

## **EXAMPLE 6 - Generalized Soil Depth:**

### **Specialist's Request**

It was never the intent of OAESIS to replace soil survey databases such as the Natural Resources Conservation Service's STATSGO and SURGO. However, the information summarized from Range Site Descriptions can be used in areas where SURGO (or the equivalent) is not available to make some approximations. This will be illustrated in this example, and in example 7. These approximations may be less generalized than what can be produced from STATSGO for some kinds of information. In such instances, a mixed scale product similar to what was illustrated in example 1 could be produced.

What I want is a map showing generalized soil depth in inches displayed on a gradient scale like was done in example 5.

This can be done using the [mindp] and [maxdp] fields of the {RSITESUM} table. These fields show the range, in inches, of the soil depths associated with each Range Site. The average of [mindp] and [maxdp] for each [rsiteno] will be the midpoint of that range and can be considered as an approximation of average soil depth.

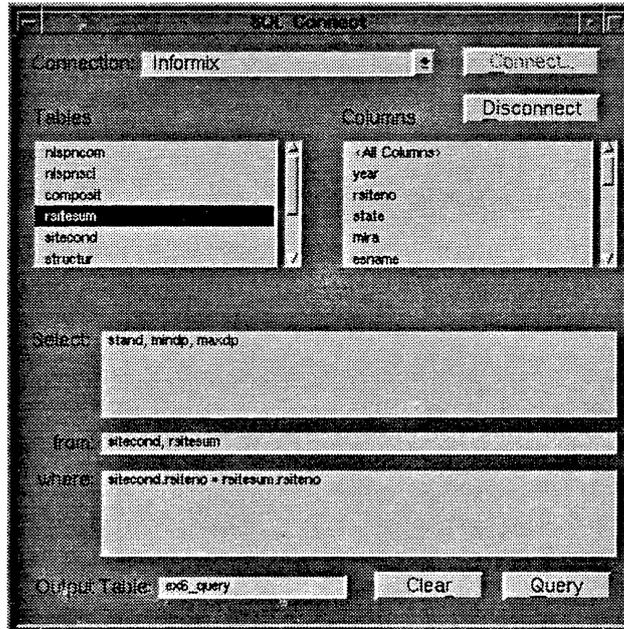
This average soil depth can then be linked to [stand] by matching [rsiteno] between the {RSITESUM} and {SITECOND} tables. When producing the map, any average soil depths of zero should be considered null (unknown). There will probably be some instances of this as not all records in the {RSITESUM} table are complete for all data fields.

Plot this map for just eastern Oregon.

### **EXAMPLE 6 - Solution:**

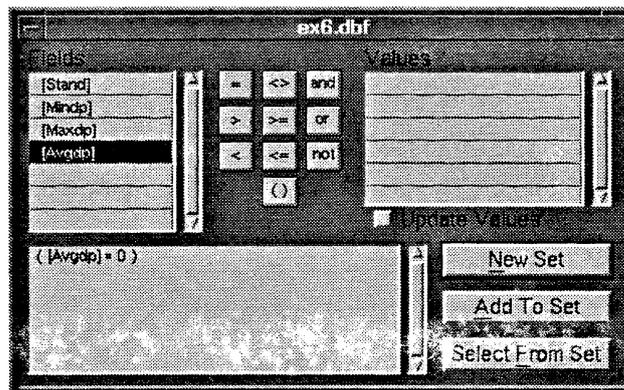
This problem is similar to the last. In ArcView, make a table with the SQL Connect, calculate the average soil depth, then link this to the attributes of the Oaesis coverage. In the view, make a suitable legend of the average soil depths. Finally create a layout.

Here is the query used to make the initial table:

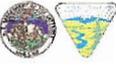


Remember to export the table (probably to a dBase table), so you can edit it. You will need to add a new field called [avgdp] for 'average depth'. Select all of the records and use the field calculator to find the average of [mindp] and [maxdp].

A key statement in the request is to not represent average soil depths equal to 0 because they are unknown. Use the 'query builder' to select those records:

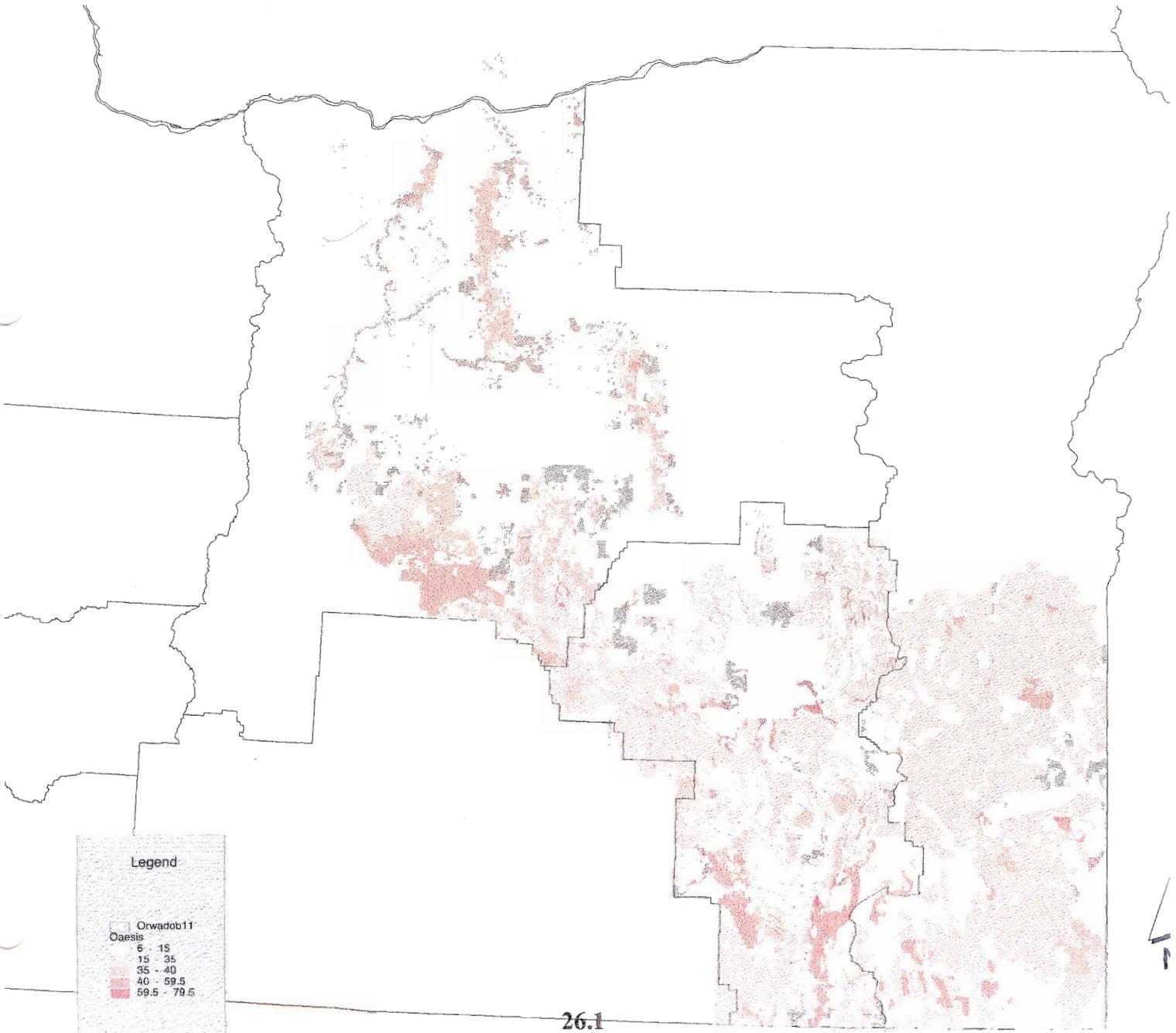


Several records in the table should now be selected (yellow). Under the 'Edit' menu, press 'Delete Records' to purge these from the table. Now you are ready to join the table with the table of Oaesis attributes (by the [stand] field). Finish up by making a map as you did in Example 5.



United States Department of the Interior  
Bureau of Land Management  
220 West 500  
Portland, Oregon 97208-3346

## Generalized Soil Depth Eastern Oregon



### Legend

- Orwadob11
- Oaesis
- 6 - 15
- 15 - 35
- 35 - 40
- 40 - 59.5
- 59.5 - 79.5

26.1