Web Soil Survey **Team # _____**
Spring 2012

By signing below, you acknowledge that you have made a substantive contribution to this project and preparation of the report. If you do not sign, you will not receive any points for this project.

_____ _____

_____ _____

To begin this project, go to http://websoilsurvey.nrcs.usda.gov/app/. Read ***Welcome to Web Soil Survey*** and ***Three Basic Steps***. Click on the green ***START WSS*** icon. You will be choosing two Areas of Interest (AOIs) following the instructions on the web site. Your AOIs can be anywhere in the United States where soil survey information is available. Try to use locations that are of interest to you and, to the degree possible, use 2 fairly contrasting locations. For purposes of this assignment, your AOIs should be approximately 1000-2000 acres in size. It might be helpful to assign 2 team members to work on each AOI and work on Questions 13-14 as a group.

1. In what state(s) is AOI #1 located? _____

   In what states(s) is AOI #2 located? _____

SOIL MAP UNITS

2. For each AOI you have selected, go to the ***Soil Map*** tab (located near top of page) to generate a map showing the AOI and its component soil map units. **Print this map for each of your AOIs and attach them to this report**.

3. Choose a particular point location on each of the maps – this can be a house, school, part of a ranch, etc. **Clearly mark the points with an *X* on each of the maps**.

4. Determine which soil map unit contains the selected point.

   AOI #1
   map unit symbol _____

   map unit name _____

   What percentage of the AOI does this map unit occupy? _____

Which soil series makes up most of this map unit? _____

AOI #2
map unit symbol _____

map unit name _____

What percentage of the AOI does this map unit occupy? _____

Which soil series makes up most of this map unit? _____

SOIL DATA EXPLORER
Next, you will examine information about soil properties and land-use interpretations for your map units. Answer Questions 5-12 for the chosen map unit from each of your AOIs.

Go to the ***Soil Data Explorer*** tab and then select the tab heading entitled *Soil Properties and Qualities*.

5. Select *Water Features* and determine *Depth to Water Table* for your map unit. Do this by clicking on the *View Rating* button. You can use all of the default settings.

AOI #1
Depth to water table = _____
include units

AOI #2
Depth to water table = _____
include units

6. Next, select *Soil Physical Properties*.

AOI #1
What is the *Surface Texture* for your map unit? _____

Find the *Bulk Density (One-Third Bar)* for the surface layer of your map unit (you will have to use *Advanced Options > Layer Options > Surface Layer* to get information for the surface layer).

Surface layer bulk density = _____

AOI #2
What is the *Surface Texture* for your map unit? _____

Find the *bulk density (one-third bar)* for the surface layer of your map unit (you will have to use *Advanced Options > Layer Options > Surface Layer* to get information for the surface layer).

Surface layer bulk density = _____

7. Now select *Soil Chemical Properties*. Find the *pH (1 to 1 water)* for the surface soil layer of your map unit (you will have to use *Advanced Options > Layer Options > Surface Layer* to get information for the surface layer).

AOI #1
Surface layer pH = _____

AOI #2
Surface layer pH = _____

8. Now select *Soil Qualities and Features*. Find the *Depth to Any Soil Restrictive Layer* for your map unit (default settings are OK).

AOI #1
Depth to any soil restrictive layer = _____

Soil depth class (you should have this in your notes) = _____

AOI #2
Depth to any soil restrictive layer = _____

Soil depth class (you should have this in your notes) = _____

While still under the ***Soil Data Explorer*** tab, select the tab heading entitled *Suitabilities and Limitations for Use* – it's located immediately to the left of the *Soil Properties and Qualities* tab heading.

9. Determine the suitability of your soil map unit for *Dwellings with Basements*. This can be found under the *Building Site Development* tab (default settings are OK).

AOI #1
What is the rating? _____

List the reason(s) for the rating _____

AOI #2
What is the rating? _____

List the reason(s) for the rating _____

10. Determine the suitability of your soil map unit for *Local Roads and Streets*. This is also found under the *Building Site Development* tab (default settings are OK).

AOI #1
What is the rating? _____

List the reason(s) for the rating _____

AOI #2
What is the rating? _____

List the reason(s) for the rating _____

11. Click on the *Vegetative Productivity* tab. Determine the suitability of your soil map unit for one of the categories listed (this will vary depending on geographical location).

AOI #1
List the category (e.g. *Yields of Irrigated Crops*, *Range Production*, etc.)

_____

What is the rating? _____ (describe as needed)

AOI #2
List the category (e.g. *Yields of Irrigated Crops*, *Range Production*, etc.)

_____

What is the rating? _____ (describe as needed)

12. Click on the *Waste Management* tab. Determine the suitability of your soil map unit for *Disposal of Wastewater by Irrigation* (default settings are OK).

AOI #1
What is the rating? _____

List the reason(s) for the rating _____

AOI #2
What is the rating? _____

List the reason(s) for the rating _____

GENERAL QUESTIONS

13. Based on all of the information you have found in Web Soil Survey, provide a general assessment of the selected soil map units from each of your AOIs relative to their use and management. Mention any relevant soil or site properties that result in limitations for the variety of land uses that are assessed in Web Soil Survey. This shouldn't take more than a short paragraph for each of the map units.

14. In your own words, give a short definition of a map unit. A few sentences should be adequate to do this, but make sure your definition includes mention of soil series.