Earth Science Education Activity

USING WEB SOIL SURVEY TO CREATE A LOCAL SOIL MAP AND ANALYZE SOIL ERODIBILITY

Adjunct guide for learning activity: "Impacts of Groundcover on the Erodibility of Soil"

1. Visit **https://websoilsurvey.nrcs.usda.gov/app/** and get acquainted with the site.

2. Select the green button that says "**START WSS.**"

3. Select an Area of Interest (AOI):
   - **a.** Under the brown **Quick Navigation** tab, select **Address**.
   - **b.** Type in a specific address, or just a city and/or state for an area where you'd like to learn more about the soil. Hit "**Enter**" or select the "**View**" button.
   - **c.** Use the magnifying glasses  to zoom in or out. If you'd like to zoom in, select the + magnifying glass, then click on the map. Similarly, select the – magnifying glass and click on the map to zoom out.
   - **d.** Use the hand button  to move the map around until your desired AOI is centered.
   - **e.** Select an AOI in a rectangular shape using the square AOI button  or select an AOI in any polygon using the polygon AOI button  . Once an AOI button is selected, select your area on the map. The application has a limit of 100,000 acres. If you exceed that size, an error box will pop up and ask that you make your AOI smaller.

4. Display the soil erodibility map of your selected area:
   - **a.** Click the "**Soil Data Explorer**" tab.
   - **b.** Click the "**Soil Properties and Qualities**" tab.
   - **c.** Expand the "**Soil Erosion Factors**" section by clicking on it.
   - **d.** Click on "**K Factor, Whole Soil**" or another erosion-related interpretation.
   - **e.** If you would like to read a description of selected factor, select "**View Description.**"
   - **f.** To view the map, select "**View Rating.**" The map will load on the screen.

5. Select the "**Printable Version**" in the top right of the app to see the selected map including the legend. Optionally, add a title to the map. Click "**view.**"

6. A PDF will load which has the map on the first page and map legend on the second page. The specifics of the surface texture and descriptions will follow.

Buttons: USDA NRCS Web Soil Survey