

How to Get Information on Soils and their Suitability for Soil-based Residential Wastewater Disposal in Vermont from Web Soil Survey (version 2.3) October 2011

- Log on to Web Soil Survey: <http://websoilsurvey.nrcs.usda.gov/app/>
- Click the green **Start WSS** button to open Web Soil Survey, version 2.3.

Tab 1. Area of Interest (AOI)

- **Quick Navigation** -> click on **State and County** – choose Vermont as State and your county of interest in the drop-down menu. **All Vermont counties are accessible through WSS.**
- Click **View** to get the county shown on the Area of Interest Interactive Map on right side of screen. A basic map of the county will appear, with major roads and water bodies shown.
- With the **Zoom In** button active (this button looks like a magnifying glass with a plus sign on it), draw a box around the general part of the county you are interested in by holding down your mouse button and enlarging the boxed area. You can repeat this step several times to get to the point where the property you are interested in appears in the map window. An airphoto background will appear with the map. Note: You can also try the **Navigate by Address** option.
- To delineate your Area of Interest, click on one of the two **AOI** buttons on the map toolbar. The **AOI** button showing a red box will delineate a rectangular area. The **AOI** button showing a red multi-sided polygon will delineate an irregularly-shaped area – with this, you must continue clicking at each corner and double-click at the point where you started to close the polygon.
- Once you have delineated your Area of Interest, the interactive map will zoom to show the area, hatched in blue. On the left side of the screen, it will tell you the acreage of the area you have delineated. If your Area of Interest covers more than one county, the acreage will be listed separately by county. You can give your Area of Interest a Name if you desire.
- If you are not happy with the Area of Interest as shown, click the **Clear AOI** button on the right side of the screen and use the **AOI** buttons to re-delineate it. Repeat as many times as needed. When you are satisfied with your Area of Interest, you're ready to produce the Soil Map.

Tab 2. Soil Map

- Click on the **Soil Map** tab on top of the screen, in between the **Area of Interest** tab and the **Soil Data Explorer** tab. This will generate the soil map for the Area of Interest (from here on referred to as AOI) you have delineated. Depending on server traffic, this may take a few minutes. The screen will show the Soil Map on the right and the Map Unit Legend on the left, with soil map unit symbols and names, and their acreage and percentage within the AOI.
- When viewing the soil map on-screen, some soil polygons may not show a map unit symbol. This is due to the scale of the map on-screen. Not to worry – the symbols are there. You can enlarge the scale on-screen, or they will show up when you print a copy of the map.
- At this point, you can print out a copy of the soil map, save it to your computer, save it to the Shopping Cart, or continue on to the Soil Data Explorer section, which is where you'll generate the report and map for Primary Agricultural Soils for your AOI.
- To print a copy of the soil map or to save it to your computer, click the **Printable Version** button. A small window will open – if you wish to give your map a custom name (like your name or your client's name), click the **Custom Subtitle** button and type the name you wish. Then click the **View** button. This will generate a new view of the soil map and associated information as it will appear printed and display it on-screen. This multi-page file is an Adobe® pdf file. Using the toolbar, you can then print the map or save it to your computer. This map can also be emailed, but first has to be saved to your computer as a pdf file.
- After printing or saving the soil map file, close that window by clicking on the red X. You will still have the web-based soil map page open.

- This completes the Soil Map generation process. To generate a report on Primary Agricultural Soils for your AOI, continue to the next section.

Tab 3. Soil Data Explorer

- Click on the **Soil Data Explorer** tab on top of the screen to the right of the **Soil Map** tab.
- Under Soil Data Explorer, you'll see 5 new tabs. Feel free to browse them all.
- You can generate a basic report on **Soil-based Residential Wastewater Disposal Ratings** for soil map units within your AOI by clicking on the **Soil Reports** tab at the top.
- Under the Soil Reports choice list on the left side of the screen, select **Sanitary Facilities**. Under that heading, there is a report titled **Soil-based Residential Wastewater Disposal Ratings (VT)**. This report is specific to Vermont. It is based on a review of soil characteristics and the 2007 Vermont Environmental Protection Rules.
- First click on the report title line, and then click the **View Description** button to read the narrative information about the report, if you wish. To generate the report, click the **View Soil Report** button.
- This will generate a new screen and pdf file of the report. At this point, you can print it by clicking on Printable Version at the top of the screen, or add it to the Shopping Cart, where it will be included in the Custom Soil Resource Report you can create for your AOI.
- To generate a color-coded interpretative map and report on soil **Drainage Classes** within your AOI, click on the third tab, **Soil Properties and Qualities**.
- Next, click on the **Soil Qualities and Features** button. Under its choice list, select **Drainage Class**. And generate the map and report by clicking on the **View Rating** button.
- A color-coded map of your AOI will show on the map view on the right. Click on the sideways-appearing Legend tab to see what the colors mean. Red, orange, and yellow colors represent soil map units with predominantly well to excessively drained soils. Bluer colors show areas of poorly and very poorly drained soils. This report can be helpful as a first step in identifying drier and wetter areas within a property. It's a way to get a sense of which areas have soils with a seasonal high water table and how severely restrictive they might be.
- To print a copy of the Drainage Class map, legend, and table, click on the **Printable Version** button and repeat the process described to print or save the Soil Map. You can also add it to your Shopping Cart for addition to the Custom Soil Resource Report for your AOI.
- You can also generate a color-coded interpretative map and report on soil **Depth to Lithic Bedrock** within your AOI, under the third tab, **Soil Properties and Qualities**, and the **Soil Qualities and Features** button. Under its choice list, select **Depth to a Selected Soil Restrictive Layer**. Under **Basic Options**, select **Lithic Bedrock**. Then generate the map and report by clicking on the **View Rating** button.
- A color-coded map of your AOI will show on the map view on the right. Click on the sideways-appearing Legend tab to see what the colors mean. You can then print or save the report as described previously.

Tab 4. Shopping Cart

- The **Shopping Cart** tab/function will generate a Custom Soil Resource Report for your Area of Interest. Note that the number of pages of the report can be rather lengthy, depending on how many soil map units are in your AOI and how many reports you add using Soil Data Explorer.

If you have questions about Web Soil Survey, please contact VT Soil Database Manager (martha.stuart@vt.usda.gov, 802-295-7942, x.28) or VT Soil Resource Specialist (thomas.villars@vt.usda.gov, 802-295-7942, x. 24) for more information.