

# Mapping Your Soil



Soil Science Society  
of America

## Activity Source:

[Soil Science Society of America](http://www.earthsciweek.org/classroom-activities/mapping-your-soil). Adapted from information provided through Earth Science Week.

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The key properties of soil (physical, biological, and chemical) determine recreation, crop production, range, water/erosion conservation, forestry, and engineering uses of the soil. Soil surveys help us understand how soils differ and how they behave under various land management systems. The heart of a soil survey is the soil map showing the spatial distribution and variability of soils on the landscape.

The work of soil surveying in the United States began in the early 20th century. Today, the online web soil survey has soil maps and online data for more than 95 percent of the nation's counties and anticipates having 100 percent soon.

On the Web Soil Survey, you'll find the type of soil in your identified area, best uses and limitations for the area, and soil properties and qualities. Use the Web Soil Survey (developed by the USDA-Natural Resources Conservation Service) to determine what soil is around your school and how it can be used.

## Materials

Computer with Internet access

Paper and pen or pencil

## Procedure

1. Go to <http://websoilsurvey.nrcs.usda.gov/app/HomePage.htm> and click on the green Start WSS.
2. To start your search, click on "Address" under Quick Navigation on the left. Type the address of your school and click "View." The map will pinpoint the location with an orange marker.
3. Get more specific. Using the AOI (Area of Interest) Rectangle in the legend above the map, drag and create a space around the school location that encompasses at least a few streets. Wait for the "Creating AOI" message to go away. A hashed area around your school will show on the map.
4. Now you can get to information about the soil! Click on the "Soil Map" tab at the top. Identify on the map the specific soil symbol where the school is located. Click on "Map Unit Legend" at left and learn about the different soils in the area and the number of acres of each type. Click on the "Map Unit Name" to learn specific information about that soil.
5. Then, click on the "Soil Data Explorer" tab at the top and learn about the soil properties and qualities, as well as the suitability and limitations for use. Viewing ratings creates a colored map; information about the limitations is shown in the legend below the map. (Green is good, yellow means use caution, and red is not a wise use.)

Visit <http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/edu/?cid=stelprdb1236841> to find which states have state soils, what those soils are, where they are located, and why these soils are important to each state. A soil series name generally is derived from a town or landmark in or near the area where the soil was first recognized