## Assignment 6

**Data**

For this assignment you will use 8 datasets from the Florida Geographic Data Library (FGDL) that you can access at **~\Shared\HomeAssignments\assign_data\assign5** and **~\Shared\HomeAssignments\assign_data\assign6**.

- *Municipalities*, file name: **municipalities**, file type: shapefile
- *Lakes and Open Water*, file name: **lakes**, file type: shapefile
- *County Boundary*, file name*:* **cntbnd01**, file type: shapefile
- *Points of Interest*, file name: **ptsint01**, file type: shapefile
- *Major Roads*, file name: **majrds01**, file type: shapefile
- *Conservation Areas A*, file name: **fnaica01**, file type: shapefile
- *Conservation Areas B*, file name: **fnaicb01**, file type: shapefile
- *Conservation Areas C*, file name: **fnaicc01**, file type: shapefile

- Whether in ArcMap or in ArcCatalog, make sure that you have set up connections to be able to look at the data from ArcGIS.
- View the description for each of these datasets in ArcCatalog to understand what they represent.
- Load the datasets listed above into a new ArcMap project. Zoom to all layers.
- Rename all layers with meaningful names.
- Re-order layers, set transparency levels, and change colors so all datasets can be seen.
- Add any Labels that might be useful.
- Select units of distance to meters (Display Units) in the **Data Frame**>**Properties**>**General**.
- Save the project. Don't' exit.

**Create Selection Layers**

This assignment will help you practice the selection skills and techniques.

1. Show all of the lakes and open water areas that have a surface area greater than or equal to 5,000 acres.

2. Show all of the Conservation A areas that intersect the Gainesville city limits. Find Gainesville city limits querying the municipalities shapefile.

3. Show all of the publicly-owned points of interest that are completely within the Gainesville city limits and lie within 0.1 miles of a major road.

You will save each of these 3 selected subsets as separate files. For this do the following:

- Create a new layer from the selected features.

  - For this, right click on the selected layer in the TOC, and in the context menu scroll down to Select>Create Layer from Selected Features

- Export the newly added layer as a new shape file (.shp).

  - For this, right click on the layer in the TOC, and in the context menu scroll down to Data>Export Data.

- In the Layout View, create a layout/map which presents the new selection. You may be interested in experimenting with the Change Layout button on the Layout toolbar.

Save each of the three selections and layouts as separate .mxd files. In the end, you should have three separate .mxd files to show each of the selections listed above. Be ready to present your layouts and convince the teacher that the correct selections were made, and also submit a pdf document with screenshots.

Home assignments always due a week later.