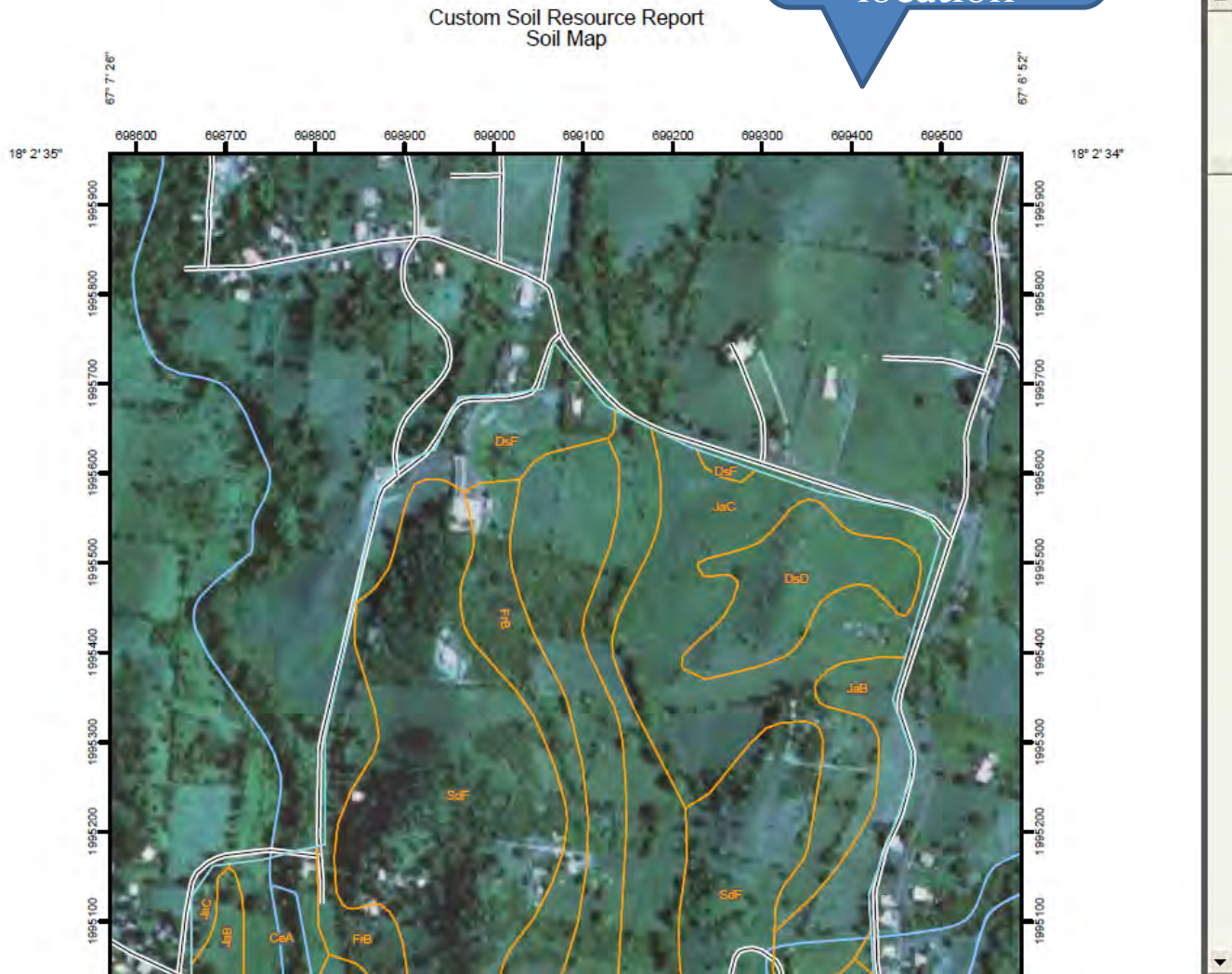
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Soil Map

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.

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Custom Soil Resource Report

MAP LEGEND

Area of Interest (AOI)	Area of Interest (AOI)	Very Stony Spot
Soils	Soil Map Units	Wet Spot
Special Point Features	Blowout	Other
Borrow Pit	Gully	Special Line Features
Clay Spot	Short Steep Slope	Other
Closed Depression	Cities	Political Features
Gravel Pit	Water Features	Streams and Canals
Gravelly Spot	Transportation	Rails
Landfill	Interstate Highways	US Routes
Lava Flow	Major Roads	Local Roads
Marsh or swamp	Local Roads	
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		

MAP INFORMATION

Map Scale: 1:8,540 if printed on A size (8.5" x 11") sheet.

The soil surveys that comprise your AOI were mapped at 1:20,000.

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

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Please rely on the bar scale on each map sheet for accurate map measurements.

Source of Map: Natural Resources Conservation Service
 Web Soil Survey URL: <http://websoilsurvey.nrcs.usda.gov>
 Coordinate System: UTM Zone 19N NAD83

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: San German Area, Southwestern Puerto Rico
 Survey Area Data: Version 3, Dec 8, 2008

Date(s) aerial images were photographed: 2004

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.

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The map unit legend and the map unit descriptions

Map Unit Legend

San German Area, Southwestern Puerto Rico (PR787)			
Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
CeA	Cartagena clay, 0 to 2 percent slopes	3.9	3.2%
DsD	Descalabrado clay, 12 to 20 percent slopes	6.2	5.1%
DsF	Descalabrado clay, 20 to 60 percent slopes	5.7	4.6%
FrA	Fratemidad clay, 0 to 2 percent slopes	21.4	17.4%
FrB	Fratemidad clay, 2 to 5 percent slopes	13.4	10.9%
JaB	Jacana clay, 0 to 5 percent slopes	6.7	5.4%
JaC	Jacana clay, 5 to 12 percent slopes	18.8	15.3%
ScA	San Anton clay loam, 0 to 2 percent slopes, occasionally flooded	12.2	9.9%
SdF	San German cobbly clay loam, 20 to 60 percent slopes	34.6	28.2%
Totals for Area of Interest		123.0	100.0%

Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally

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The map unit descriptions

Custom Soil Resource Report

San German Area, Southwestern Puerto Rico

CeA—Cartagena clay, 0 to 2 percent slopes

Map Unit Setting

Elevation: 10 to 160 feet
Mean annual precipitation: 25 to 66 inches
Mean annual air temperature: 66 to 89 degrees F
Frost-free period: 365 days

Map Unit Composition

Cartagena and similar soils: 85 percent
Minor components: 15 percent

Description of Cartagena

Setting

Landform: Fan skirts
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Dip, talf
Down-slope shape: Linear, concave
Across-slope shape: Linear
Parent material: Alluvium derived from igneous and sedimentary rock and/or marine deposits derived from igneous and sedimentary rock

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Somewhat poorly drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low (0.01 to 0.14 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 25 percent
Maximum salinity: Slightly saline to moderately saline (8.0 to 16.0 mmhos/cm)
Sodium adsorption ratio, maximum: 20.0
Available water capacity: Moderate (about 7.6 inches)

Interpretive groups

Land capability classification (irrigated): 2s
Land capability (nonirrigated): 3c

Typical profile

0 to 7 inches: Clay
7 to 15 inches: Clay
15 to 46 inches: Clay

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The reports added to the custom soil survey

Soil Information for All Uses

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.

Building Site Development

Building site development interpretations are designed to be used as tools for evaluating soil suitability and identifying soil limitations for various construction purposes. As part of the interpretation process, the rating applies to each soil in its described condition and does not consider present land use. Example interpretations can include corrosion of concrete and steel, shallow excavations, dwellings with and without basements, small commercial buildings, local roads and streets, and lawns and landscaping.

Shallow Excavations

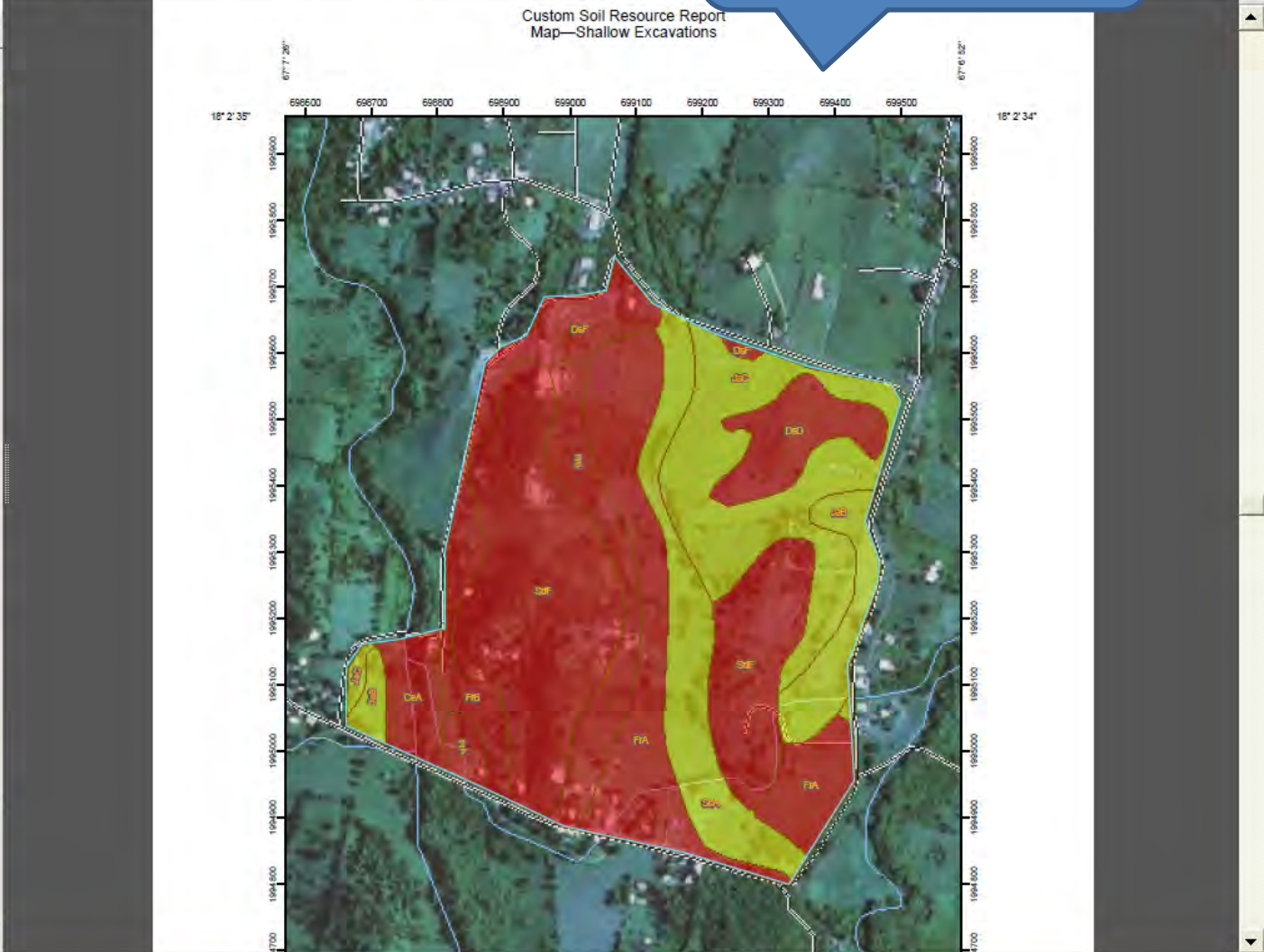
Shallow excavations are trenches or holes dug to a maximum depth of 5 or 6 feet for graves, utility lines, open ditches, or other purposes. The ratings are based on the soil properties that influence the ease of digging and the resistance to sloughing. Depth to bedrock or a cemented pan, hardness of bedrock or a cemented pan, the amount of large stones, and dense layers influence the ease of digging, filling, and compacting. Depth to the seasonal high water table, flooding, and ponding may restrict the period when excavations can be made. Slope influences the ease of using machinery. Soil texture, depth to the water table, and linear extensibility (shrink-swell potential) influence the resistance to sloughing.

The ratings are both verbal and numerical. Rating class terms indicate the extent to which the soils are limited by all of the soil features that affect the specified use. "Not limited" indicates that the soil has features that are very favorable for the specified use. Good performance and very low maintenance can be expected. "Somewhat limited" indicates that the soil has features that are moderately favorable for the specified use. The limitations can be overcome or minimized by special planning

The associated maps

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The map legends

Custom Soil Resource R

MAP LEGEND

Area of Interest (AOI)

- Area of Interest (AOI)

Soils

- Soil Map Units

Soil Ratings

- Very limited
- Somewhat limited
- Not limited
- Not rated or not available

Political Features

- Cities

Water Features

- Streams and Canals

Transportation

- Rails
- Interstate Highways
- US Routes
- Major Roads
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The interpretative tables

Tables—Shallow Excavations

Shallow Excavations— Summary by Map Unit — San German Area, Southwestern Puerto Rico (PR767)						
Map unit symbol	Map unit name	Rating	Component name (percent)	Rating reasons (numeric values)	Acres in AOI	Percent of AOI
CeA	Cartagena clay, 0 to 2 percent slopes	Very limited	Cartagena (85%)	Cutbanks cave (1.00)	3.9	3.2%
				Too clayey (1.00)		
			Aguirre (15%)	Ponding (1.00)		
				Too clayey (1.00)		
DsD	Descalabrado clay, 12 to 20 percent slopes	Very limited	Descalabrado (90%)	Depth to hard bedrock (1.00)	6.2	5.1%
				Depth to soft bedrock (1.00)		
				Slope (1.00)		
DsF	Descalabrado clay, 20 to 60 percent slopes	Very limited	Descalabrado (90%)	Depth to hard bedrock (1.00)	5.7	4.6%
				Depth to soft bedrock (1.00)		
				Slope (1.00)		
			San German (10%)	Depth to hard bedrock (1.00)		
				Slope (1.00)		
				Cutbanks cave (0.10)		
FrA	Fratemidad clay, 0 to 2 percent slopes	Very limited	Fratemidad (90%)	Cutbanks cave (1.00)	21.4	17.4%
				Too clayey (1.00)		
			Cartagena (5%)	Cutbanks cave (1.00)		
				Too clayey (1.00)		
				Ponding (1.00)		
			Santa Isabel (5%)	Cutbanks cave (1.00)		
				Too clayey (0.83)		
				Depth to saturated zone (0.05)		

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Custom Soil Resource Report

Soil Properties and Qualities

The Soil Properties and Qualities section includes various soil properties and qualities 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 property or quality.

Soil Chemical Properties

Soil Chemical Properties are measured or inferred from direct observations in the field or laboratory. Examples of soil chemical properties include pH, cation exchange capacity, calcium carbonate, gypsum, and electrical conductivity.

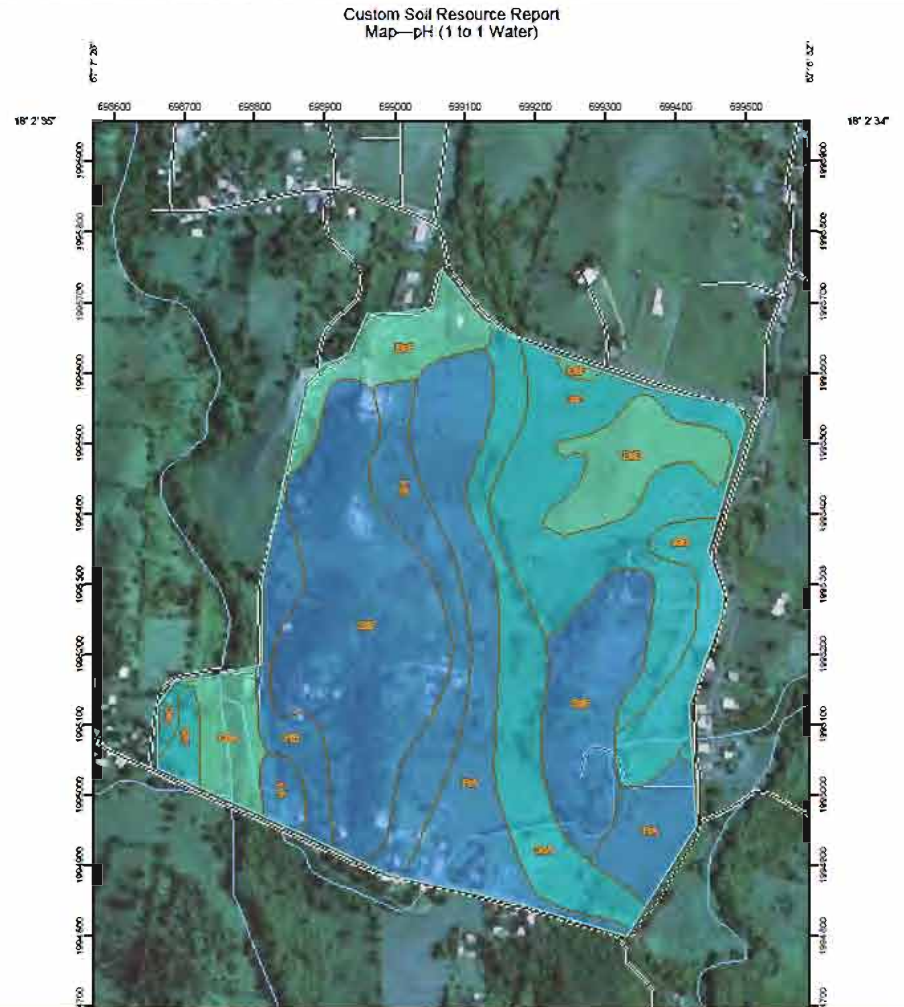
pH (1 to 1 Water)

Soil reaction is a measure of acidity or alkalinity. It is important in selecting crops and other plants, in evaluating soil amendments for fertility and stabilization, and in determining the risk of corrosion. In general, soils that are either highly alkaline or highly acid are likely to be very corrosive to steel. The most common soil laboratory measurement of pH is the 1:1 water method. A crushed soil sample is mixed with an equal amount of water, and a measurement is made of the suspension.

For each soil layer, this attribute is actually recorded as three separate values in the database. A low value and a high value indicate the range of this attribute for the soil component. A "representative" value indicates the expected value of this attribute for the component. For this soil property, only the representative value is used.

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MAP LEGEND

- | | |
|------------------------------------|---------------------------|
| Area of Interest (AOI) | Political Features |
| Area of Interest (AOI) | Cities |
| Soils | Water Features |
| Soil Map Units | Streams and Canals |
| Soil Ratings | Transportation |
| Ultra acid (pH < 3.5) | Rails |
| Extremely acid (pH 3.5 - 4.4) | Interstate Highways |
| Very strongly acid (pH 4.5 - 5.0) | US Routes |
| Strongly acid (pH 5.1 - 5.5) | Major Roads |
| Moderately acid (pH 5.6 - 6.0) | Local Roads |
| Slightly acid (pH 6.1 - 6.5) | |
| Neutral (pH 6.6 - 7.3) | |
| Slightly alkaline (pH 7.4 - 7.8) | |
| Moderately alkaline (pH 7.9 - 8.4) | |
| Strongly alkaline (pH 8.5 - 9.0) | |
| Very strongly alkaline (pH > 9.0) | |
| Not rated or not available | |

MAP INFORMATION

Map Scale: 1:6,540 if printed on A size (8.5" x 11") sheet.

The soil surveys that comprise your AOI were mapped at 1:20,000.

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

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

Please rely on the bar scale on each map sheet for accurate map measurements.

Source of Map: Natural Resources Conservation Service
 Web Soil Survey URL: <http://websoilsurvey.nrcs.usda.gov>
 Coordinate System: UTM Zone 16N NAD83

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: San German Area, Southwestern Puerto Rico
 Survey Area Date: Version 3, Dec 8, 2008

Date(s) aerial images were photographed: 2004

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.

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Table—pH (1 to 1 Water)

pH (1 to 1 Water)—Summary by Map Unit—San German Area, Southwestern Puerto Rico (PR787)

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
CeA	Cartagena clay, 0 to 2 percent slopes	6.7	3.0	3.2%
DsD	Descalabrado clay, 12 to 20 percent slopes	6.8	6.2	5.1%
DsF	Descalabrado clay, 20 to 60 percent slopes	6.8	5.7	4.8%
FrA	Fratemidad clay, 0 to 2 percent slopes	7.0	21.4	17.4%
FrB	Fratemidad clay, 2 to 5 percent slopes	7.0	13.4	10.8%
JaB	Jacaru clay, 0 to 5 percent slopes	7.5	6.7	5.4%
JaC	Jacaru clay, 5 to 12 percent slopes	7.5	18.8	15.3%
SoA	San Anton clay loam, 0 to 2 percent slopes, occasionally flooded	7.3	12.2	9.8%
SdF	San German cobbly clay loam, 20 to 60 percent slopes	8.0	34.6	28.2%
Totals for Area of Interest			123.0	100.0%

Rating Options—pH (1 to 1 Water)

Aggregation Method: Dominant Component
Component Percent Cutoff: None Specified
Tie-break Rule: Higher
Interpret Nulls as Zero: No
Layer Options: Surface Layer

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Soil Reports

The Soil Reports section includes various formatted tabular and narrative reports (tables) containing data for each selected soil map unit and each component of each unit. No aggregation of data has occurred as is done in reports in the Soil Properties and Qualities and Suitabilities and Limitations sections.

The reports contain soil interpretive information as well as basic soil properties and qualities. A description of each report (table) is included.

AOI Inventory

This folder contains a collection of tabular reports that present a variety of soil information. Included are various map unit description reports, special soil interpretation reports, and data summary reports.

Map Unit Description (Brief, Generated)

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 in this report, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

The Map Unit Description (Brief, Generated) report displays a generated description of the major soils that occur in a map unit. Descriptions of non-soil (miscellaneous areas) and minor map unit components are not included. This description is generated from the underlying soil attribute data.

Additional information about the map units described in this report is available in other Soil Data Mart reports, which give properties of the soils and the limitations, capabilities, and potentials for many uses. Also, the narratives that accompany the Soil Data Mart reports define some of the properties included in the map unit descriptions.

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Custom Soil Resource Report

Report—Map Unit Description (Brief, Generated)

San German Area, Southwestern Puerto Rico

Map Unit: CeA—Cartagena clay, 0 to 2 percent slopes

Component: Cartagena (85%)

The Cartagena component makes up 85 percent of the map unit. Slopes are 0 to 2 percent. This component is on fan skirts on basins. The parent material consists of alluvium derived from igneous and sedimentary rock and/or marine deposits derived from igneous and sedimentary rock. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is somewhat poorly drained. Water movement in the most restrictive layer is moderately low. Available water to a depth of 60 inches is moderate. Shrink-swell potential is very high. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 4 percent. Nonirrigated land capability classification is 3c. Irrigated land capability classification is 2s. This soil does not meet hydric criteria. The calcium carbonate equivalent within 40 inches, typically, does not exceed 12 percent. The soil has a moderately saline horizon within 30 inches of the soil surface. The soil has a moderately sodic horizon within 30 inches of the soil surface.

Component: Aguirre (15%)

Generated brief soil descriptions are created for major components. The Aguirre soil is a minor component.

Map Unit: DsD—Descalabrada clay, 12 to 20 percent slopes

Component: Descalabrado (90%)

The Descalabrado component makes up 90 percent of the map unit. Slopes are 12 to 20 percent. This component is on ridges on mountains, mountain slopes on mountains, ridges on hills, hillslopes on hills. The parent material consists of residuum and colluvium. Depth to a root restrictive layer, bedrock, paralithic, is 10 to 16 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately low. Available water to a depth of 60 inches is very low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 3 percent. This component is in the F271XZ011PR Calamovilla

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Includes the references

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Web Soil Survey - Windows Internet Explorer

File Edit View Favorites Tools Help

http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx

Web Soil Survey

USDA United States Department of Agriculture
Natural Resources Conservation Service

Contact Us Download Soils Data Preferences Link Logout Help

Area of Interest (AOI)

Search

Area of Interest

Open

AOI Properties

Import AOI

- Create AOI from Shapefile
- Create AOI from Zipped Shapefile

Export AOI

Export AOI as Zipped Shapefile

Base filename

Export AOI

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- Bureau of Land Management
- Department of Defense
- Forest Service
- National Park Service
- Hydrologic Unit

Map

View Extent Contiguous U.S.

Scale (not to scale)

0 837ft

When done, you can export your AOI as a zipped shapefile, for future use

Download your exported AOI zipped shapefile

Search

Area of Interest

Open All Close All

AOI Properties

Import AOI

- Create AOI from Shapefile
- Create AOI from Zipped Shapefile

Export AOI

Export AOI as Zipped Shapefile

Base filename John_Smith_Farm

Information

i Your exported AOI

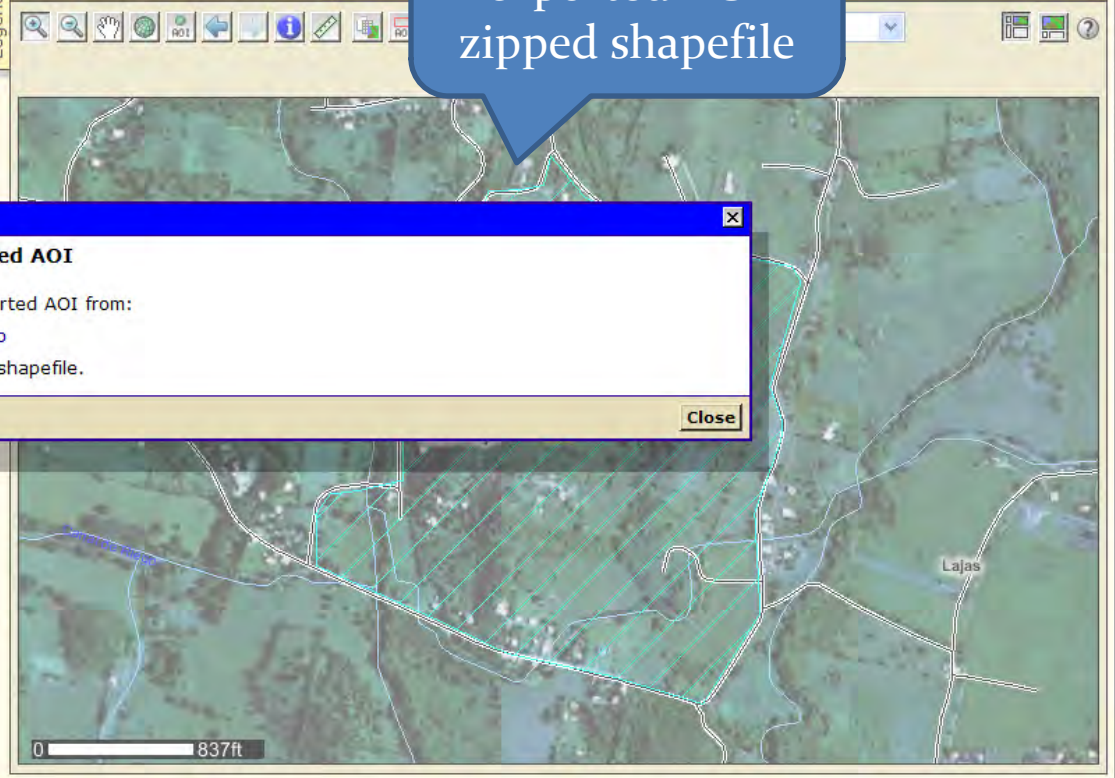
Download your exported AOI from:
[John_Smith_Farm.zip](#)
 This file is a zipped shapefile.

Close

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- Hydrologic Unit

Area of Interest Interactive Map



Area of Interest

Shopping Cart (Free)

If you need information for another area, you can clear the AOI, and start all over again

Search

Area of Interest

AOI Properties

Clear AOI

AOI Information

Name John_Smith_Farm

- Use Soil Survey Area Map Unit Symbols
- Use National Map Unit Symbols

Area (acres) 123.0

Soil Data Available from Web Soil Survey

San German Area, Southwestern Puerto Rico (PR787)

Spatial Data Version 1, Dec 17, 2007

Tabular Data Version 2, Dec 3, 2008

Clear AOI

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Interactive Map

View Extent Contiguous U.S.

Scale (not to scale)



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