## Sorghum Lab

## **Purpose**:

The purpose of the lab assignment is to apply the skills just learned from the tutorial.

## Assignment:

- 1. Conduct an analysis, using the "multi-step" method, but with the following criteria:
  - a. elevations <= 8 metres <u>AND</u>
  - b. clay AND heavy clay soil
  - Name the map layer Flood AND All Clay
  - Change the colours to pink for suitable and light blue for unsuitable.
  - Alter the legend so it is clear what areas are suitable and what areas are not.
- 2. Conduct an analysis, using the "one step" method, but with the following criteria:
  - a. elevations <= 8 metres <u>OR</u>
  - b. clay AND heavy clay soil
  - Name the map layer **Flood OR All Clay**
  - Change the colours to pink for suitable and light blue for unsuitable.
  - Alter the legend so it is clear what areas are suitable and what areas are not.
- 3. Create a layout with these two maps (see attached map). Placing two maps onto one sheet of paper is something you have not yet done. Refer to the attached sheet for hints on how to do this.
- 4. Draw and label an analytical model for two analyses. Map boxes should include the name and units; arrows should have function name above and parameters below.

Hints for map layout with 2 maps (refer to the attached map – important note, your map will look different, i.e. the pink areas will NOT be the same):

- Change from "Data View" to "Layout View". Ensure only "Flood and All Clay" is 'ticked'.
- "Grab" a corner of the map frame (e.g. hover over the light blue square in the bottom right corner) and drag it to shrink the map to about the right size (e.g. pull up and to the left). The 'right size' is approximately 1/3 the size of the page.
- Add the *Title* (Sorghum: Comparison of AND versus OR) to the top of the map.
- Add the *Text* (Flood and All Clay) under the map you just inserted.
- Add a legend for this map (accept all the defaults and place it to the right of the map).

OK, now we are at the stage where we need to add the second map. In order to do this we have to add a second data frame.

• Add a second data layer by clicking the *Insert* menu and then *Data Frame*. An empty data frame appears on your page.

You will note there is a new item on the Table of Contents on left called "New Data Frame". This "New Data Frame" is linked to the empty box on our map page. However, there are no map layers listed in this new frame ... yet. The next step is to add our *Flood <u>or</u> Clay* map layer to this new Data Frame.

- These "arrowhead bullets" indicate you will be working with the Table of Contents (e.g. the list of maps on the left side)
- Click the New Data Frame in the Table of Contents (it should be highlighted in dark blue).
- Click the "Add Data" button (the button with the black cross over a yellow diamond) and add your Flood OR All Clay map layer.
- Adjust the colours of this image as required (pink and blue, as before). Adjust the legend as required (i.e. to "suitable" and "unsuitable").
- Add the *Text* (Flood or All Clay) under the map you just inserted.
- Add a legend
- Insert a text box with your name and date in the bottom right corner.

## Sorghum: Comparison of AND versus OR



Flood and Clay



Flood or Clay