

Using *Web Soil Survey* to Print Reports of Soil Properties for All Map Units within a County

Start Web Soil Survey (WSS)

Go to the Web Soil Survey, click on the **START WSS** button:

The screenshot shows the USDA Web Soil Survey homepage. At the top, there is a navigation menu with links for Home, About Soils, Help, and Contact Us. Below the menu is a banner with the USDA logo and the text 'Web Soil Survey'. A search bar is located on the left side of the page. In the center, there is a large green button labeled 'START WSS' with a red arrow pointing to it. To the right of the button is a sidebar titled 'I Want To...' with several links: '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', 'Find information by topic', and 'Know how to hyperlink from other documents to Web Soil Survey'. Below the 'START WSS' button, there is a 'Welcome to Web Soil Survey (WSS)' section with a small image of people working in a field and a brief description of the service.

Define Parameters in “Area of Interest (AOI)” Tab

With the “Area of Interest (AOI)” tab selected, use the following steps to define your area of interest as the whole soil survey area of the county:

1. Click on “Quick Navigation”, then “Soil Survey Area”.
2. Under “Soil Survey Area”, select the **State** and **County** (if the drop down box doesn’t respond to your mouse click, click on the “Set AOI” button, then try again).
3. **Click the circle** next to the county name in the table below Soil Survey Area, then click on the “Set AOI” button. An area of interest that includes the entire county will be created.

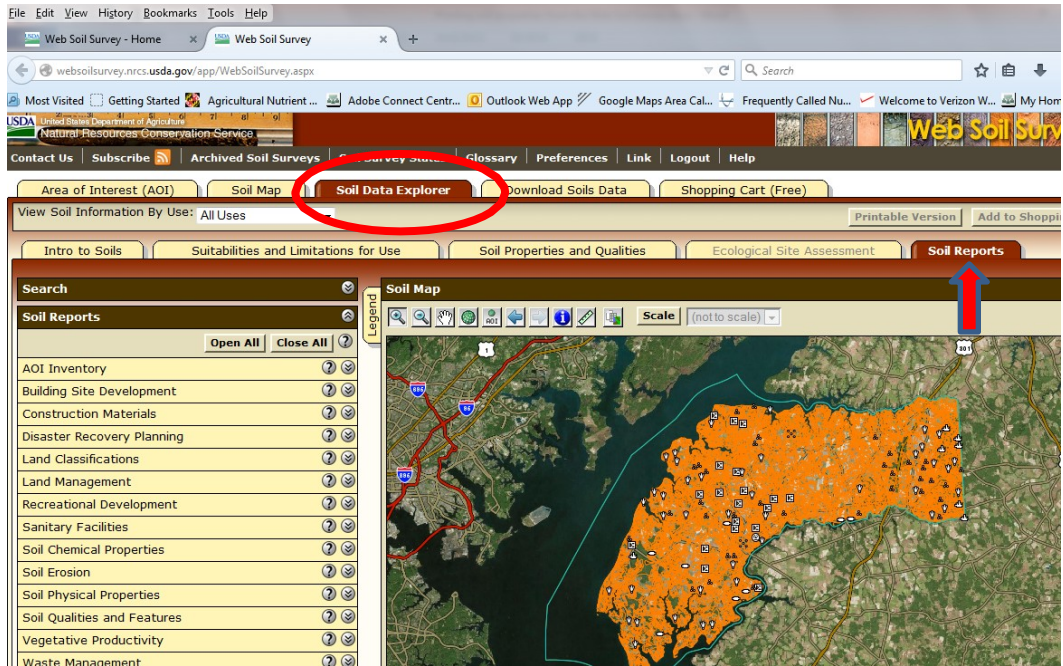
The screenshot shows the USDA Web Soil Survey interface. The "Area of Interest (AOI)" tab is selected and circled in red. The "Soil Survey Area" section is active, showing the State set to "Maryland" and the County set to "Kent". A table below lists soil survey areas, with a red arrow pointing to the "Kent County, Maryland" entry. The map on the right shows the United States with state boundaries, and red arrows point to the "Quick Navigation" and "Soil Survey Area" sections.

Name	Area Symbol	Data Availability	Version
Kent County, Maryland	MD029	Tabular and Spatial, complete	Survey Area: Version 13, Sep 24, 2014 Tabular: Version 11, Sep 24, 2014 Spatial: Version 7, Dec 11, 2013

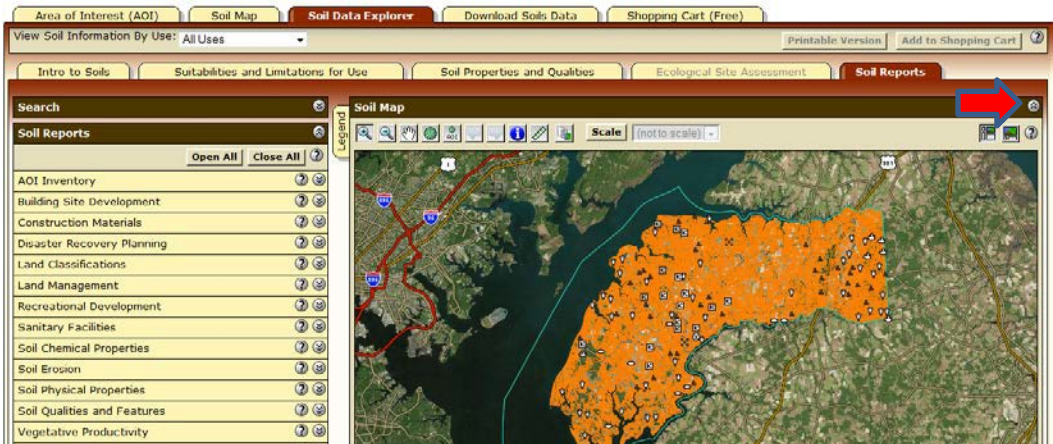
**Define Parameters
in “Soil Data
Explorer” Tab**

To run reports on different soil properties for all county map units:

1. Click on the “Soil Data Explorer” tab.
2. Then, click on the “Soil Reports” tab.



3. **Close the soil map view window** before generating and printing reports so that the map will not print as part of the report.



Handling Reports

There are a variety of reports available, for various soil properties. For example, to print **non-irrigated crop yields for multiple crops**, along with the capability class of each map unit:

1. Select “**Vegetative Productivity**”, then “**Nonirrigated Yields by Map Unit Component**”.
2. **Check up to 5 crops**, then click the “**View Soil Report**” button.

The screenshot displays a software interface with a top navigation bar containing tabs: "Intro to Soils", "Suitabilities and Limitations for Use", "Soil Properties and Qualities", and "Ecological Site Assessment". Below the navigation bar is a "Search" section with a "Soil Map" tab. The main content area is titled "Soil Reports" and includes a list of report categories. The "Vegetative Productivity" category is expanded, showing sub-items: "Forestland Productivity", "Irrigated and Nonirrigated Yields by Map Unit Component", "Irrigated Yields by Map Unit Component", and "Nonirrigated Yields by Map Unit Component". The "Nonirrigated Yields by Map Unit Component" item is highlighted in red, with a red arrow pointing to it. Below this item are two buttons: "View Description" and "View Soil Report". The "Options" section is visible below, with a sub-section "Select 1-5 crops" containing a list of crop types with checkboxes. The "Barley (Bu)" checkbox is checked, and a red arrow points to it. Other checked items include "Corn (Bu)", "Corn silage (Tons)", "Grass hay (Tons)", and "Grass-legume hay (Tons)".

Printing Reports

1. The following report will be generated. To print, click on the **“Printable Version”** button, then from the **“Printable Version Options”** window that pops up, click the **“View”** button.

The screenshot shows the 'Printable Version Options' dialog box with the following details:

- Title:** Nonirrigated Yields by Map Unit Component; Kent County, Maryland
- Subtitle (optional):**
 - Area of Interest Name: (none defined)
 - Custom Subtitle:
- Map symbol and soil name:** None

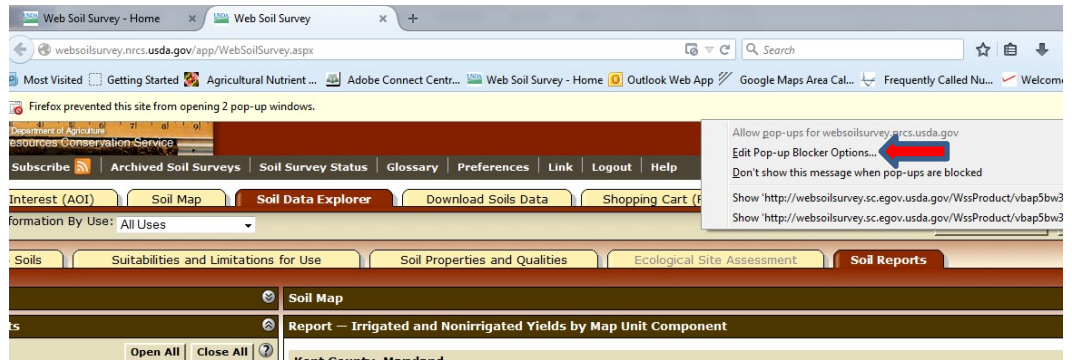
The background report table is as follows:

Map symbol and soil name	Soil	Area	Yield	Yield	Yield	Yield
Ax—Axis mucky silt loam	Axis	7w	—	—	—	—
Be—Beaches	Beaches	8	—	—	—	—
Bs—Bibb silt loam	Bibb	5w	—	—	—	3.00
Bt—Bibb variant silt loam	Bibb variant	7w	—	—	—	—
BuA—Butlertown-Mattapex silt loams, 0 to 2 percent slopes	Butlertown	2w	—	130	26.00	—
Mattapex	Mattapex	2w	—	135	27.00	—

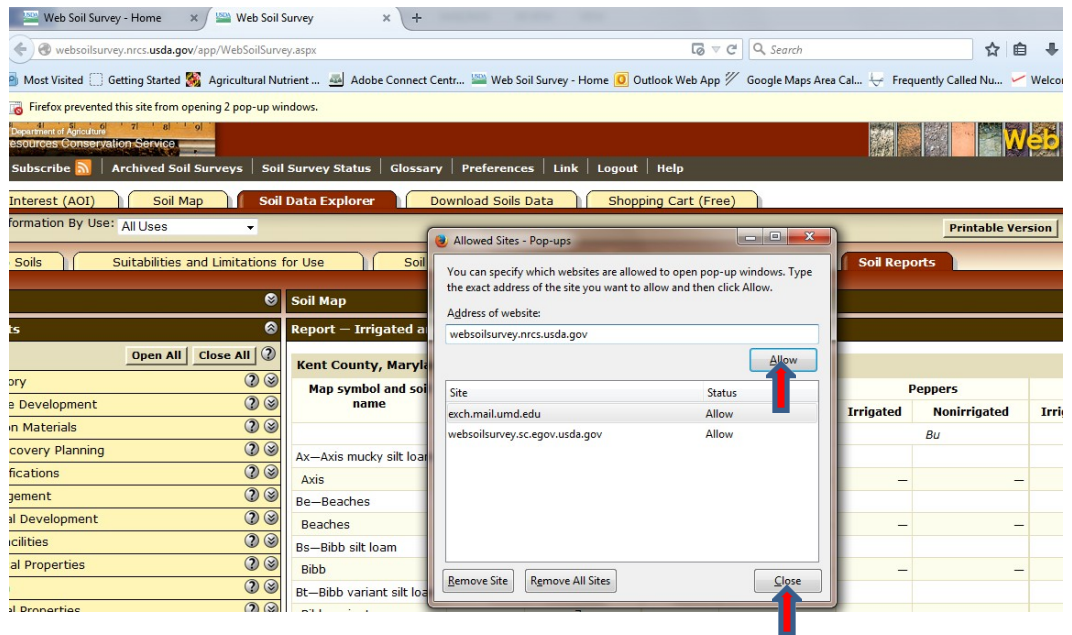
2. Your browser may prevent the printable version of the report from opening. Follow the steps for your browser to allow popups for websoilsurvey.nrcs.usda.gov. For example, If you are using Mozilla Firefox as your browser and receive the following message, click the **“OK”** button, and click the **“Options”** button on the line indicating that the popup window was prevented from opening.

The screenshot shows a browser notification bar with the text: "Firefox prevented this site from opening a pop-up window." The "Options" button is circled in red. A dialog box is open over the report with the text: "Cannot open external window. Do you have a popup blocker enabled?" The "OK" button is highlighted with a red arrow. A "Generating printable version..." message is visible at the bottom of the report area.

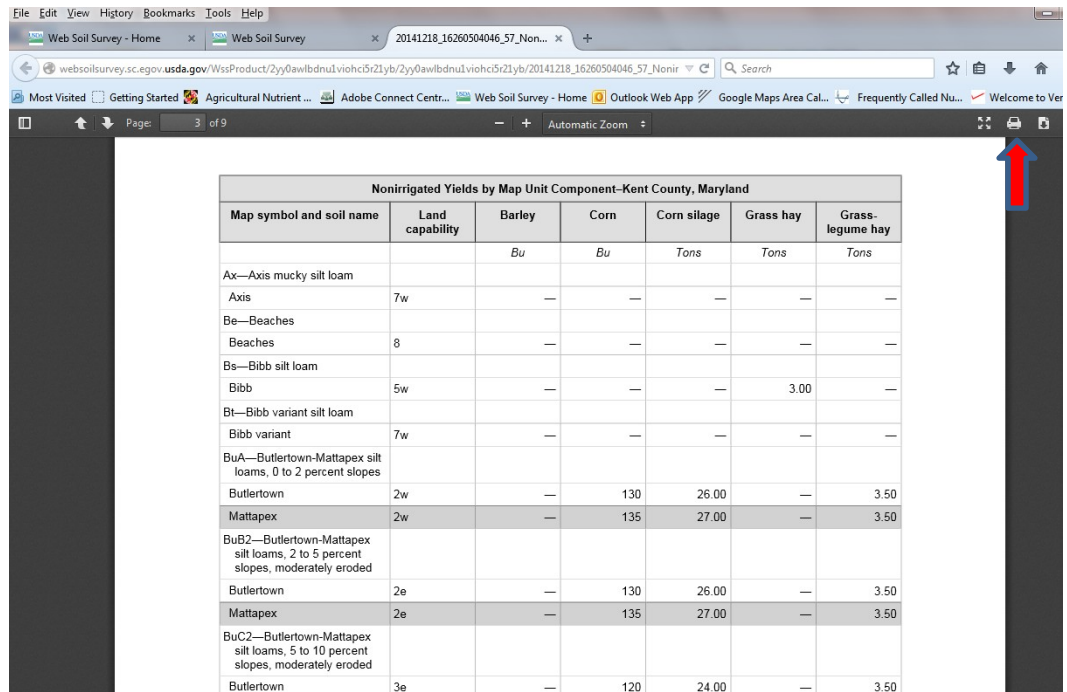
3. From the menu that appears, click on “Edit Pop-up Blocker Options”.



4. From the “Allowed Sites - Pop-ups” window, click the “Allow” button, then the “Close” button, then repeat *Printing Reports, Step 1* (located on page 5).

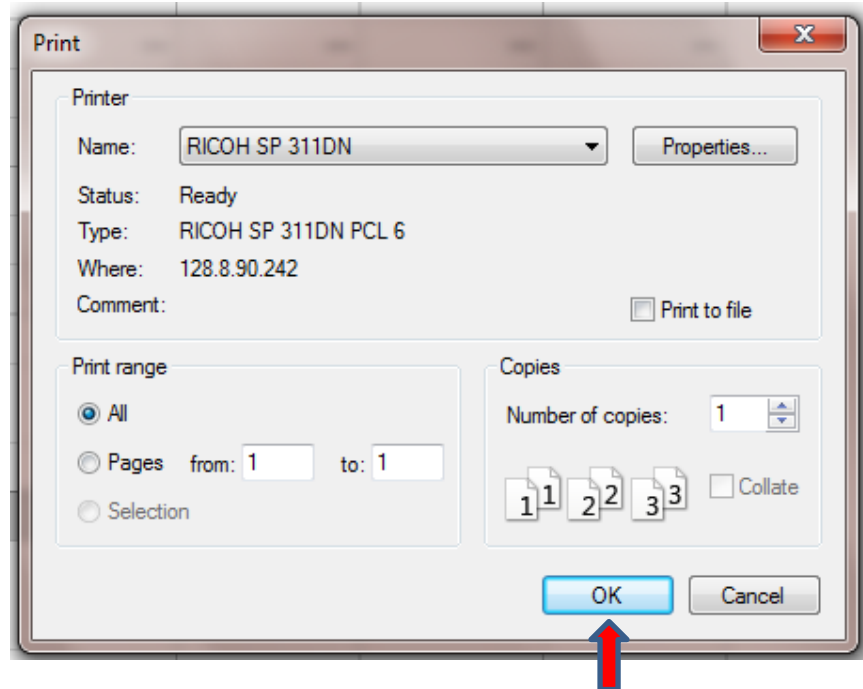


5. The following report will be generated in .pdf format. Click on the **print icon**:



Nonirrigated Yields by Map Unit Component—Kent County, Maryland						
Map symbol and soil name	Land capability	Barley	Corn	Corn silage	Grass hay	Grass-legume hay
		<i>Bu</i>	<i>Bu</i>	<i>Tons</i>	<i>Tons</i>	<i>Tons</i>
Ax—Axis mucky silt loam						
Axis	7w	—	—	—	—	—
Be—Beaches						
Beaches	8	—	—	—	—	—
Bs—Bibb silt loam						
Bibb	5w	—	—	—	3.00	—
Bt—Bibb variant silt loam						
Bibb variant	7w	—	—	—	—	—
BuA—Butlertown-Mattapex silt loams, 0 to 2 percent slopes						
Butlertown	2w	—	130	26.00	—	3.50
Mattapex	2w	—	135	27.00	—	3.50
BuB2—Butlertown-Mattapex silt loams, 2 to 5 percent slopes, moderately eroded						
Butlertown	2e	—	130	26.00	—	3.50
Mattapex	2e	—	135	27.00	—	3.50
BuC2—Butlertown-Mattapex silt loams, 5 to 10 percent slopes, moderately eroded						
Butlertown	3e	—	120	24.00	—	3.50

6. A print menu will appear, review the print options and click the **“OK”** button when ready to print.



Generating Reports for Irrigated and Non-Irrigated Crops

Reports for irrigated and non-irrigated crops can be generated separately (for up to 5 crops at a time, or together (for up to 3 crops at a time):

Report - Irrigated and Nonirrigated Yields by Map Unit Component

Map symbol and soil name	Land capability		Corn		Tomatoes	
	Irrigated	Nonirrigated	Irrigated	Nonirrigated	Irrigated	Nonirrigated
Ax-Axis mucky silt loam						
Axis	-	7w	-	-	-	-
Be-Beaches						
Beaches	-	8	-	-	-	-
Bs-Bibb silt loam						
Bibb	-	5w	-	-	-	-
Bt-Bibb variant silt loam						
Bibb variant	-	7w	-	-	-	-
BuA-Butlertown-Mattapex silt loams, 0 to 2 percent slopes						
Butlertown	-	2w	-	130	-	-
Mattapex	-	2w	165	135	-	-
BuB2-Butlertown-Mattapex silt loams, 2 to 5 percent slopes, moderately eroded						
Butlertown	-	2e	-	130	-	-
Mattapex	-	2e	165	135	-	-
BuC2-Butlertown-Mattapex silt loams, 5 to 10 percent slopes, moderately eroded						
Butlertown	-					
Mattapex	-					

Options

Select 1-3 crops

- Alfalfa hay (Tons)
- Bahiagrass (AUM)
- Barley (Bu)
- Common bermudagrass (AUM)
- Corn (Bu)
- Corn silage (Tons)

Generating Other Useful Reports

1. The RUSLE2 related attributes of soils;

Report - RUSLE2 Related Attributes

Map symbol and soil name	Pct. of map unit	Slope length (ft)	Hydrologic group	Kf	T factor	Representative value		
						% Sand	% Silt	% C
Ax-Axis mucky silt loam								
Axis	100	-	B/D	.32	5	26.5	53.5	
Be-Beaches								
Beaches	80	-	D	.02	5	98.0	1.0	
Bs-Bibb silt loam								
Bibb	100	-	B/D	.49	5	32.9	57.1	
Bt-Bibb variant silt loam								
Bibb variant	100	-	C/D	.28	5	18.7	47.8	
BuA-Butlertown-Mattapex silt loams, 0 to 2 percent slopes								
Butlertown	45	-	C	.49	5	14.2	72.3	
Mattapex	40	-	C	.49	5	14.2	71.8	
BuB2-Butlertown-Mattapex silt loams, 2 to 5 percent slopes, moderately eroded								
Butlertown	40	-	C	.49	5	14.2	72.3	
Mattapex	40	-	C	.49	5	14.2	71.8	
BuC2-Butlertown-Mattapex silt loams, 5 to 10 percent slopes, moderately eroded								
Butlertown	40	-	C	.49	5	14.2	72.3	
Mattapex	35	-	C	.49	5	14.2	71.8	

2. The **Map unit description (Brief, generated)**, which gives a brief summary of the important properties of the soils;

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

View Soil Information By Use: All Uses | Printable Version

Intro to Soils | Suitabilities and Limitations for Use | Soil Properties and Qualities | Ecological Site Assessment | **Soil Reports**

Search | **Soil Map**

Soil Reports | Open All | Close All

AOI Inventory

- Component Description (Nontechnical)
- Component Legend
- Descripción de la Unidad de Mapa
- Descripción de la Unidad de Mapa (Breve, Generada)
- Map Unit Description
- Map Unit Description (Brief)
- Map Unit Description (Brief, Generated)**
- This report has no options.
- Selected Soil Interpretation Description and Criteria Summary
- Selected Soil Interpretations
- Survey Area Data Summary
- Survey Area Map Unit Symbols and Names

Report — Map Unit Description (Brief, Generated)

Minor map unit components are excluded from this report.

Kent County, Maryland

Map Unit: Ax—Axis mucky silt loam
Component: Axis (100%)
 The Axis component makes up 100 percent of the map unit. Slopes are 0 to 1 percent. This comp marshes. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is Water movement in the most restrictive layer is moderately high. Available water to a depth of 6 Shrink-swell potential is low. This soil is frequently flooded. It is frequently ponded. A seasonal zc is at 0 inches during January, February, March, April, May, June, July, August, September, October, and December. Organic matter content in the surface horizon is about 6 percent. Nonirrigated land ca 7w. This soil meets hydric criteria. The soil has a slightly saline horizon within 30 inches of the

Map Unit: Be—Beaches
Component: Beaches (80%)
 Generated brief soil descriptions are created for major soil components. The Beaches is a miscell

Map Unit: Bs—Bibb silt loam
Component: Bibb (100%)
 The Bibb component makes up 100 percent of the map unit. Slopes are 0 to 2 percent. This comp plains. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is o

3. **Hydric rating;**

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

View Soil Information By Use: All Uses

Intro to Soils | Suitabilities and Limitations for Use | Soil Properties and Qualities | Ecological Site Assessment

Search | **Soil Map**

Soil Reports | Open All | Close All

AOI Inventory

Building Site Development

Construction Materials

Disaster Recovery Planning

Land Classifications

- Conservation Tree and Shrub Suitability Groups
- Forage Suitability Groups
- Hydric rating by map unit(5 categories)**
- Options
- Hydric Soil List - All Components
- Hydric Soils
- Land Suitability Classification

Report — Hydric rating by map unit(5 categories)

This Hydric Soil Category rating indicates the cumulative percentage of compone within the map units. Map units are composed of one or more map unit componer hydric or not hydric. The class ratings are: Hydric (100%), Predominantly hydric Predominantly nonhydric (1 to 32%), and Nonhydric (0%).

Kent County, Maryland

Mapunit symbol	Map symbol and map unit name
Ax	Ax—Axis mucky silt loam
Be	Be—Beaches
Bs	Bs—Bibb silt loam
Bt	Bt—Bibb variant silt loam
BuA	BuA—Butlertown-Mattapex silt loams, 0 to 2 percent slopes
BuB2	BuB2—Butlertown-Mattapex silt loams, 2 to 5 percent slopes, moderately eroded
BuC2	BuC2—Butlertown-Mattapex silt loams, 5 to 10 percent slope moderately eroded
CeB2	CeB2—Colts Neck loam, 0 to 5 percent slopes, moderately er

4. Reports may also be generated for soil properties individually, by clicking on the “Soil Properties and Qualities” tab under “Soil Data Explorer”. For example, Soil Drainage Class:

The screenshot shows the 'Soil Data Explorer' interface. The 'Soil Properties and Qualities' tab is selected. The left sidebar shows a tree view with 'Drainage Class' selected. The main content area displays a table titled 'Summary by Map Unit — Kent County, Maryland (MD029)'. The table has three columns: 'Map unit symbol', 'Map unit name', and 'Rating'. Red arrows point to the 'Soil Properties and Qualities' tab, the 'Drainage Class' section in the sidebar, and the 'View Rating' button in the sidebar.

Map unit symbol	Map unit name	Rating
Ax	Axis mucky silt loam	Very poorly drained
Bc	Beaches	Very poorly drained
Bs	Bibb silt loam	Poorly drained
Bt	Bibb variant silt loam	Very poorly drained
BuA	Butlertown-Mattapex silt loams, 0 to 2 percent slopes	Well drained
BuB	Butlertown-Mattapex silt loams, 2 to 5 percent slopes, moderately eroded	Moderately well drained
BuC2	Butlertown-Mattapex silt loams, 5 to 10 percent slopes, moderately eroded	Well drained
CeB2	Colts Neck loam, 0 to 5 percent slopes, moderately eroded	Well drained
CeC2	Colts Neck loam, 5 to 10 percent slopes, moderately eroded	Well drained
CgC2	Colts Neck gravelly loam, 2 to 10 percent slopes, moderately eroded	Well drained
CgC3	Colts Neck gravelly loam, 5 to 10 percent slopes, severely eroded	Well drained
CgD2	Colts Neck gravelly loam, 10 to 15 percent slopes, moderately eroded	Well drained
CgD3	Colts Neck gravelly loam, 10 to 15 percent slopes, severely eroded	Well drained
CnE	Colts Neck and Sassafras soils, 15 to 40 percent slopes	Well drained
Em	Elkton silt loam, 0 to 2 percent slopes	Poorly drained
FaA	Fallsington sandy loam, 0 to 2 percent slopes	Poorly drained
FgA	Fallsington loam, 0 to 2 percent slopes	Poorly drained
FmR	Fort Mott loamv sand, 0 to 5 percent slopes	Well drained