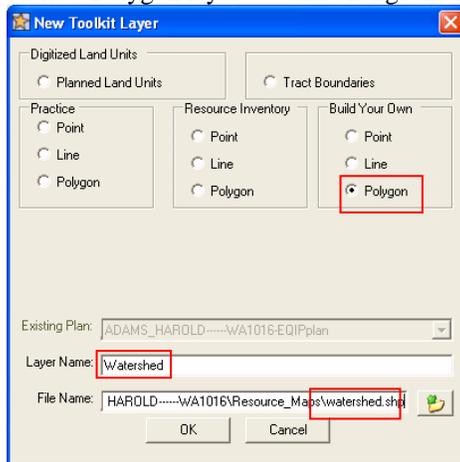




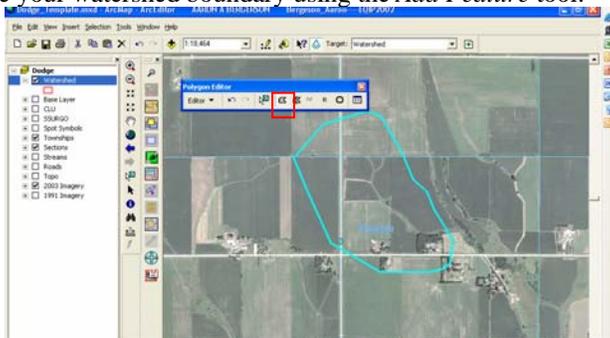
Determining Hydrologic Groups Acreage By Land Use for Small Watershed

Creating Watershed Layer

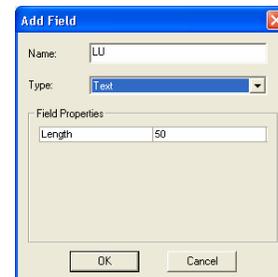
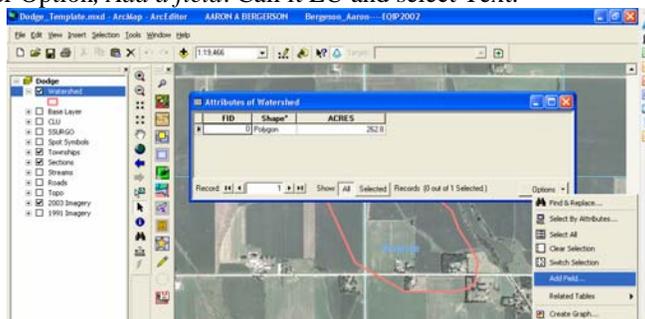
- Open the ToolkitGIS_Template in the Customer folder.
- Load a Consplan  if present. *A Consplan is not necessary for this operation.*
- Create a new Polygon layer  and change the *Layer Name AND File Name* to watershed.



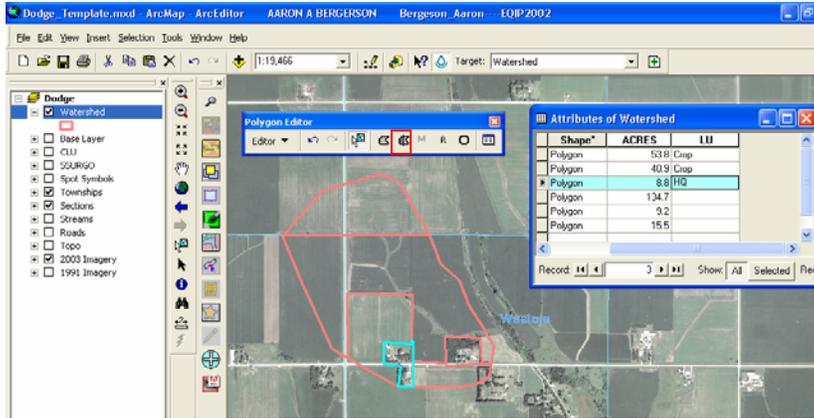
- Define your watershed boundary using the *Add Feature* tool.



- When you have finished defining your watershed, Stop editing and save your edits.
- If you have more than one land use type, right click on the layer and *Open Attribute Table*
- Under Option, *Add a field*. Call it LU and select Text.



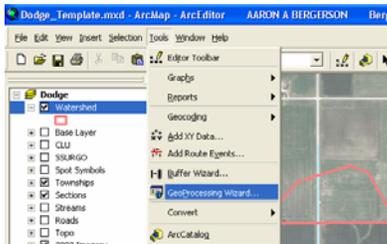
- Start Editing Watershed again 
- Use the Split Field to Split the Watershed by Land Use type
- Save Edits (don't Stop Editing just yet)
- Open the *Attribute table* of Watershed and Type the Land Use type for each line



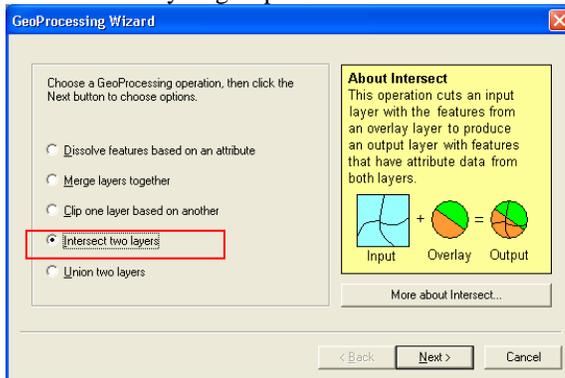
- Add the Hydrogroup Layer to your project using  located in F:\geodata\sols\soil_mnXXX\HydroGrp_mn000.lyr

INTERSECTING Watershed and Hydrogroup

- Select Tools from the menu bar and *select Geoprocessing Wizard*.

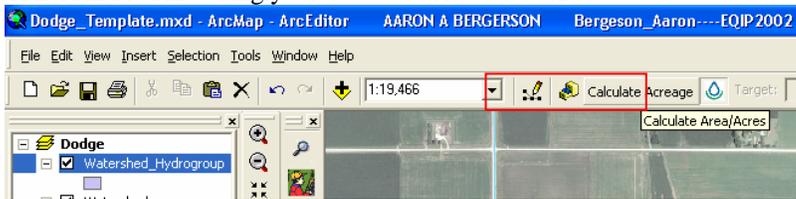


- Select **INTERSECT** with the Hydrogroup layer first then the watershed boundary.
- Browse to save the Hydrogroup for watershed in the Customer *Resource_Maps* folder.



- Click Finish to process. Your watershed_hydrogroup will be added to your project.

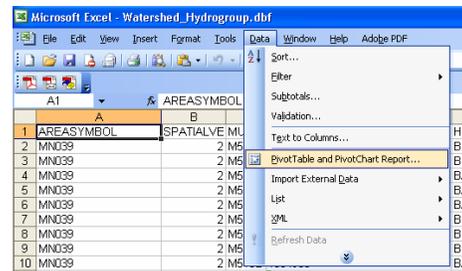
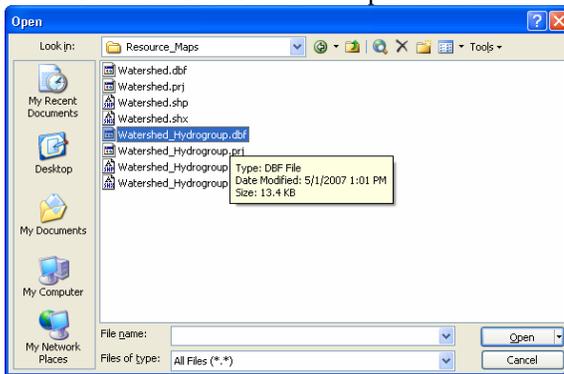
- UPDATE THE ACRES using your *Calculate Acres* button



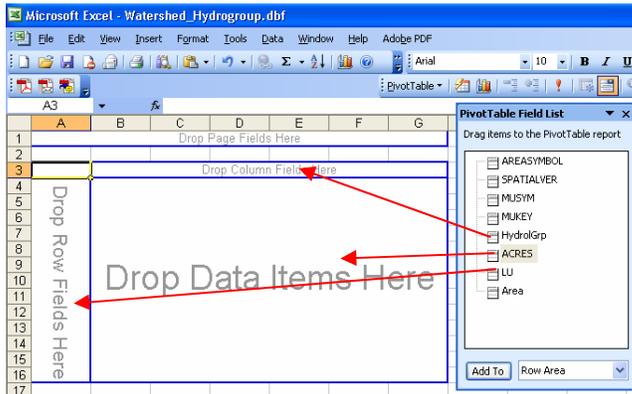
Summarizing your data

The best way to summarize is to open your new shapefile table in Excel and summarize it there.

- Open Excel and Browse for your resource maps folder
- Select *File type* 'All files' and open the **watershed_hydrogroup.dbf**
- Under Data Select *Pivot Table* and accept defaults



- When the empty table opens Drag Hydrogroup to the top, LU to the left Side and Acres in the middle.



The screenshot shows the completed PivotTable in Excel. The PivotTable is summarized by Land Use (LU) for each Hydrogroup. The data is as follows:

HydroGrp	LU	ACRES	Grand Total
B	Crop	76.19	94.68
	HQ	13.63	17.94
	Pasture	83.37	134.73
B/D	Small grain	15.46	15.46
	Grand Total	188.66	262.81

- Your summary table of Hydrogroup by Land Use is finished!

Adding Summary Table to layout

- You can highlight the table and [copy the summary table](#), create your Map Layout and then paste the summary table in the Layout.
- Save your work to an Excel spreadsheet. **DO NOT overwrite** the watershed_hydrogroup.dbf

