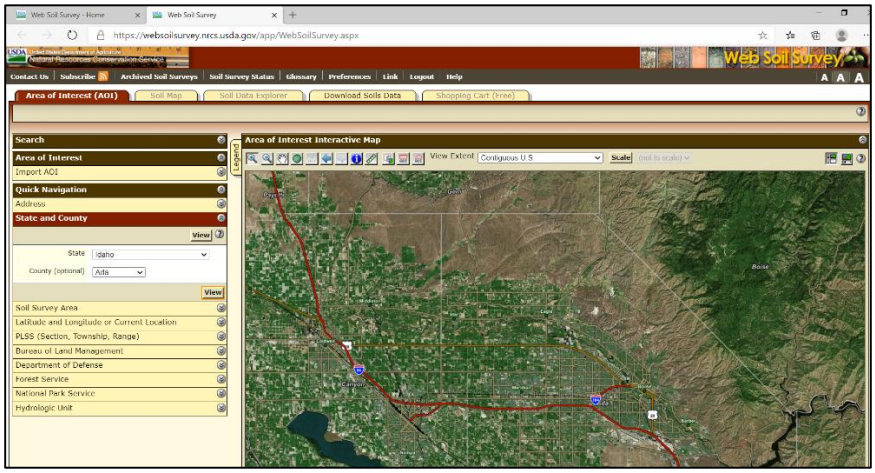
Web Soil Survey Activity: Using Web Soil Survey to Determine Soil Composition and Plant Biomass and Composition.

1. Start Web Soil Survey (WSS) (http://websoilsurvey.nrcs.usda.gov/app/)
2. Click on "**Start WSS**"
3. **Find Area of Interest** (AOI) – your instructor may ask you to find a specific area OR you may be asked to choose one on your own which you are interested in. (NOTE: not all areas in the database have soil data available in Web Soil Survey. You may have to navigate to a different AOI if no data is available).

   There are several ways to navigate in WSS. An example is given below.

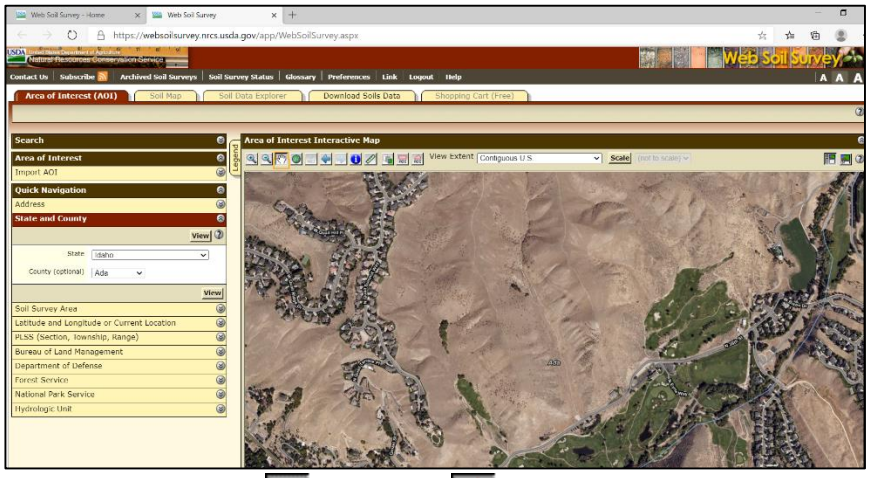
   EXAMPLE:

   a. Navigate by "**State and County**" on left hand menu
   b. Select Idaho and then select a county (example "Ada")
   c. Click "**view**" (example of results below)



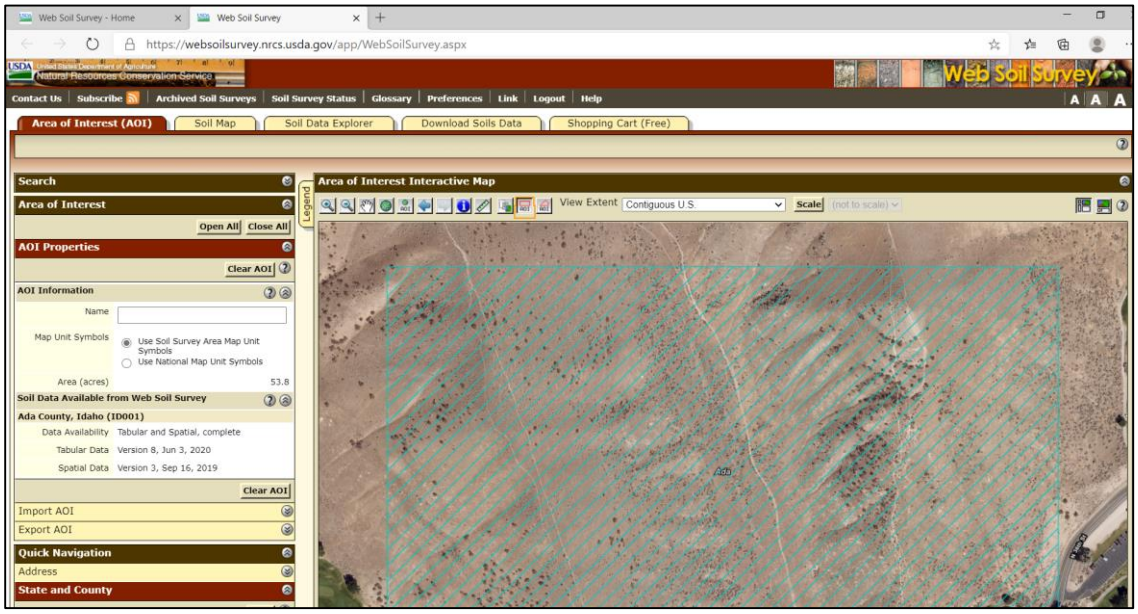
   d. Zoom in  to any specific area of interest (may need to zoom multiple times) and use  to center or move the map.

      - Zoom until road names and landmarks show up on map.



   e. Use AOI Rectangle  or Polygon  on Map Legend to select an area. Your AOI should be less than 1000 acres in size.

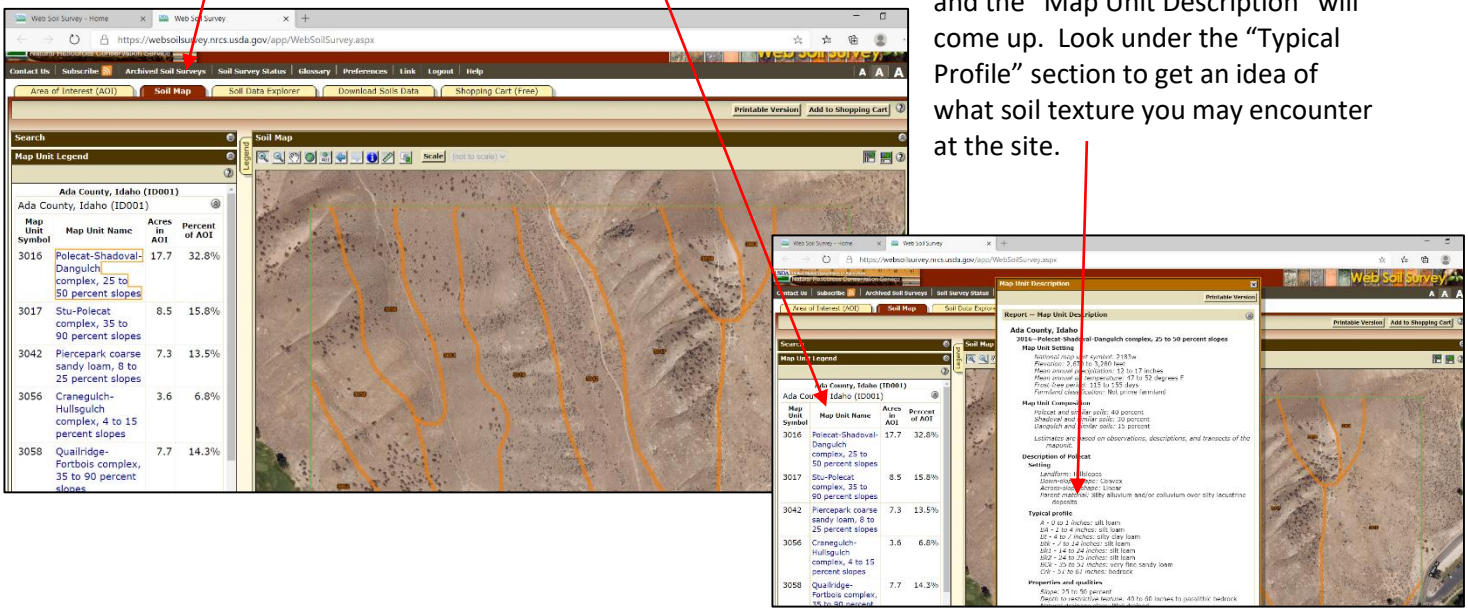
f. Once an AOI is selected, an "area of interest properties" box should appear on the left and the selected area should be boxed and lined.



4. Click on the "**Soil Map**" tab (top of page)

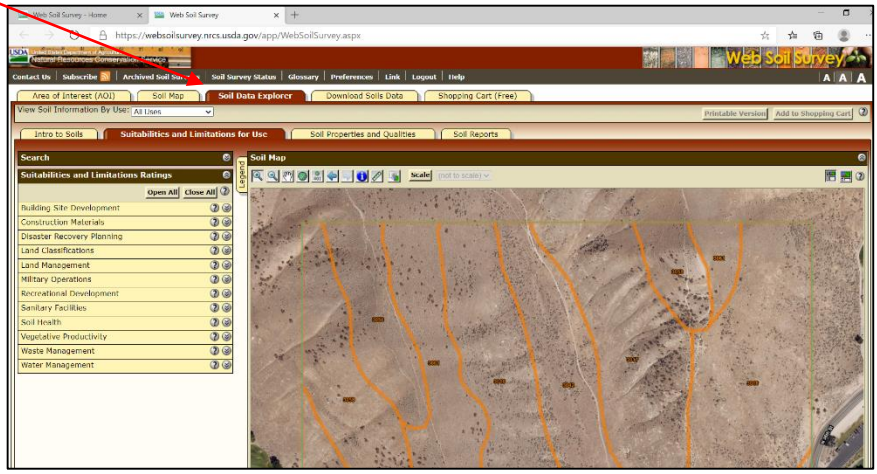
a. This gives you a list of the different types of soils present within your selected soil area, along with the percentages of each soil present. By clicking on any of the soil types (Map Unit Name) you can receive the properties and information on that one soil.

b. **NOTE which soils are the most prevalent**. Click on the most prevalent "Map Unit Name" and the "Map Unit Description" will come up. Look under the "Typical Profile" section to get an idea of what soil texture you may encounter at the site.

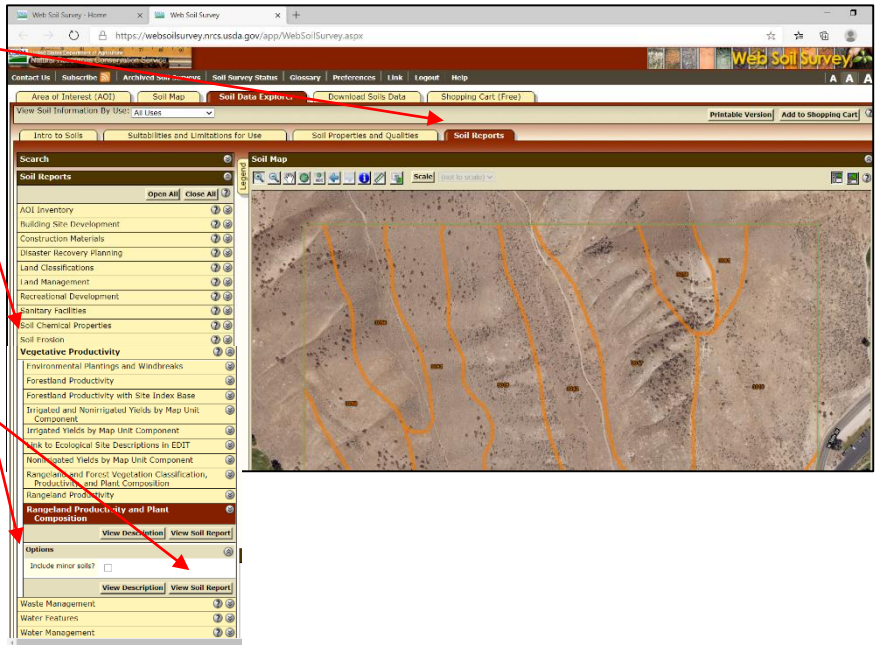


5. Click on the "**Soil Data Explorer**" tab

    a. This gives you 4 sub-tabs to select from: Intro to Soils, Suitabilities and Limitations for Use, Soil Properties and Qualities, and Soil Reports.



6. Click on the "**Soil Reports**" tab. → click on "**Vegetative Productivity**" in the menu on the left→ click on "**Rangeland Productivity and Plant Composition**" → click on "**View Soil Report**" button. Scroll down the page as the report appears below the map.



7. **Soil Report Output --** This provides you with the soil map unit names, ecological sites, total dry-weight productions (lbs/acre), characteristic vegetation, and rangeland composition percentages (Rangeland Composition will be used in Section 4A)

Ada County, Idaho

Map unit symbol and soil name	Ecological site	Total dry-weight production			Characteristic vegetation	Rangeland composition
		Favorable year	Normal year	Unfavorable year		
		Lb/ac	*Lb/ac*	*Lb/ac*		*Pct*
3016—Polecat-Shadoval-Dangulch complex, 25 to 50 percent slopes						
Polecat	Loamy 8-12 Artrt/pssp6	1,200	950	650	Bluebunch wheatgrass	40
					Basin big sagebrush	20
					Basin wildrye	10
					Bottlebrush squirreltail	5
					Sandberg bluegrass	5
					Arrowleaf balsamroot	5
					Rubber rabbitbrush	5
Shadoval	Loamy 8-12 Artrt/pssp6	1,200	950	650	Bluebunch wheatgrass	40
					Basin big sagebrush	20
					Basin wildrye	10

Answer the following questions for your AOI:

1. What is the "likely" dominate soil texture at your site? _____
2. In a normal year, what is the "Total dry-weight production" for your AOI? _____
3. What are the dominate plant species for your AOI?

4. Using the Rangeland Composition column for the dominate Map Unit Symbol in your AOI, Determine the "Desired State of Composition" (Section 4A), your total should be 100%

Perennial Grass_____

Annual Grass _____

Forbs _____

Shrubs _____