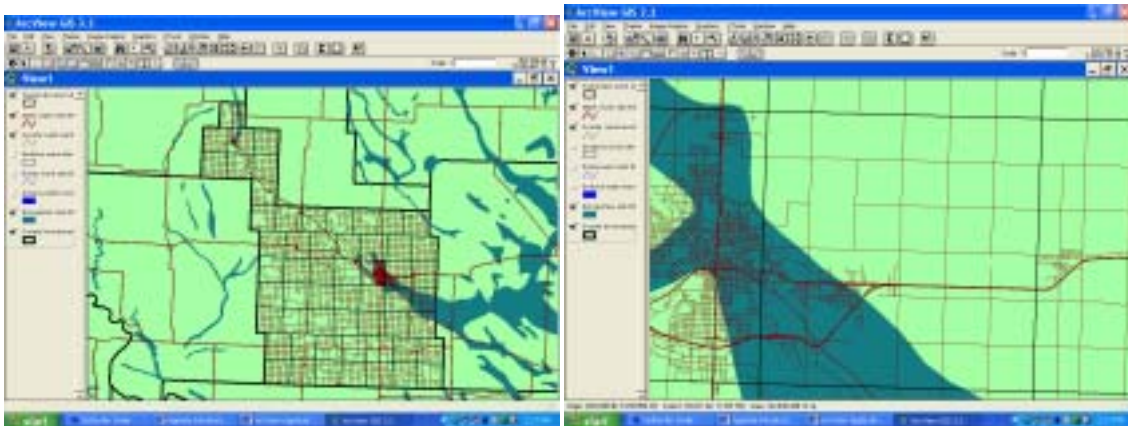


## **ArcView Applications: Exercise 9 – ArcView Utility Tools and Xtools**

- Making a New Shapefile From a Graphic
- Clipping Shapefiles (Feature Themes)
- Calculating Acres
- Buffering Shapefiles

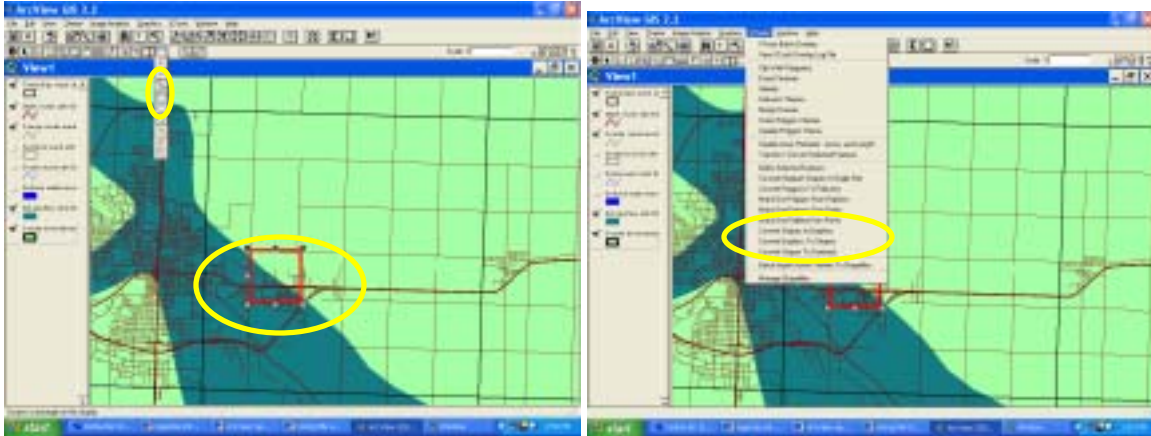
(Note: Steps 1 – 4 are included to add themes to the view, and are not part of the Exercises on using ArcView Extensions.)

1. Add the following themes to an ArcView view:
  - a. State themes: County Boundaries, State Roads, ND Aquifers
  - b. County themes: Townships, County Roads, Drains, Sections, Surface Water
2. Edit the various themes as follows:
  - a. Townships: empty polygon, outline width 2
  - b. State Roads: dark red, width 2
  - c. County Roads: dark red, width 1
  - d. Sections: empty polygon County Roads: dark red
  - e. Drains: blue
  - f. Surface Water: blue colored fill and outline
  - g. ND Aquifers: aqua colored fill and outline.
  - h. County Boundaries: light green, boundary width: 3
3. Display the following themes: County Boundaries, ND Aquifers, County Roads, State Roads, Townships.
4. Zoom in to an area of approximately one township.

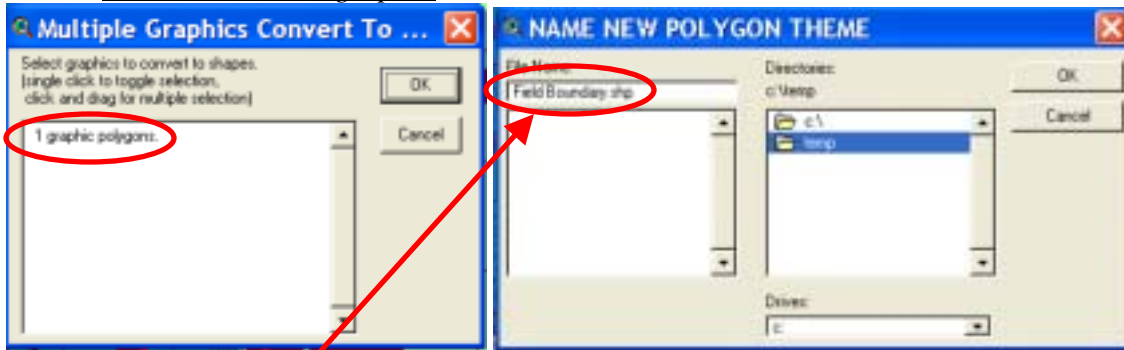


## Making a New Shapefile From a Graphic (Xtools Extension)

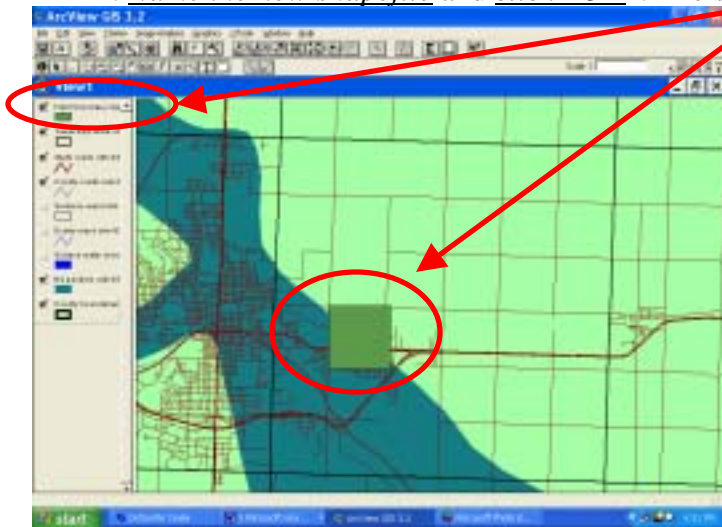
5. From the File menu, *add the “Xtools Extension”*.
6. *Add a rectangular graphic* to the view.
7. With the graphic selected, *choose “Convert Graphics to Shapes” from the Xtools menu*.





8. A Convert Multiple Graphics to Shapes window will be displayed.
9. *Select the desired graphic* and click OK.

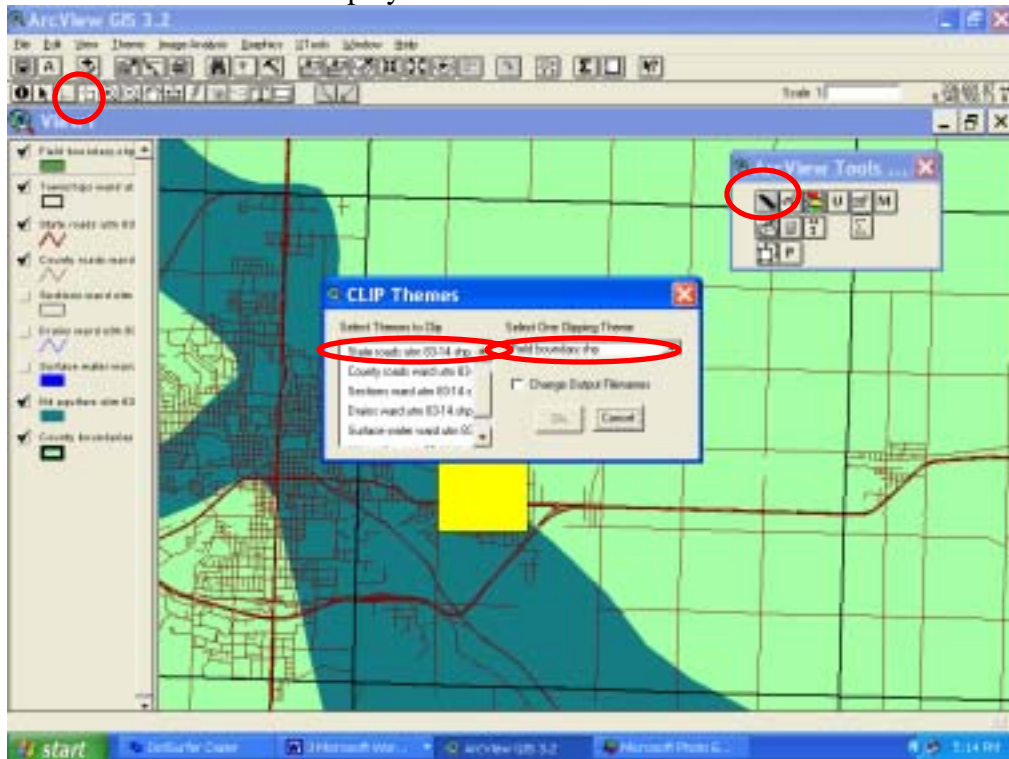


10. A “Name New Polygon Theme” window will be displayed.
11. *Name the new shapefile and click “OK”*. The shapefile will be added to the view.

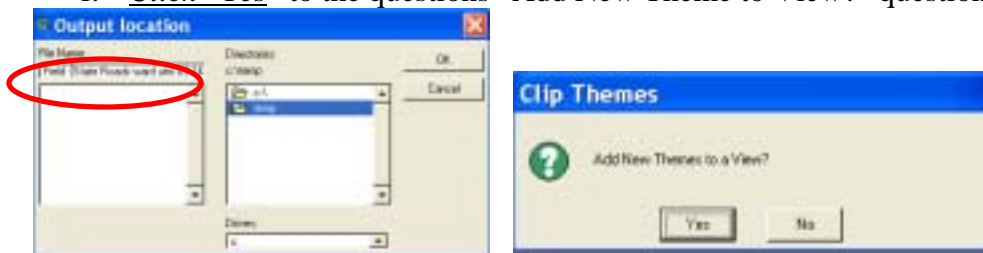


## Clipping Themes (ArcView Utilities Extension)

12. From the File menu, *add the “ArcView Utilities Tools” Extension.*
13. To clip themes with another theme:
  - a. *Make the clipping theme active* in the table of contents of the view.
  - b. Use the “Select Features” icon  to *select the feature in a theme to use to clip* the other themes.
  - c. *Select the “Clip Icon”*  from the ArcView Tools. A “Clip Themes” window will be displayed.




- d. In the Clip Themes window *select the desired clipping theme* and the *desired themes to clip*. Click OK. An “Output Location” window will be displayed.
- e. In the Output Location window, *choose the desired directory* and provide *a name for the new clipped shapefile*. Click “OK”.
- f. *Click “Yes”* to the questions “Add New Theme to View?” question.

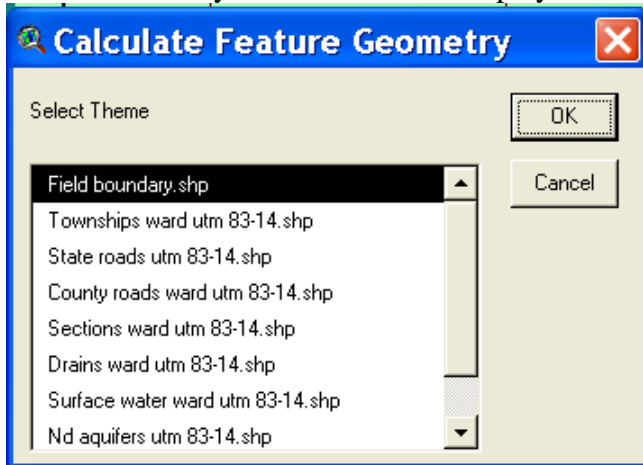


- g. Repeat the above steps to clipped the other themes.



## **Calculating Acres (ArcView Utilities Extension)**

14. Make the theme for calculating acres the active theme.

15. Select the “Calculate” icon  from the ArcView Tools. A “Calculate Feature Geometry” window will be displayed.





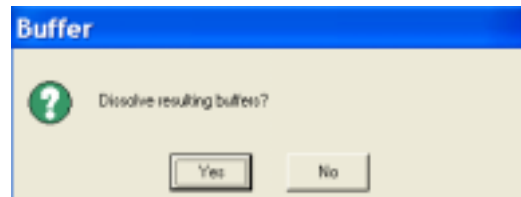
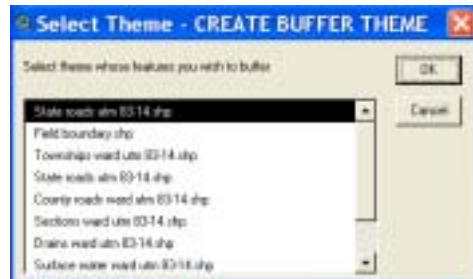
16. Select the theme on which you want acres calculated. Click OK.

17. Click either the “Open Theme Table” icon , or the “Identify” icon  to determine the acres.

## **Buffering Points, Lines or Polygons (ArcView Utilities Extension)**

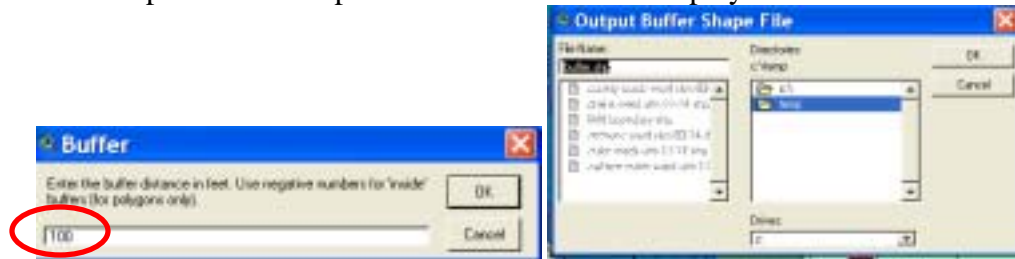
18. To buffer themes:

- From the View menu, choose “Properties” to set the View “Map Units” to Meters, and the “Distance Units” to feet. (Or other desired units)
- Make the theme active in the table of contents of the view.
- Use the “Select Features” icon  to select the feature in a theme to buffer.
- Select the “Buffer” icon  from the ArcView Tools. A “Select Theme – Create Buffer Theme” window will be displayed.



- Click “Yes” to the question “Dissolve resulting buffers?” A “Buffer” window will be displayed.

- f. In the Buffer window, choose the distance to buffer the feature. An “Output Buffer Shape File” window will be displayed.



- g. In the Output Buffer Shape File window, choose the directory and name the new buffer shapefile. Click “OK”.

19. The Buffer shapefile will be added to the view.

