Attaching domain values to the exported LCLU shapefile

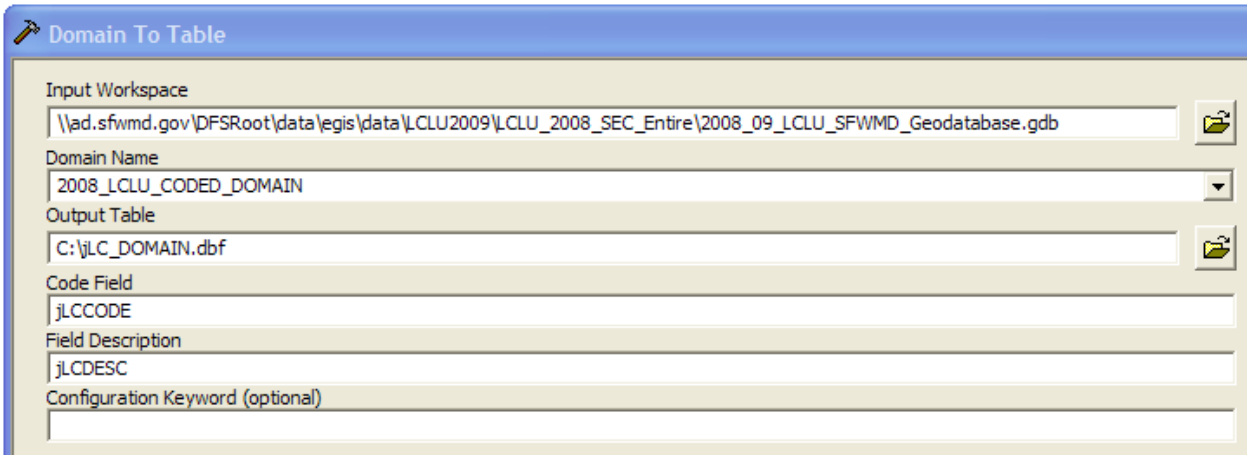
Overview

The purpose of this process described in this document is to attach the coded values and the associated text description from "2008_LCLU_CODED_DOMAIN" to the exported 2008 LCLU Shapefile from a Geodatabase. Domains are created in ArcCatalog and can be either coded values or ranges. Since they are a property of the geodatabase, domains can be shared by fields in multiple tables. This is one of the unique features in 2009 Land Cover Land Use Mapping Project in which 2008_09_ LCLU featureclass utilizes Workspace domains for the majority of the table columns.

From the application aspect, the most interesting information from the LCLU dataset is the land use and land cover classifications that are stored in the two table fields - LCCODE and LUCODE. This information provides essential input parameters for hydrological/watershed modeling, and/or water supply assessment studies. However, since Workspace Domains cannot be transferred to a shapefile, an additional geoprocessing operation needs to be performed in order to preserve the coded descriptions of Domain - "2008_LCLU_CODED_DOMAIN" outside the Geodatabase environment. Thus, 2008_LCLU_CODED_DOMAIN domain is required to export to an individual system table (.dbf) while the LCLU featureclass is converted to the format of Shapefile for other traditional modeling applications. The steps to preserve domain descriptions are described as follows:

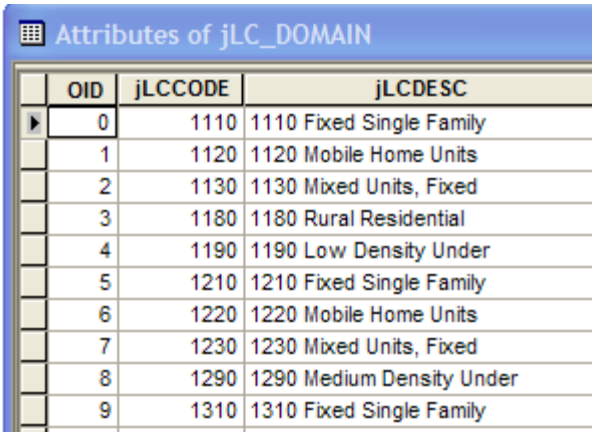
Methods

1. Use ArcCatalog and double-click on "Domain To Table" tool
2. Input *Workspace Name* or use the mini-browser
3. Select *Domain Name*, which is 2008_LCLU_CODED_DOMAIN for export
4. Select a location where the output DBF table will be and specify the table name (i.e. C:\jLC_DOMAIN.dbf)
   (The default location is the geodatabase where the LCLU featurecass is; you need to change to another place and add .dbf to the file name at the end)
5. Specify *Code Field* as jLCCODE (variable; will be generated in the output dbf)
6. Specify *Field Description* as jLCDESC (variable; will be generated in the output dbf)



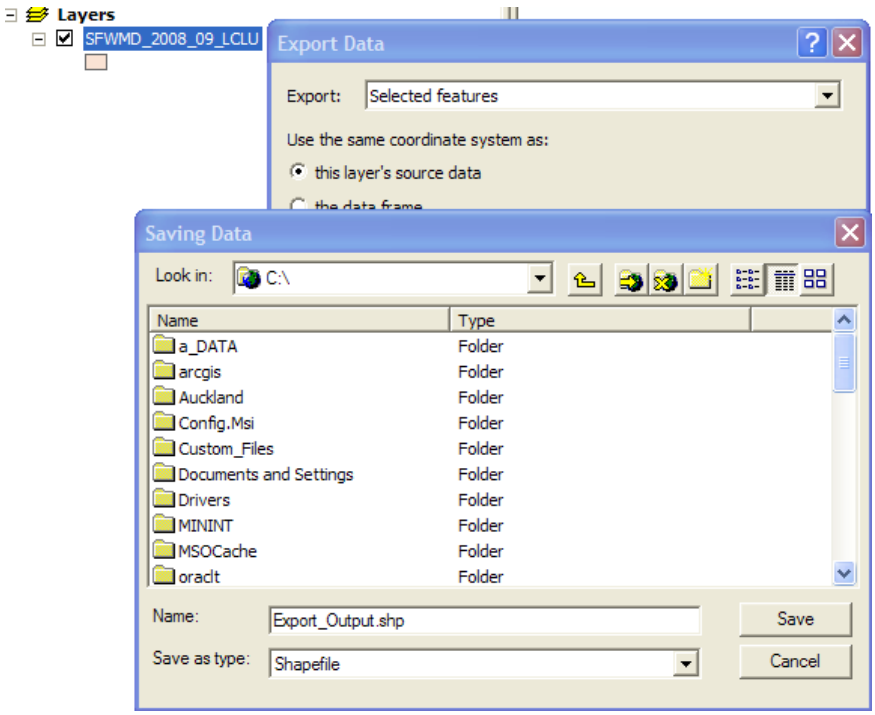
7. Press OK and the table will be automatically loaded into ArcMAP TOC (Source tab)

8. In ArcMap, right-click and open the DBF file (i.e. C:\jLC_DOMAIN.dbf), the attribute table of which should look like this screen shot

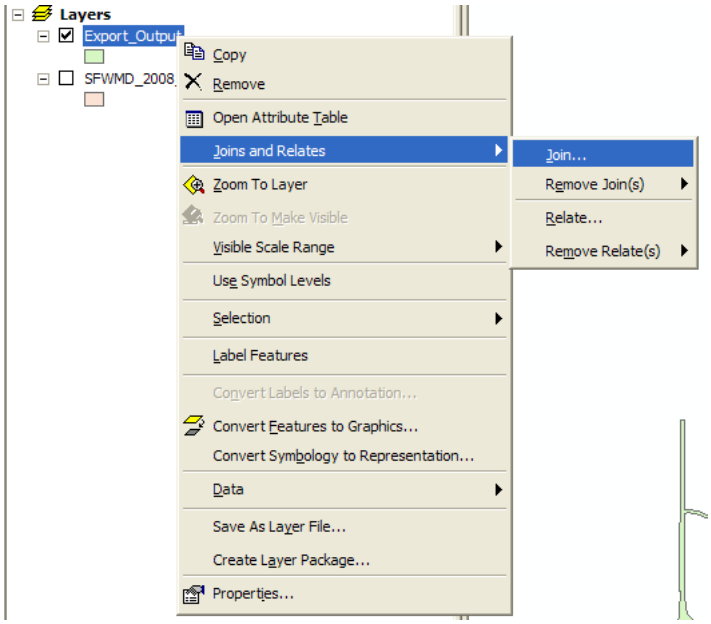


OID	jLCCODE	jLCDESC
0	1110	1110 Fixed Single Family
1	1120	1120 Mobile Home Units
2	1130	1130 Mixed Units, Fixed
3	1180	1180 Rural Residential
4	1190	1190 Low Density Under
5	1210	1210 Fixed Single Family
6	1220	1220 Mobile Home Units
7	1230	1230 Mixed Units, Fixed
8	1290	1290 Medium Density Under
9	1310	1310 Fixed Single Family

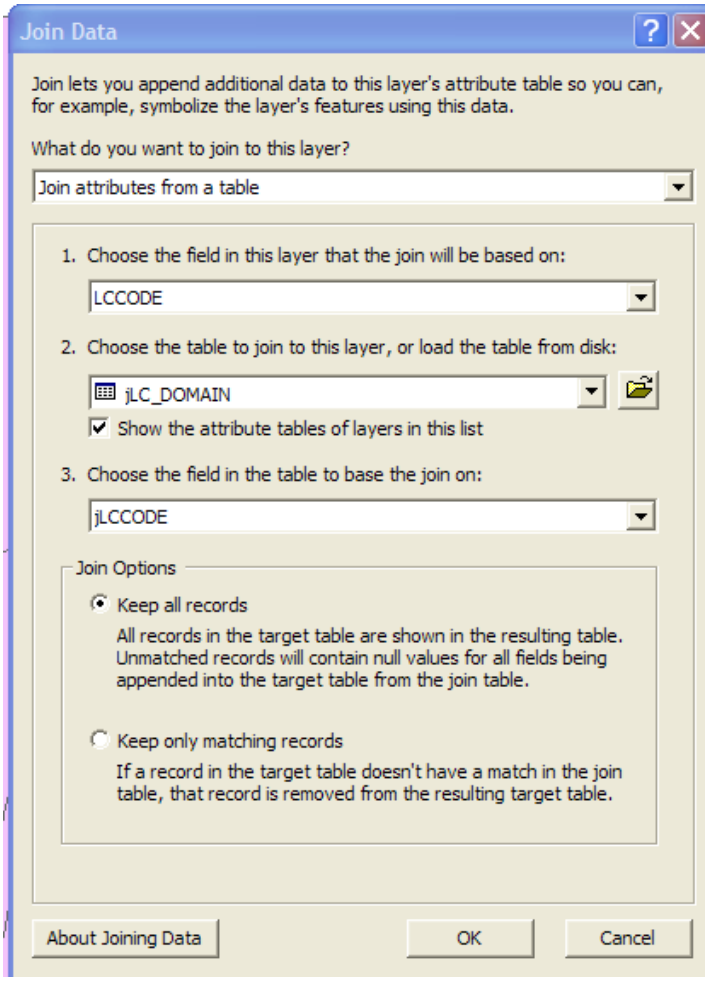
9. Export LCLU for the selected features or the entire feature



10. ArcMap automatically loads the exported shapefile into TOC
11. Right-click on the shapefile and perform "*Join*"



12. Choose the field LCCODE in the shapefile (Step 1)
13. Choose the table jLC_DOMAIN (c:\jLC_DOMAIN.dbf) in Dropdown menu (Step 2)
14. Choose the field jLCCODE from Attribute table (Step 3)
15. Join Options – Keep all records

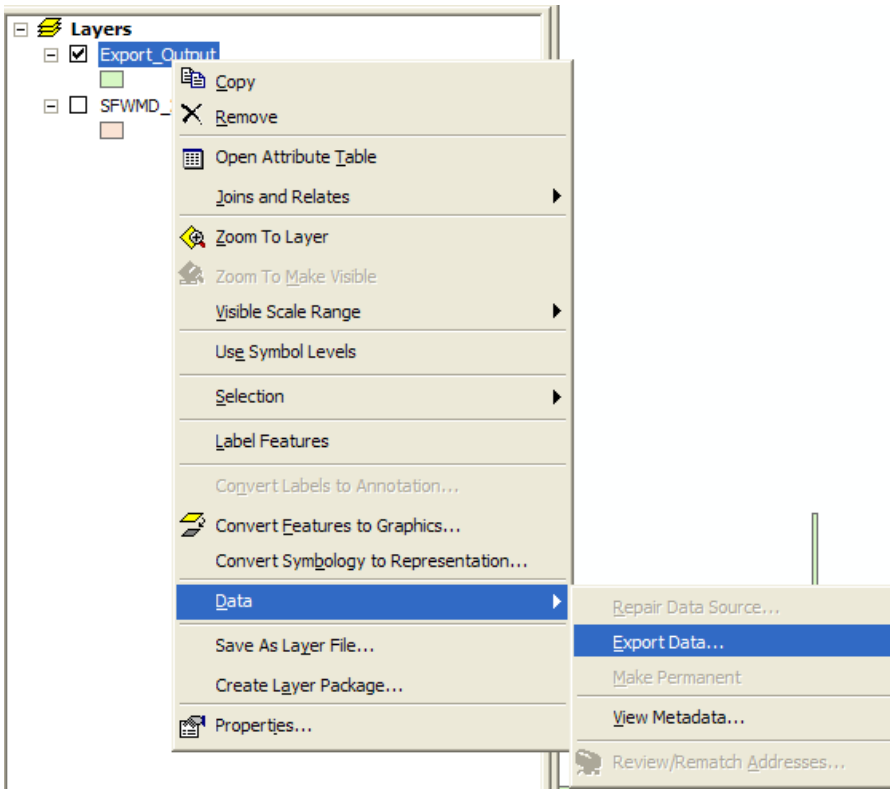


16. The joined attribute table of the shapefile should look like this screenshot as shown below. Since "Join" occurs only in PC memory, it needs to be exported out to a shapfile to make joined data permanent. (Notice that there is an asterisk marked on jLCCODE*

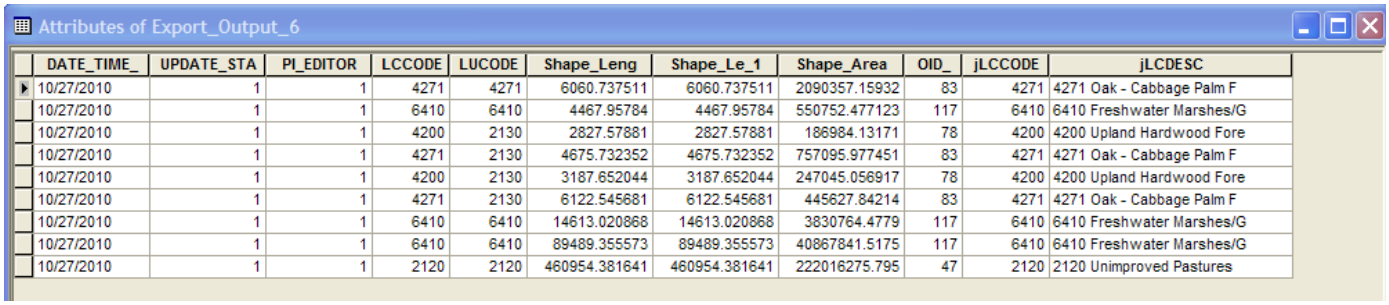
Attributes of Export_Output_5

LUCODE	Shape_Leng	Shape_Le_1	Shape_Area	OID	jLCCODE *	jLCDESC
4271	6060.737511	6060.737511	2090357.15932	83	4271	4271 Oak - Cabbage Palm F
6410	4467.95784	4467.95784	550752.477123	117	6410	6410 Freshwater Marshes/G
2130	2827.57881	2827.57881	186984.13171	78	4200	4200 Upland Hardwood Fore
2130	4675.732352	4675.732352	757095.977451	83	4271	4271 Oak - Cabbage Palm F
2130	3187.652044	3187.652044	247045.056917	78	4200	4200 Upland Hardwood Fore
2130	6122.545681	6122.545681	445627.84214	83	4271	4271 Oak - Cabbage Palm F
6410	14613.020868	14613.020868	3830764.4779	117	6410	6410 Freshwater Marshes/G
6410	89489.355573	89489.355573	40867841.5175	117	6410	6410 Freshwater Marshes/G
2120	460954.381641	460954.381641	222016275.795	47	2120	2120 Unimproved Pastures

17. Export this shapefile to a new shapefile



18. The joined fields become permanent in a new shapefile (notice that the asterisk disappeared)



Attributes of Export_Output_6

DATE_TIME_	UPDATE_STA	PI_EDITOR	LCCODE	LUCODE	Shape_Leng	Shape_Le_1	Shape_Area	OID_	jLCCODE	jLCDESC
10/27/2010	1	1	4271	4271	6060.737511	6060.737511	2090357.15932	83	4271	4271 Oak - Cabbage Palm F
10/27/2010	1	1	6410	6410	4467.95784	4467.95784	550752.477123	117	6410	6410 Freshwater Marshes/G
10/27/2010	1	1	4200	2130	2827.57881	2827.57881	186984.13171	78	4200	4200 Upland Hardwood Fore
10/27/2010	1	1	4271	2130	4675.732352	4675.732352	757095.977451	83	4271	4271 Oak - Cabbage Palm F
10/27/2010	1	1	4200	2130	3187.652044	3187.652044	247045.056917	78	4200	4200 Upland Hardwood Fore
10/27/2010	1	1	4271	2130	6122.545681	6122.545681	445627.84214	83	4271	4271 Oak - Cabbage Palm F
10/27/2010	1	1	6410	6410	14613.020868	14613.020868	3830764.4779	117	6410	6410 Freshwater Marshes/G
10/27/2010	1	1	6410	6410	89489.355573	89489.355573	40867841.5175	117	6410	6410 Freshwater Marshes/G
10/27/2010	1	1	2120	2120	460954.381641	460954.381641	222016275.795	47	2120	2120 Unimproved Pastures