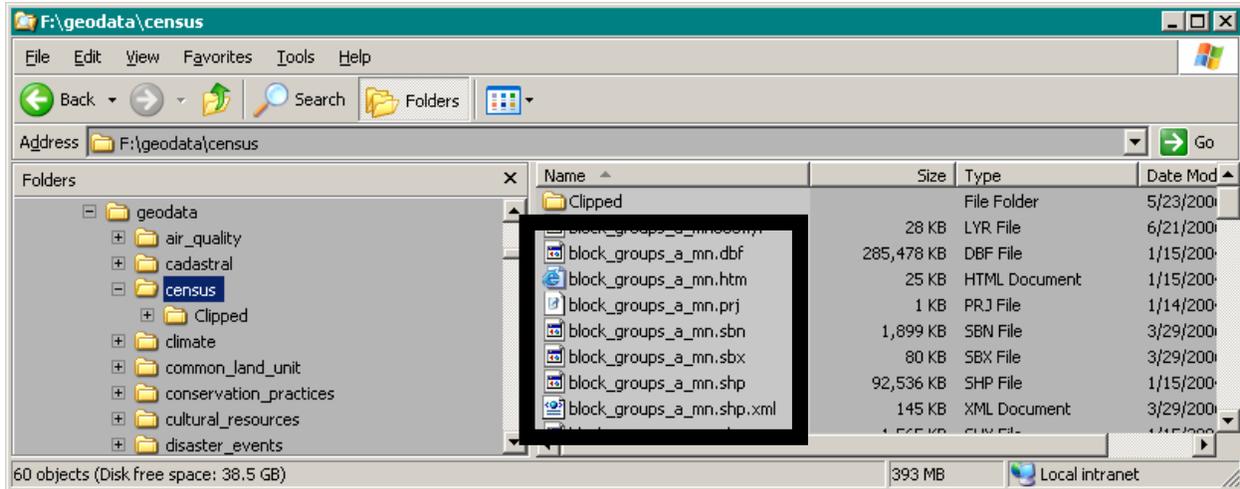


## Introduction – Using ArcCatalog

In this tutorial, you will be provided step-by-step instructions on how and where to set up a project folder – an important step to keeping very specific project info together in 1 spot. You will also be instructed on how to copy and move geodata from one folder to another.

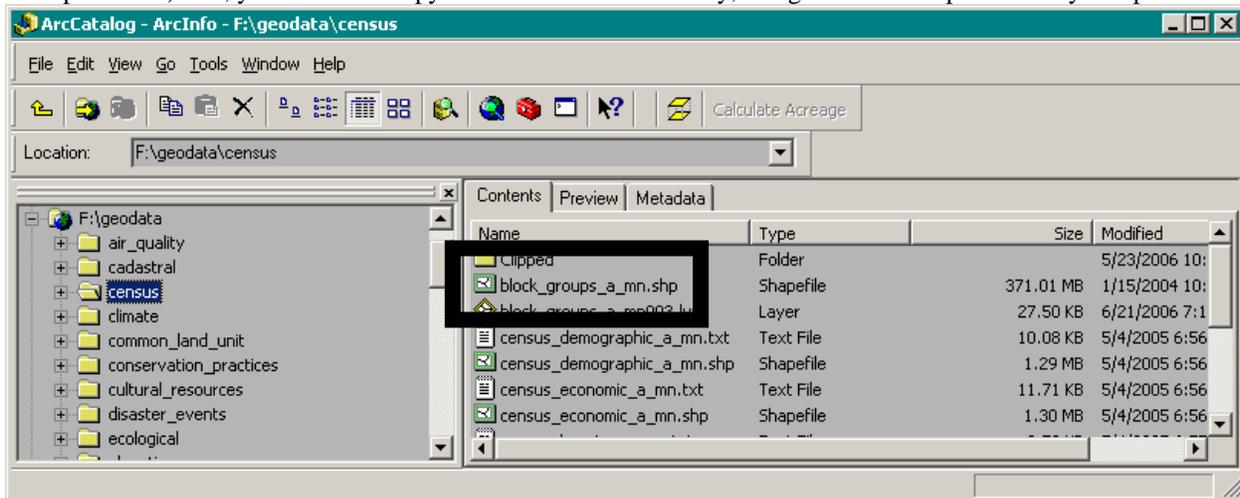
Most of you are familiar with Windows Explorer (diagram below). In the **left pane** you see a set of folders that you can click on. Then, what shows up in the **right pane** are all of the different files stored in that folder. This can include word files, spreadsheets, text files, etc.



ArcCatalog is very much like Windows Explorer in that it shows this same type of information. The difference is that it has some unique capabilities that are very specific to GIS.

For instance, in the picture above you see a number of individual files that are actually all part of a shapefile called “block\_groups\_a\_mn.” You will notice that there are 7 files showing the same name but with different extensions (3 letters to the right of the “.” (dot). If you were to copy or move the block\_groups shapefile, you would have to select all 7 files, otherwise the shapefile gets corrupted.

In ArcCatalog (below), you would only see 1 file and if you were copy or move that shapefile, ALL of the other parts of the shapefile automatically get moved along with it. Makes your job much easier!! The only files I’ve found (so far) that do not get included in the ArcCatalog move/copy are any metadata (.html) files or .lyr files (see example below). So, you’d have to copy or move them individually, using Windows Explorer or MyComputer.

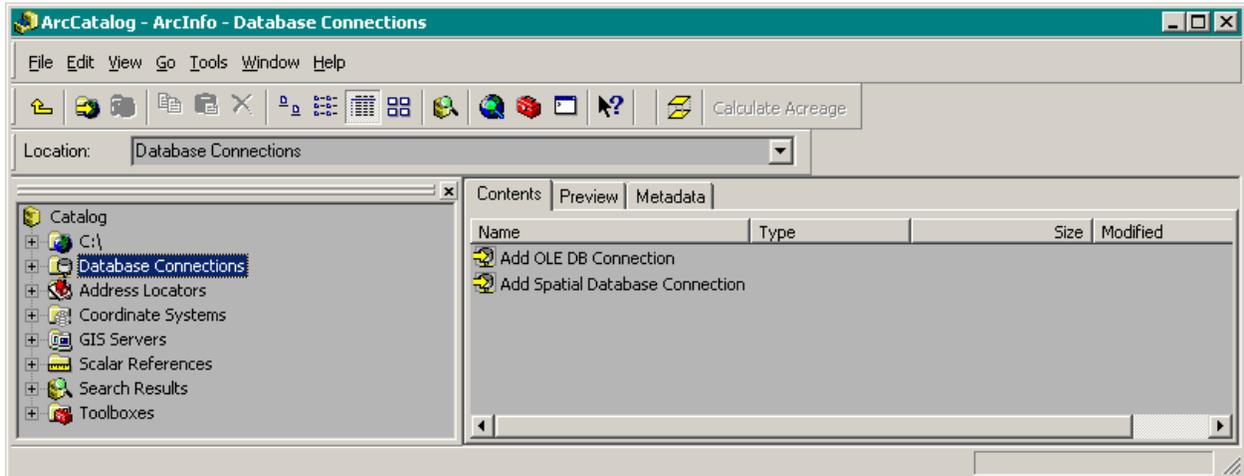


In ArcCatalog, the left pane is called the “**Catalog tree**” as it shows you all of the folders and files that you have access to.

Now that I’ve explained a little of what goes on “behind the scenes,” let’s take a look at how you get started using ArcCatalog. In order to access any datasets, you must first **connect** to the folders where that data is **stored**. Neither ArcCatalog nor ArcMap will show you any of the data (e.g., like what we looked at in the above pictures), without first being connected to that folder. In the example above, we were looking at files stored in the F:\geodata folder. But...we couldn’t have seen those files without first connecting to that folder. So, how do we do that?? The following steps will walk you through this process.

## Folder Connections in ArcCatalog

1. To open ArcCatalog, Click on **Start – All Programs – ArcGIS – ArcCatalog**. Below is what you'll see if you have NEVER used ArcCatalog. If you have used the software even a little, your results may look differently as you may have already connected to some folders.

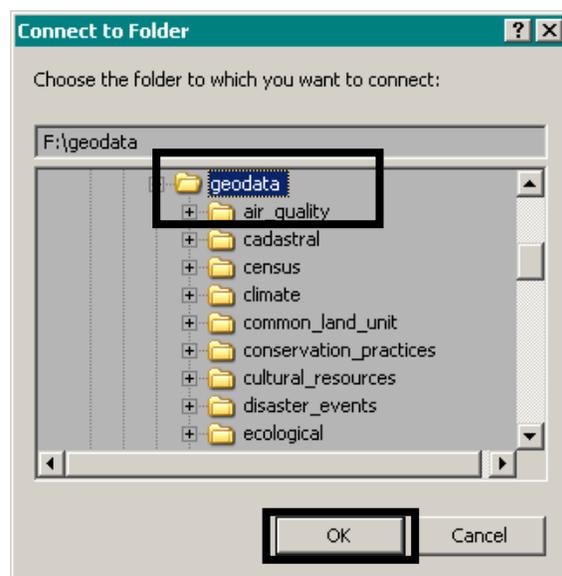
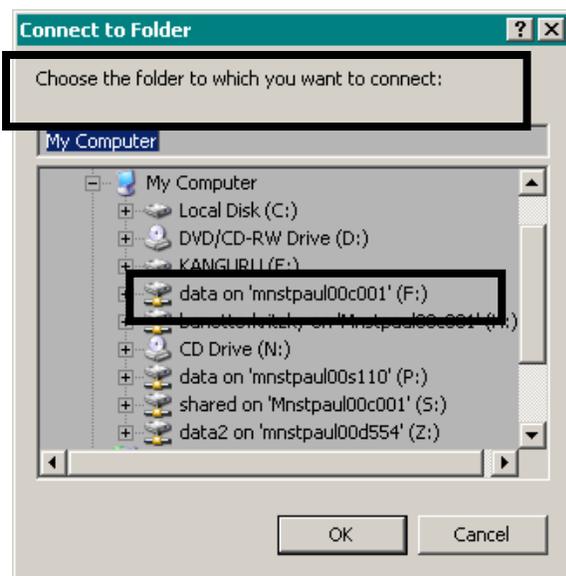


2. You will see that there are a number of Menus that look quite similar to Microsoft products – File, View, Tools, Window, Help.

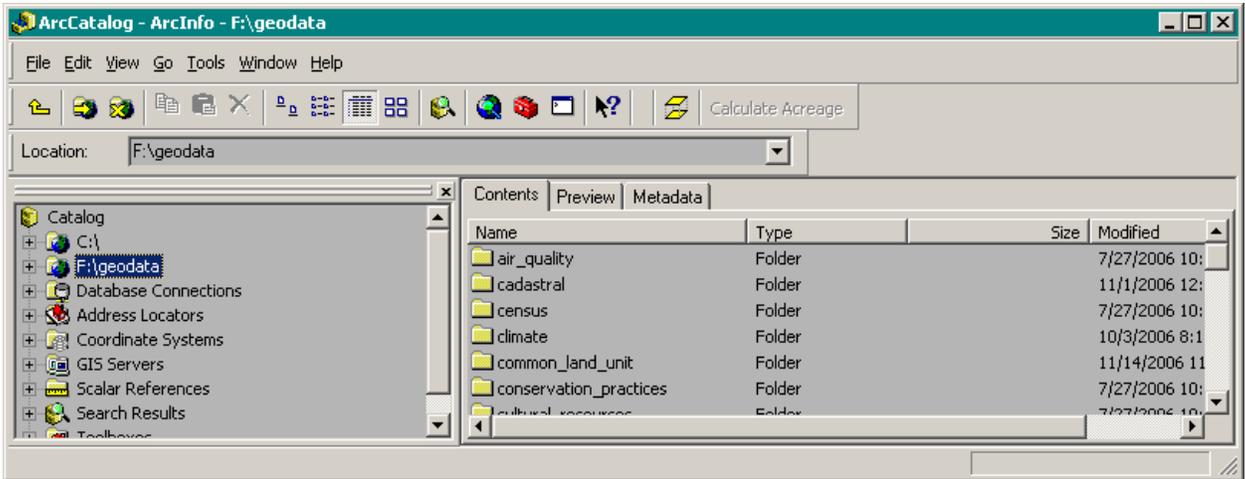
- a. Click on **File – Connect Folder**.

A new dialog box opens similar to below left.

- b. Double-click on “data on ‘mnstpaul00c001’ (F:)” (below left);
- c. then Double-click on **Geodata** (below right); then Click on OK.



- d. Your ArcCatalog interface should now look like the following picture. Notice how the **F:\geodata** folder has been added to the Catalog Tree. You can now see any folders and datasets that exist in either your C drive or the F:\geodata folder.



You have now connected your first folder, and you can see all of the subfolder choices in the left.

- e. You could continue to connect to any folders you want to...but they must be only those folders where our MN guidelines state we can store GIS information. Primarily, that is only on the following:
- i. C drive
  - ii. f:\projects
  - iii. f:\geodata
  - iv. **ABSOLUTELY NO GIS DATA SHOULD EVER RESIDE ON EITHER YOUR "H" DRIVE NOR THE "S" DRIVES.**

Also recognize that these connections do not always stay connected. For various reasons (computer crashes, network problems), your connections may get severed and you will then have to go back and restore your connections. Refer back to the previous steps if you need assistance to restore your folder connections.

**Note:** To disconnect a folder (main folders only), click on a folder to highlight. Then just click on the menu **File – Disconnect Folder** OR **right-click** the folder and click on **Disconnect**.

## Storing Project-Related Data

Now you might be wondering where to store any newly created GIS data that relates to specific projects you are working on. There are actually 2 places you can store this data, but try to be consistent on which place you use. It's confusing to keep bouncing back and forth between folders trying to remember where you stored your project.

The following 2 locations are where you can store GIS-related projects:

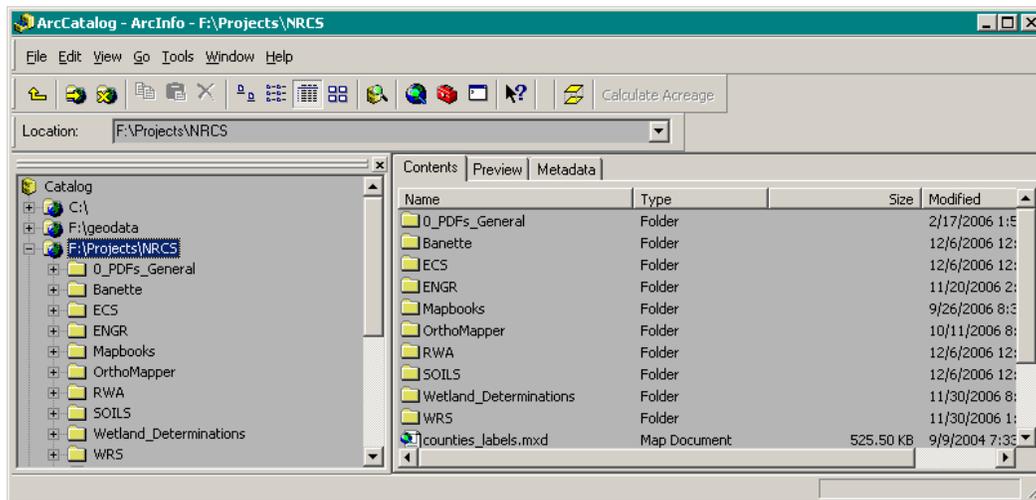
- f:\ projects \ nrCS \ <groupname> \ <project name> folder; and/or
- f: \ geodata \ project\_data \ nrCS \ <groupname> \ <project name> folder OR
- c:\ home \ projects folder

where the <groupname> is the group you belong to (e.g., soils, ecs, engr, wrs, etc.)

You should think about the following when determining where you want to store your data:

1. The 1<sup>st</sup> choice above is a new folder we created. **Pro:** It's easier to use, you don't have so many clicks to get down to your project. **Con:** Anyone can see and have access to your data. There are no permissions restriction to this folder. We've not, however, had any problems with anyone accessing anything they shouldn't be, nor deleting or corrupting any fields.
2. The 2<sup>nd</sup> choice above is part of the original geodata folder structure. **Pro:** It does have permissions tied to the folder so the only folks that can access, or even see, this data are NRCS employees. **Con:** You have to drill down another layer, AND your project (.mxd) file may actually be stored BELOW the folders where the datasets are coming from. This use to be a major concern in previous versions of GIS software; doesn't seem to be quite the issue any longer. But most folks are choosing the first option as it is just easier to use.

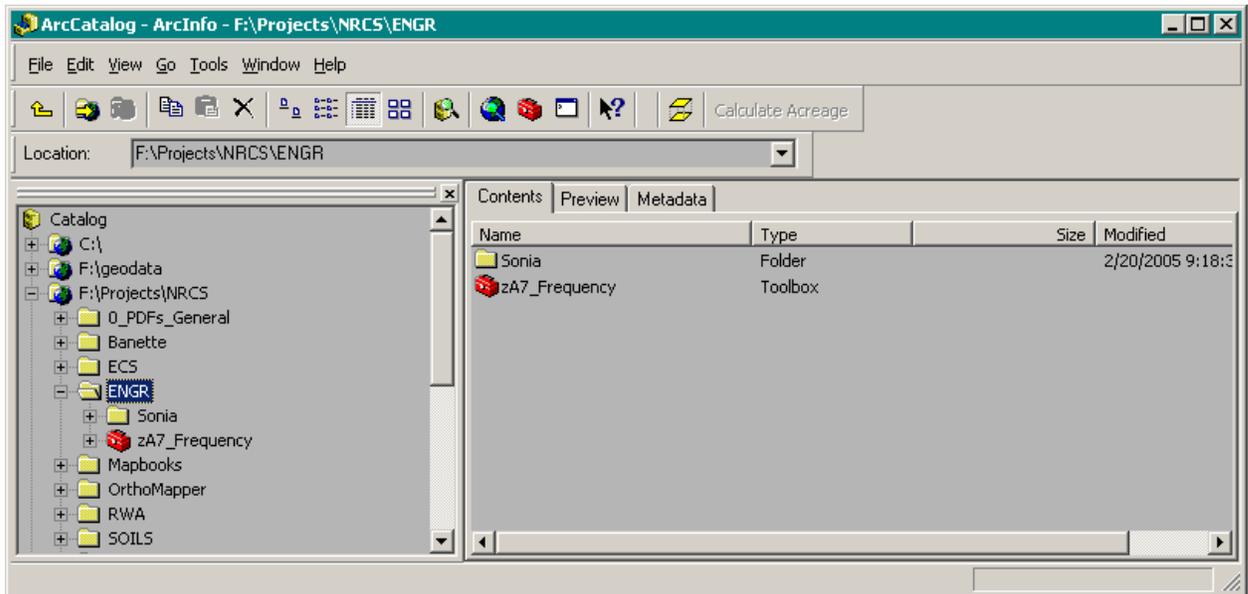
To use and save any folders or data to the **F:\ Projects \ NRCS** folder, you will have to, first, connect through ArcCatalog. Recall - click on **File – Connect Folder**, and then navigate to correct folder:



You can see on our F:\ drive there is already an ENGR folder created. So, for now, you could just create new project subfolders under the ENGR folder. How to do that is explained in the next section.

## Create Project Folders

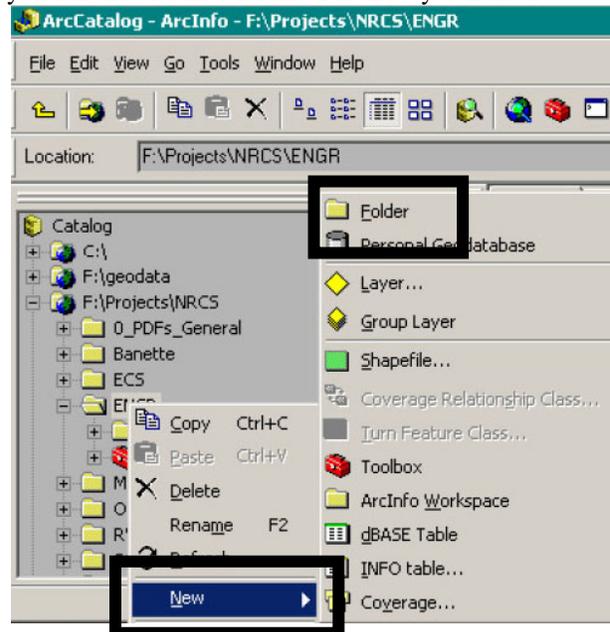
1. In ArcCatalog, Click on the **ENGR** folder mentioned above. You can see that Sonia already has created a folder for herself. There's also an ArcGIS Toolbox – ignore that for now.



As in so many software packages, there is more than 1 way you can create a new folder. I'll show you 2 methods:

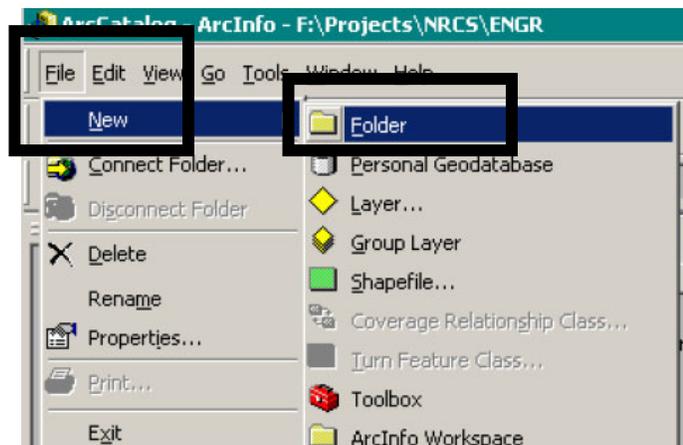
- First, you can Right-Click on the ENGR folder and click on **NEW – Folder**

OR....

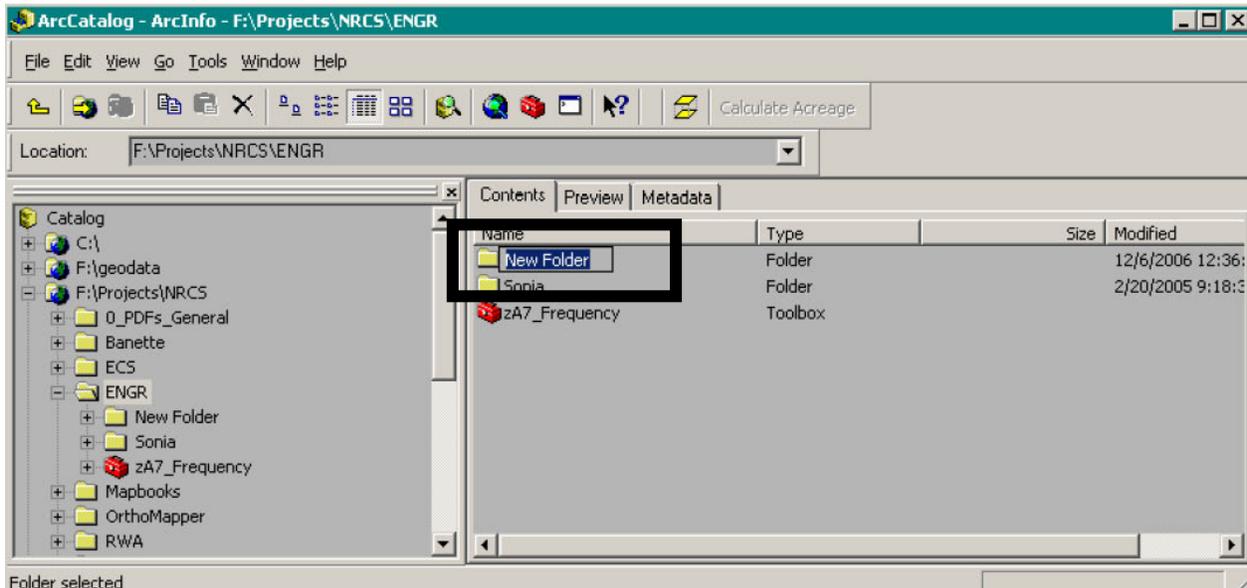


- Second, you can click on the Menu **File – New Folder**.

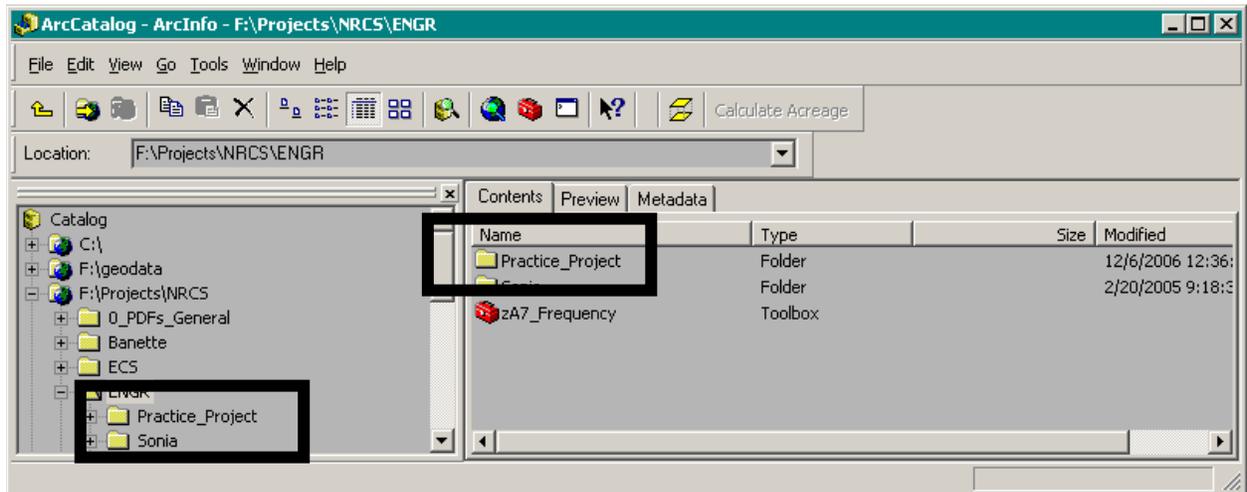
Either way works just fine, so you can choose whichever you like. Most folks are getting quite used to the Right-click methodology, so you might want to try that one.



2. Once you've completed whichever method you used above, a new folder is added in the Right pane (see below) and you can then click on it to give it a new name (or right-click on it and select "Rename" and type in the new name.)



I'm naming this project folder "**Practice Project**" to easily identify it from any other project folders that may be created while I'm creating this tutorial. Click Return when done typing in the name. You can now see the new folder in both the right and left panes below.



That's pretty much it. As you will see with practice, creating folders in ArcCatalog very much resembles how you'd create folders in Windows Explorer; you just have to make sure you've established that initial "connection" so you can see the directory you want to use.

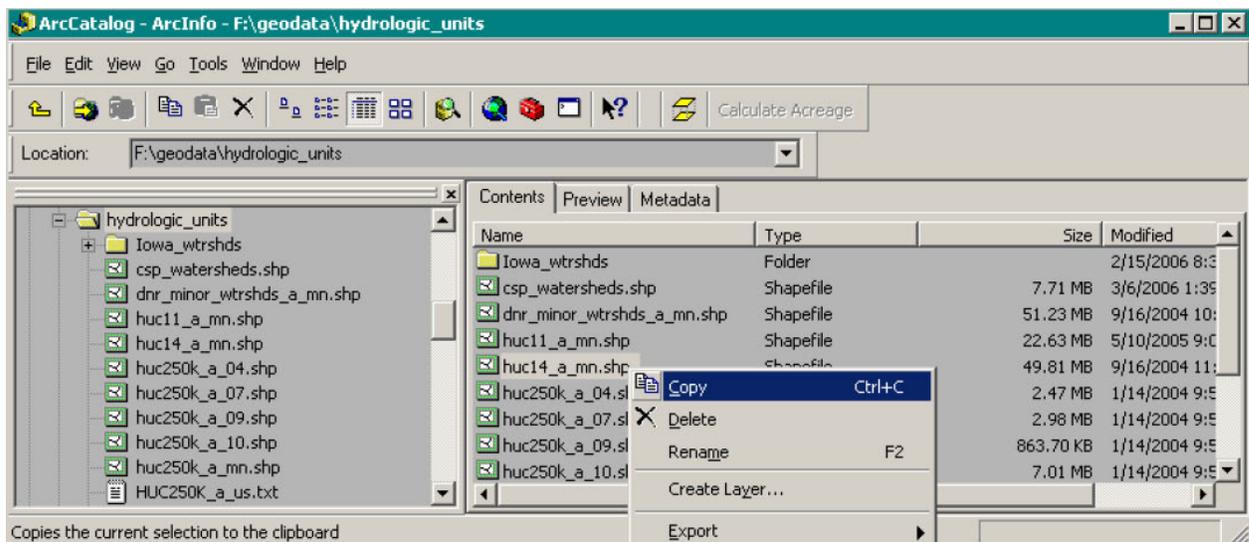
So, now you want to copy some datasets into the new project folder. The next section will guide you through that process (get ready for using more right-clicks using your mouse!).

## Copying Files to a Project Folder

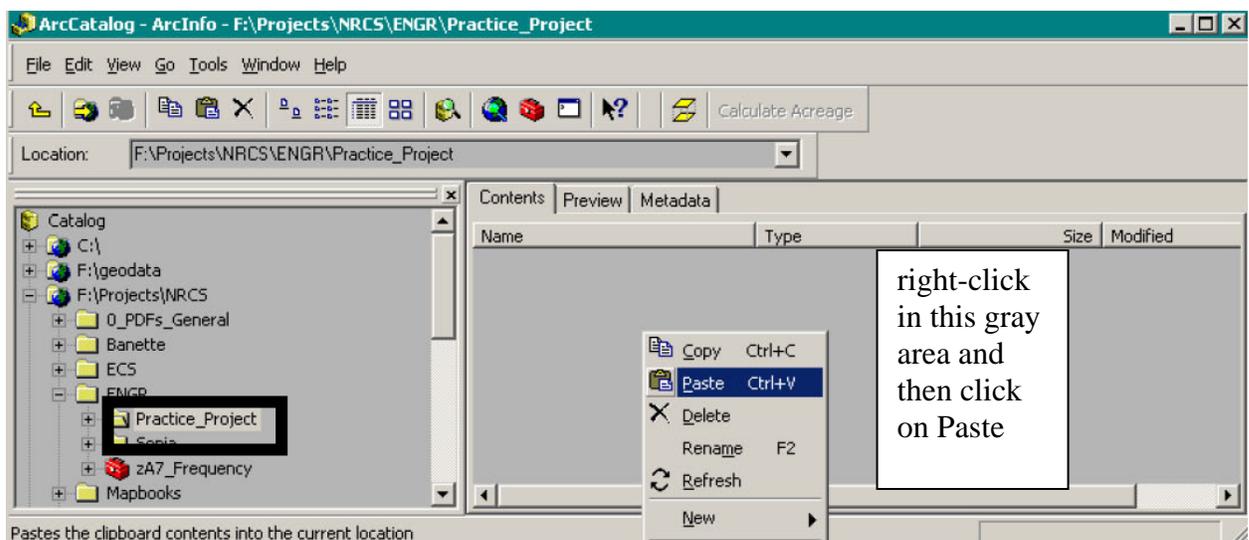
There are a couple of items you should keep in mind when working with any datasets from the “f:\geodata” folders. First, you **cannot** edit those files. You do **not** have “write” permissions to the “f:\geodata” folders and will receive error messages if you try to do so. Second, because of the aforementioned write restrictions, you also cannot place any new data that you create into the f:\geodata” folders; instead you must store them in your project folder. But, you can however, COPY data FROM the “f:\geodata” folders TO your Project folder.

For our example, you will be copying the **huc14\_a\_mn.shp** from the f:\geodata\hydrologic\_units folder to your Project folder.

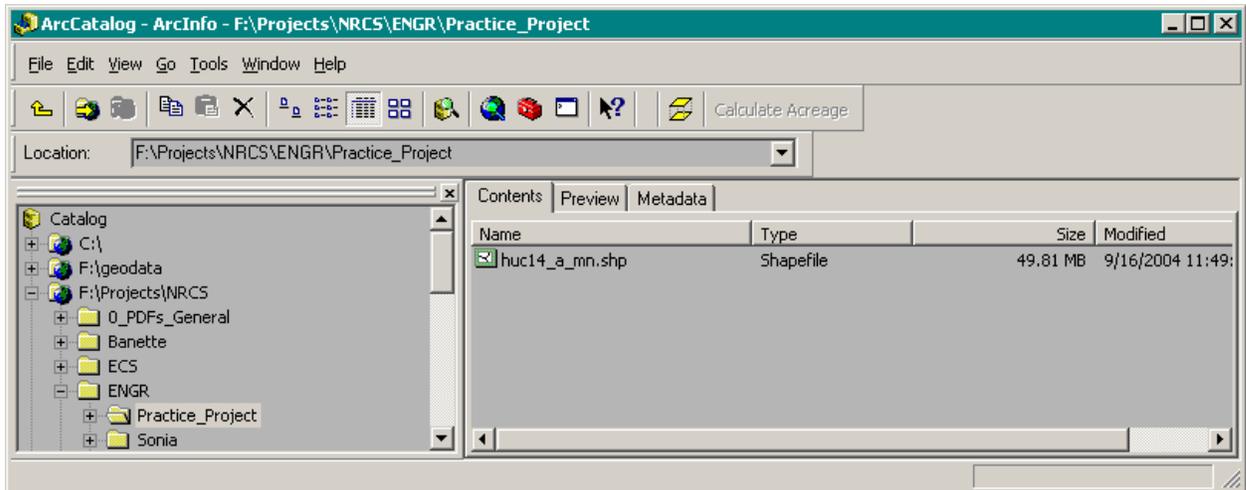
1. First, you need to connect to the “f:\ geodata” folder. So walk through again those steps provided on pages 2 and 3. Once the connection is made,
2. Navigate to the f:\geodata\hydrologic\_units folder (see below, left pane). If you click on the folder (left pane), all of the files within it are shown in the right pane.
3. In the right pane, Right-Click on “**huc14\_a\_mn.shp**” – **Copy**. This places a copy in the Clipboard (just like any other Microsoft product).



4. Next, using the left pane, navigate back to the “**Practice\_Project**” folder you created previously. (Be careful to not accidentally click anywhere – this will lose your copy connection, and you’ll have to redo).
5. Once you are back in your “Practice\_Project” folder, in the empty right pane, just **right-click inside** the pane, and select **Paste**.



6. Your end result should look like the following, showing a copy of the huc14 shapefile:



If it doesn't look like the above, then go back and retry the above steps again. *(Please note that you could have also selected from the menu File – Copy, to copy the dataset; and then File – Paste, to paste the dataset into the appropriate folder.)*

7. This exact same process works if you want to **MOVE** a dataset from one location to another.

- a. I have found that it is, generally, safer to copy to a new location and once that is done, go back and delete the original source.
  - i. What sometimes happens is that in the middle of a MOVE process, the computer or network glitches and your dataset has flown the coop and ends up in neither location!!
  - ii. Just remember to make sure that you go back and delete the original dataset so it does not exist in 2 locations.