

Making a Map in ArcGIS using data from PDS Studio Case Recordation

Create Export Files.

- Go to <http://www.pdsstudio.com> with your Internet browser.
- Login.



PDS Studio Login

User Name: Password:

- Select BLM Case Recordation.

Home	Your Account	All Data Outputs	Report Prices	Support	Premier Data	Help
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Welcome back, you are currently logged in as chase.

[Log Off PDS Studio](#)

PDS Studio Applications

Name	Description
BLM Case Recordation	This database contains federal use case authorizations for the United States.
BLM Land Status	This database contains federal land status information for the United States.
BLM Mining Claims	This database contains federal mining claim information for the western United States.
Lot & Tract Lookup	This database contains aliquot equivalent for lot and tract locations for the western United States.
Map Server	Simplified access to land data through maps
State & BLM Lease Sales	This database contains federal and state Oil and Gas lease sale information for Wyoming, Colorado, Montana, New Mexico, and Utah.
Well Data	This database contains federal and state well information.

- Select Wyoming Case Recordation.

Home	Your Account	All Data Outputs	Report Prices	Support	Premier Data	Help
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BLM Case Recordation

Select Database			
Name	Description	Updated Thru	Subscription
Arizona Case Recordation	Case Recordation	Aug-15-2003	Valid thru Jan-01-2005
California Case Recordation	Case Recordation	Aug-15-2003	Valid thru Jan-01-2005
Colorado Case Recordation	Case Recordation	Aug-15-2003	Valid thru Jan-01-2005
Eastern States Case Recordation	Case Recordation	Aug-15-2003	Valid thru Jan-01-2005
Free Sample Database	Case Recordation Sample Data (Wyoming)	Apr-04-2001	Valid thru Jan-01-2005
Idaho Case Recordation	Case Recordation	Aug-15-2003	Valid thru Jan-01-2005
Montana Case Recordation	Case Recordation	Aug-15-2003	Valid thru Jan-01-2005
Nevada Case Recordation	Case Recordation	Aug-15-2003	Valid thru Jan-01-2005
New Mexico Case Recordation	Case Recordation	Aug-15-2003	Valid thru Jan-01-2005
Oregon Washington Case Recordation	Case Recordation	Aug-15-2003	Valid thru Jan-01-2005
Utah Case Recordation	Case Recordation	Aug-15-2003	Valid thru Jan-01-2005
Wyoming Case Recordation	Case Recordation	Aug-15-2003	Valid thru Jan-01-2005

- Under Available Criteria select Location and enter your desired township and ranges. Use the <tab> key to move between entry fields.

Location - Federal Township & Range			
Meridian (optional)	No Land Desc		
	Township		Range
Min Value:	28	N	107 W
Max Value:	29	N	109 W
Section:			
<input type="checkbox"/> Exclusive			
Apply		Clear	

- Click Apply.
- Under Available Criteria, select Disposition and move Authorized and Pending to the right by clicking the single right arrow. Use the <CTRL> key to select multiple selections from the list. Use the <SHIFT> key to select multiple continuous selections from list.

Disposition	
Available	Selected
Cancelled	Authorized
Closed	Pending
Expired	
Rejected	
Relinquished	
Void	
Withdrawn	
<input type="button" value=">"/> <input type="button" value=">>"/> <input type="button" value="<"/> <input type="button" value="<<"/>	
Apply	

- Click Apply.
- Under Outputs, Reports select Case Type Frequency.
- Put in a Title if desired.

Title/Description	
Case Type Frequency	Continue
Output report in <input checked="" type="radio"/> PDF Format <input type="radio"/> CSV Format	
<input checked="" type="checkbox"/> Include Selection	

- Click Continue.
- Under Completed Outputs, Description, click on the bold underlined report title to view report in Acrobat Reader.

Completed Outputs - Click on Description to View										
Application	Data Source	Description	File Name	Date Created	Status	Time to Process	Delete Date	Type		
BLM Case Recordation	Wyoming Case Recordation	Case Type Frequency	chase_41301	Sep-03-2003	Completed	0.0.2	Oct-03-2003	Reports	View Receipt	Delete

Determine what layers to map.

Case Type Frequency

Sep-03-2003

Case Type	Description	Total
262400	State gt sch sec patents	2
281001	Row-roads	136
281007	Row-roads federal fac	4
282103	Fed aid highway(sec 317)	3
285001	Row-pwr facilities	1
285003	Row-power tran-flpma	3
286001	Row-comm site, flpma	1
286203	Row-tel & teleg,flpma	1
287001	Row-water facility	20
288001	Row-pipeline-other	1
288100	Row-o&g pipelines	490
288101	Row-o&g facility sites	5
288104	Row-salt wtr disp-flpma	1
289001	Row-other-flpma	15
311121	O&g lse noncomp pd -1987	30
311211	O&g lse simo public land	16
312021	O&g lse comp pd -1987	62
315100	O&g geophys expl-excp ak	2
318210	O&g exploratory unit	5
318230	O&g participating area	7
318310	O&g communitization agrmt	2
361113	Min mat negotiated -all	1
Total:		808

- Click the back button on the main toolbar to return to Completed Outputs.
- Click on BLM Case Recordation Home to return to Case Recordation Criteria selection options.
- Under Application Queries use the drop down menu to select Active Oil and Gas Leases. Click the Recall button.

Current Database: Wyoming Case Recordation		Updated: Aug-15-2003
Available Criteria	Criteria Selected	Outputs
County Location Case Type Owner Type Disposition Owner Name Serial Number Commodity Action Type Action Date Expiration Date	Case Type 310112 - O&G Private Le 310781 - O&G Renewal L 310911 - O&G Lse Speci 311100 - O&G Lse Regu 311111 - O&G Lse Nonci 311112 - O&G Lse Nonci 311115 - O&G Lse Sp Ac 311116 - O&G Lse Sp Ac 311120 - O&G Lse Texae 311121 - O&G Lse Nonci 311122 - O&G Lse Nonci 311131 - O&G Lse Future 311132 - O&G Lse Fut In 311212 - O&G Lse Simo 312011 - O&G Lse Comp 312012 - O&G Lse Comp	Exports Basic - (5000) Owner Mail Merge Text File - (10000) Ownership CarteView Export Reports (O&G) Exhibit A - (5000) (O&G) Expiration Date - (10000) (O&G) Location Price - (10000) (O&G) Net Acreage By Lessee - (10000) (O&G) Price Per Acre - (5000) Acreage Inventory - (10000) Action Frequency - (10000) Case Summary - (5000) Case Type - (10000) Case Type Frequency Commodity Frequency - (10000) Net Acreage - (10000)
Current Selection		
Count: 21751 View List Clear Criteria Save Criteria		
Defined Criteria		
Application Queries: Active Oil and Gas Leases		Recall
User Queries: No query recalled		Recall Delete

- Click on Location under Available Criteria. Enter your desired township and range. Click Apply.
- Under Outputs, Exports, click on Ownership CarteView Export.
- Under Export Options take the defaults and click continue.

Export Options	
Output Half Township as	<input type="radio"/> 2 <input checked="" type="radio"/> 5
<input checked="" type="checkbox"/> Substitute Lots	<input type="checkbox"/> Use Survey Type
Continue	

- Enter a report title under Description if desired and click continue.

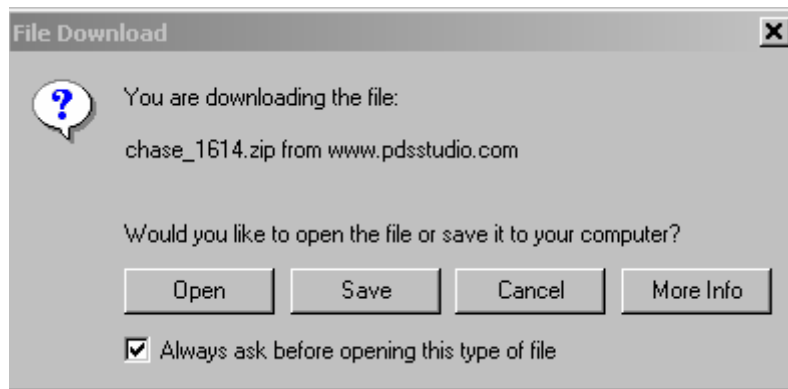
Description
Ownership CarteView Export
Continue

Enter a description you would like to identify your export by.

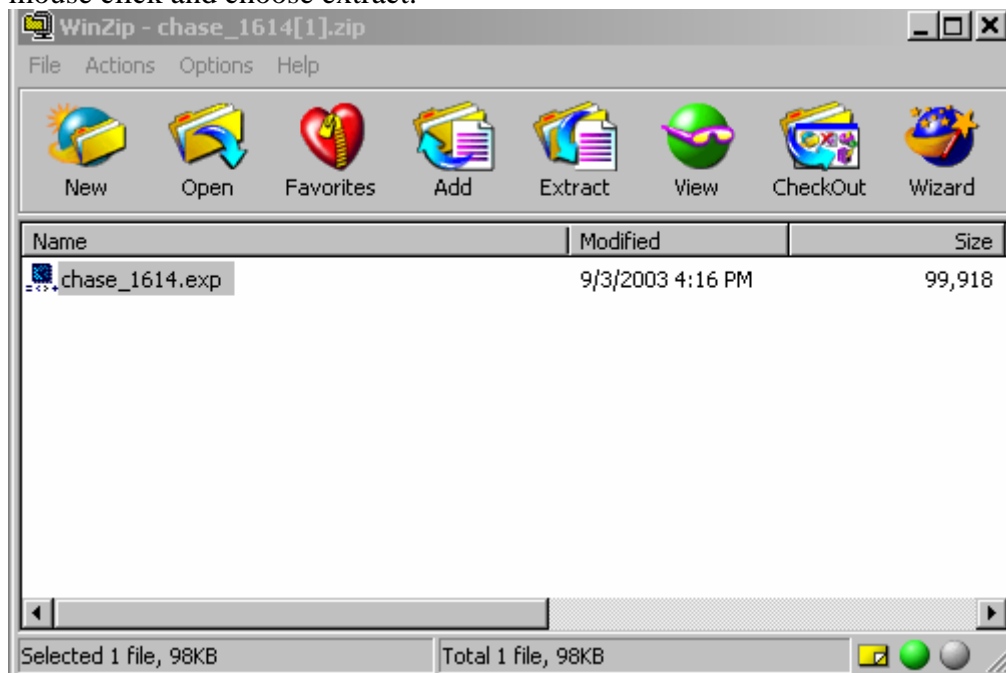
- Under Completed Outputs, Description, click on the bold, underlined report title to activate WinZip. (You may also right click on the report title and choose Save Target As to save the zip file to the folder of your choice.)

Completed Outputs - Click on Description to View										
Application	Data Source	Description	File Name	Date Created	Status	Time to Process	Delete Date	Type		
BLM Case Recordation	Wyoming Case Recordation	Ownership CarteView Export	chase_1614	Sep-03-2003	Completed	0:0:19	Oct-03-2003	Exports	View Receipt	Delete

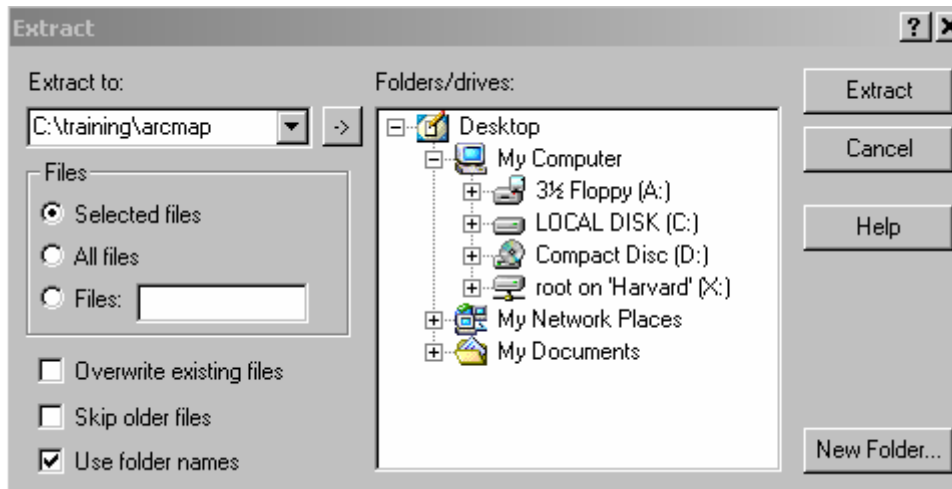
- At the File Download dialog box you can open, save or cancel the operation. Select open.



- Close the Comment dialog box.
- Highlight the zip file and either click on the extract icon in the toolbar or right mouse click and choose extract.



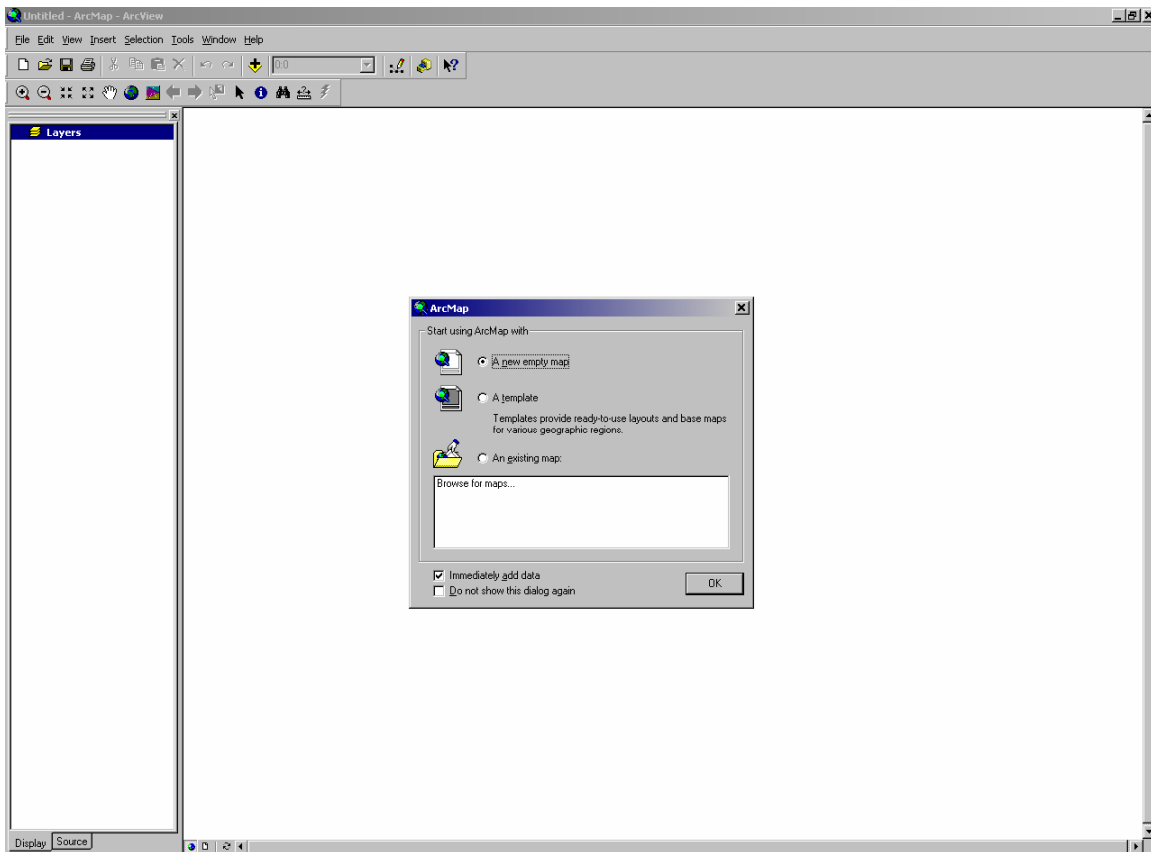
- Navigate to the desired folder and click the Extract button.




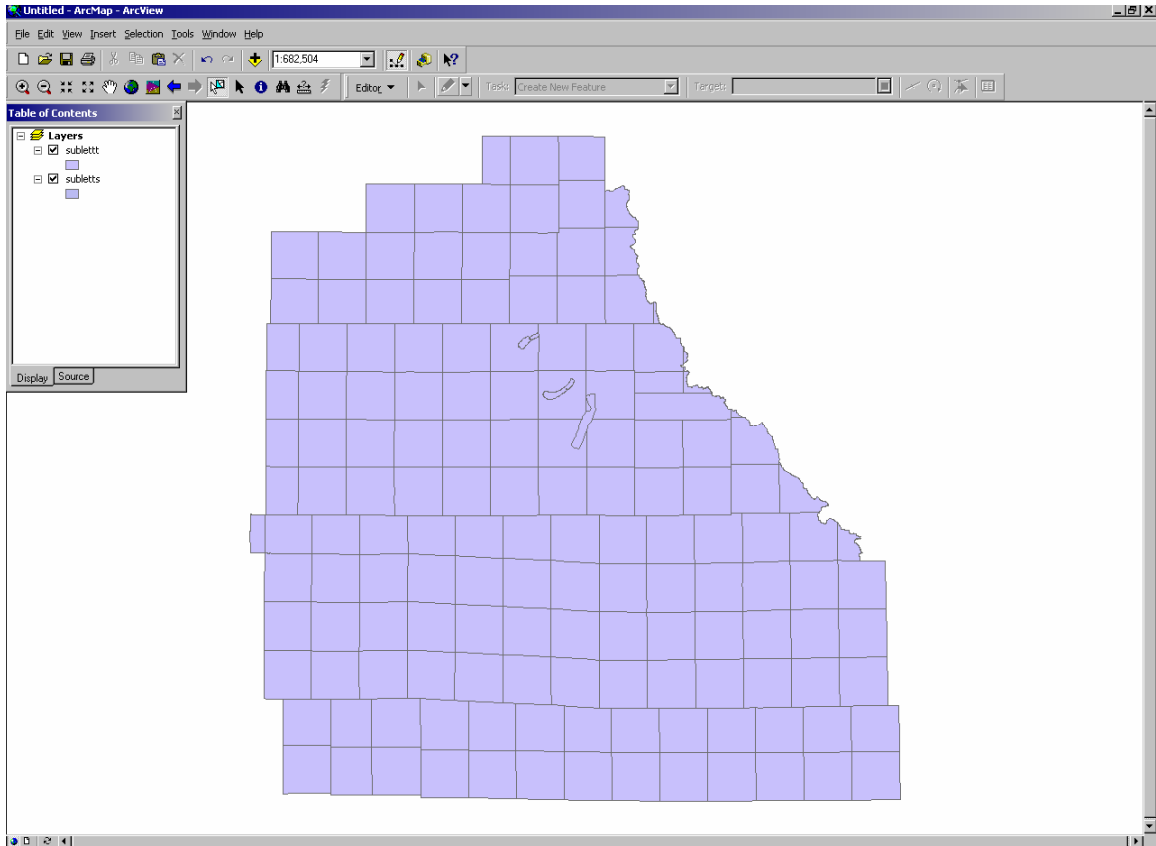
- Repeat the procedure for other layers such as units, communitization agreements, participating areas, closed leases, etc.

Process Export Files and Create Map Layout.

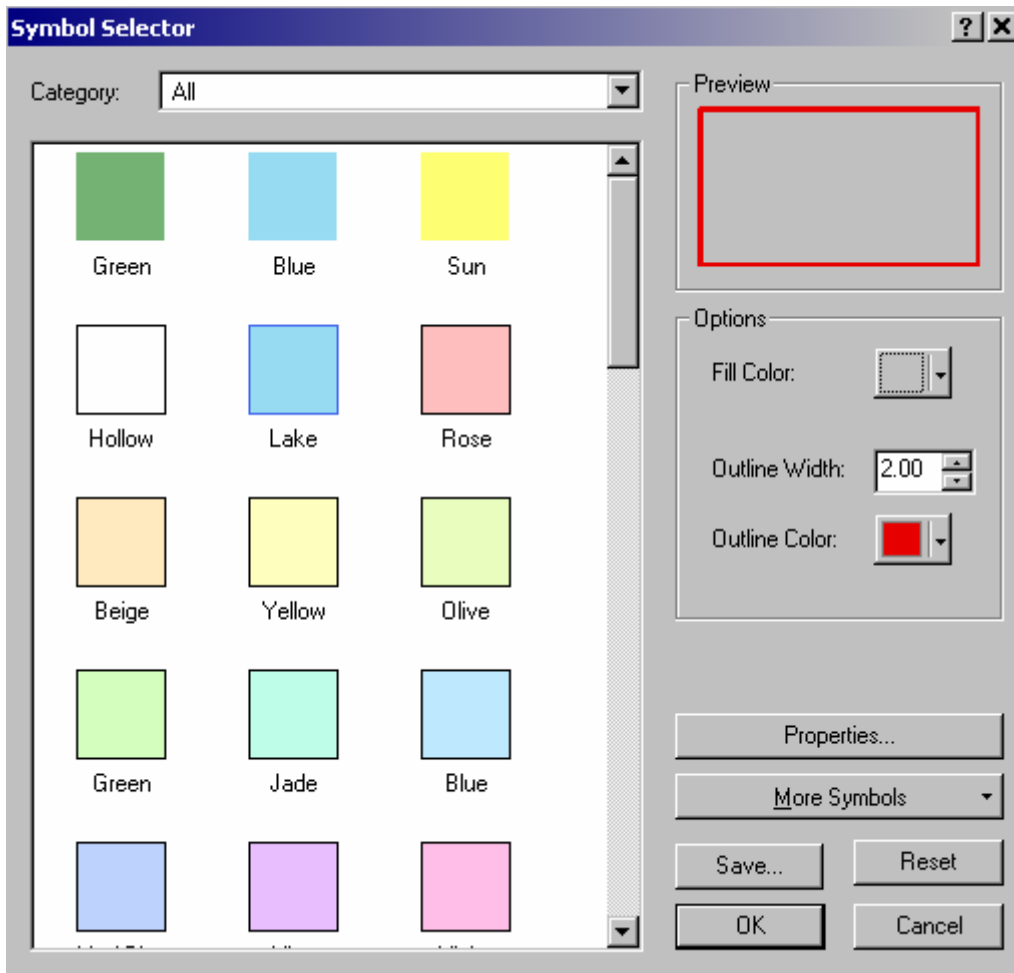
- Open ArcMap.



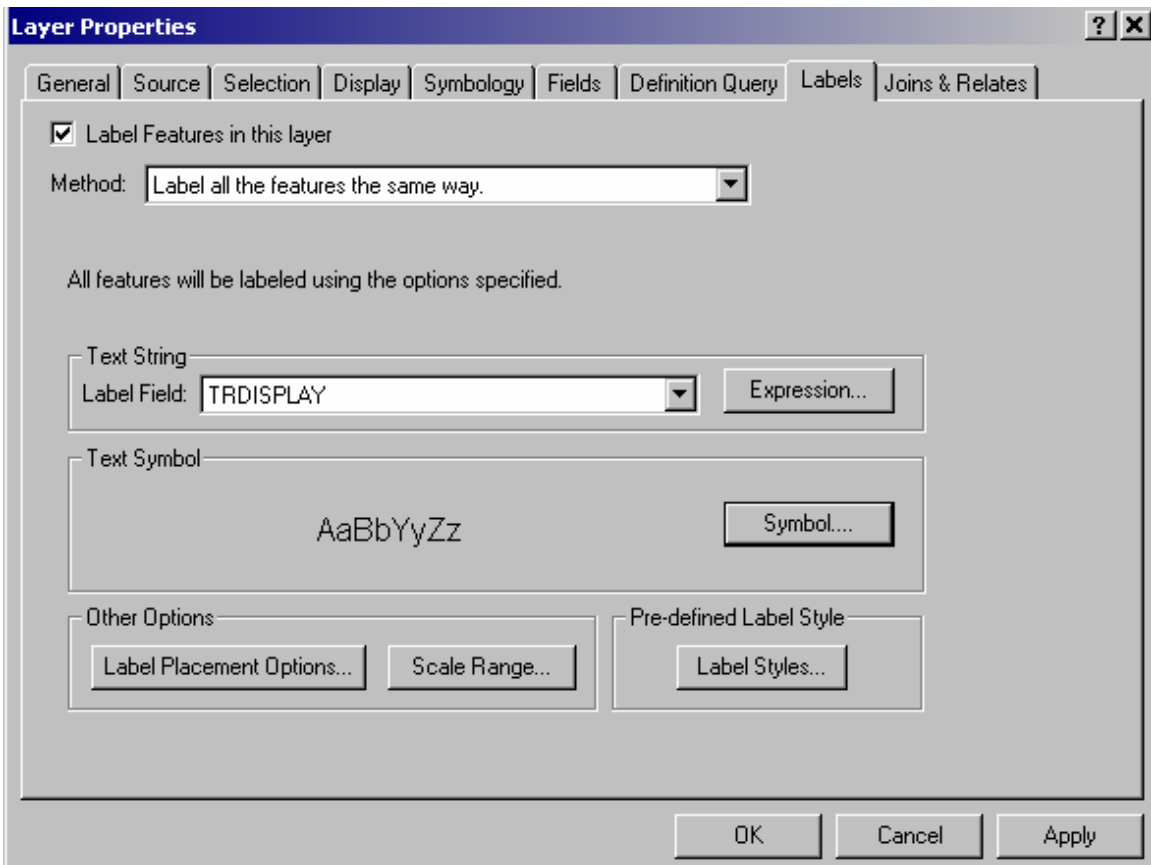
- Add section and township data layers. Click on 'Add Data' icon  and browse to file location.

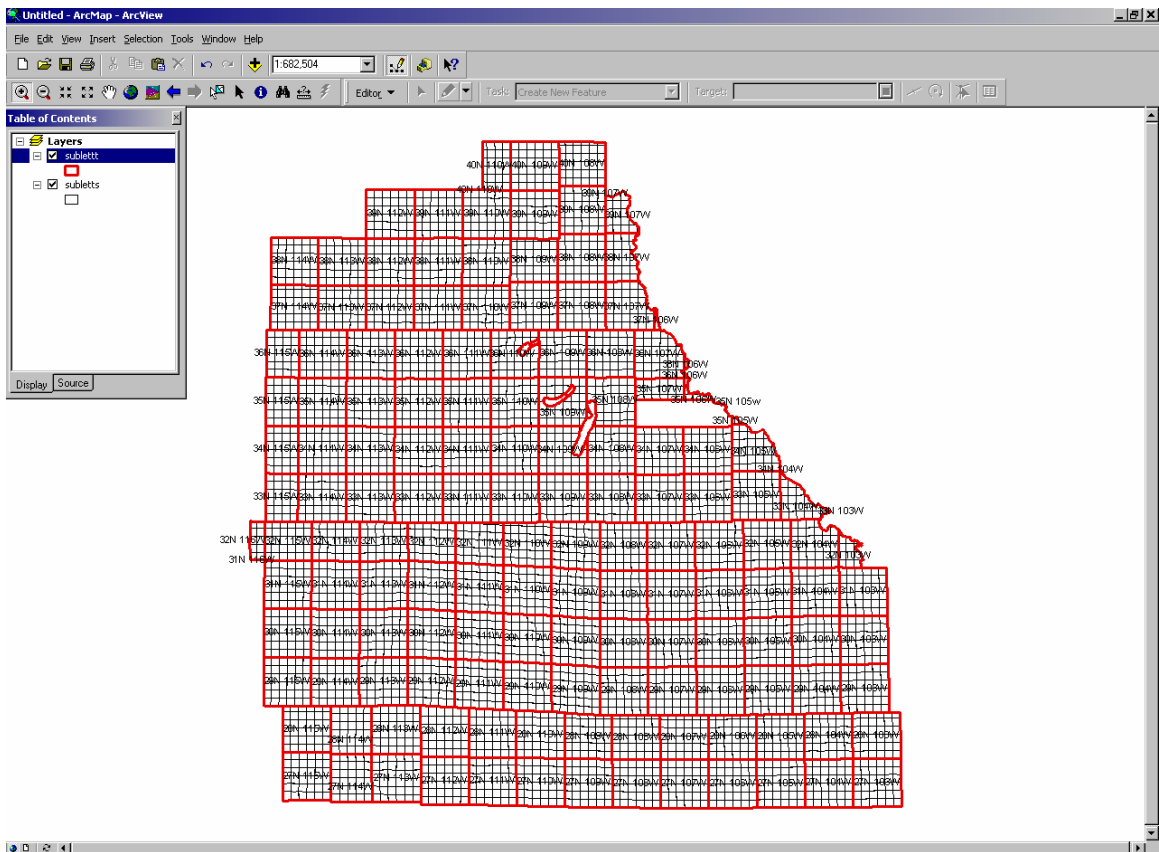


- Change display of layer by either right clicking on the layer name, choosing properties and then choosing the symbology tab and clicking of the symbol box or by simply clicking on the symbol directly below the layer name. The symbol selector dialog box will come up. Choose the fill color, outline width and outline color. For more detailed fill options select Properties and select Type for other fill options.



- Label the township layer so you can clip the grid to the desired map area by right clicking on the township layer and selecting Properties. Click of the Label tab. Put a check mark in the Label Features in this layer box. Under Text String use the drop down menu to select the desired label field or select expression to label multiple fields. Click on the Symbol button to select font size, color and Label Placement Options button for label placement and other options.

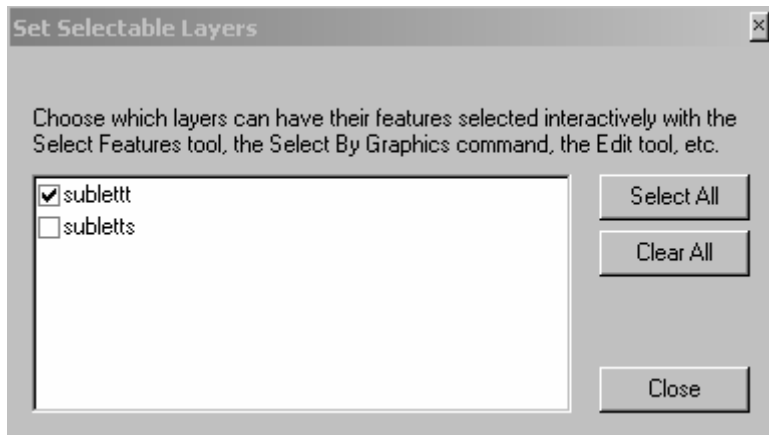


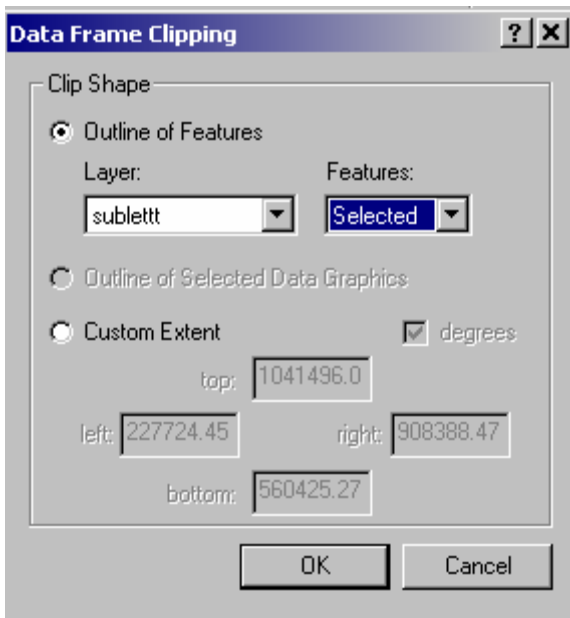
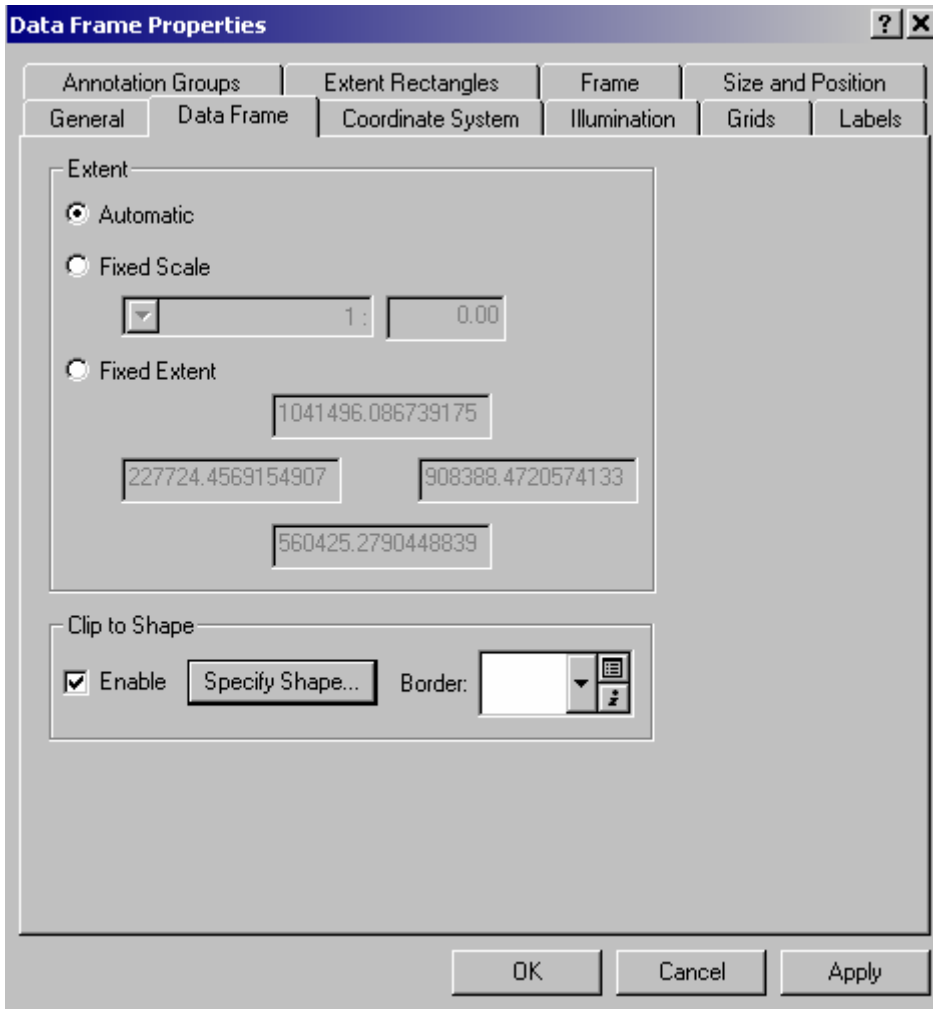


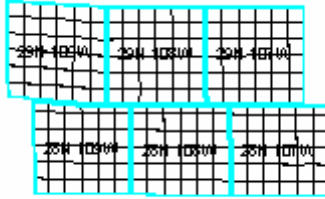
- There are two methods to displaying only the desired area for your map. You can permanently clip the grid or you may clip the grid only for display purposes. We will review both. Please note that if you are clipping the grid the grid must be read/write. It is always a good practice to work with a copy of the grid in the event that an error occurs during editing.

Method One; Clipping the grid for display only.


- Choose Selection, Set Selectable Layers and check only the township layer.

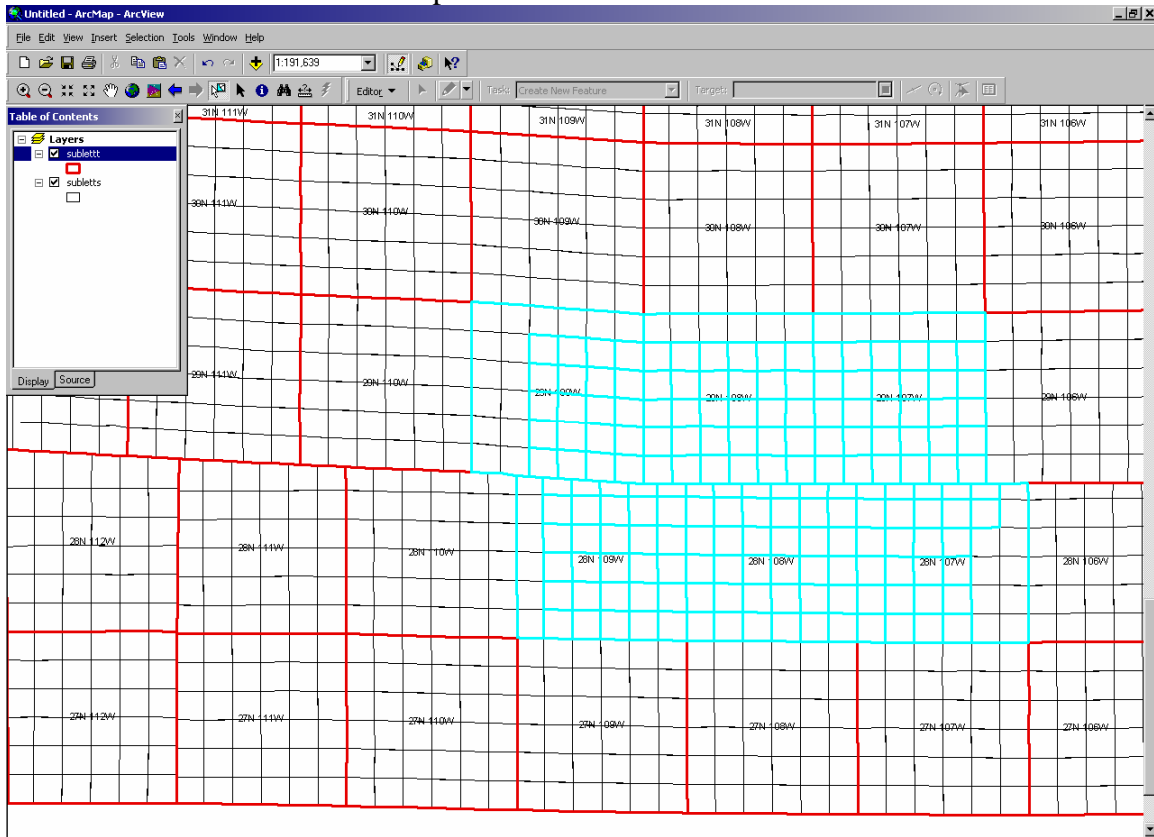







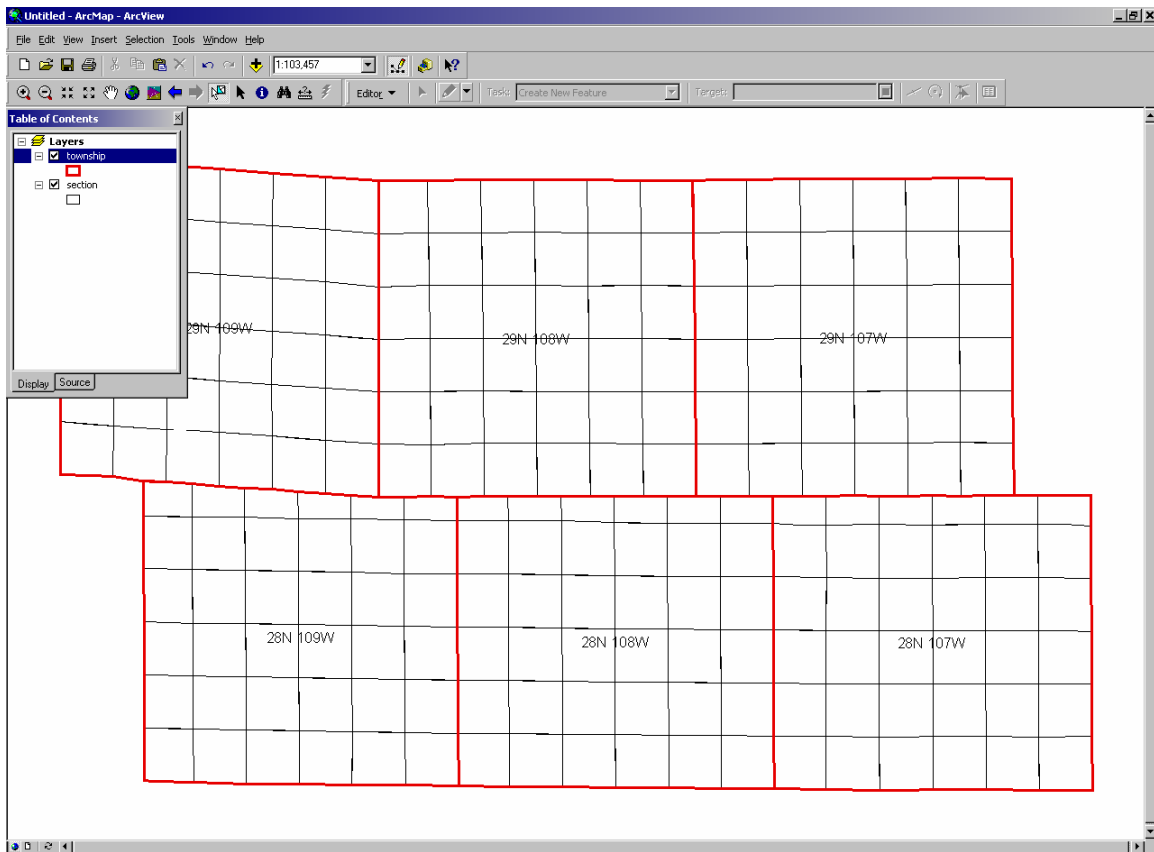
Method Two; Permanently clipping the grid.

- Highlight the township layer. Use the feature select tool  to draw a box to select the desired townships.




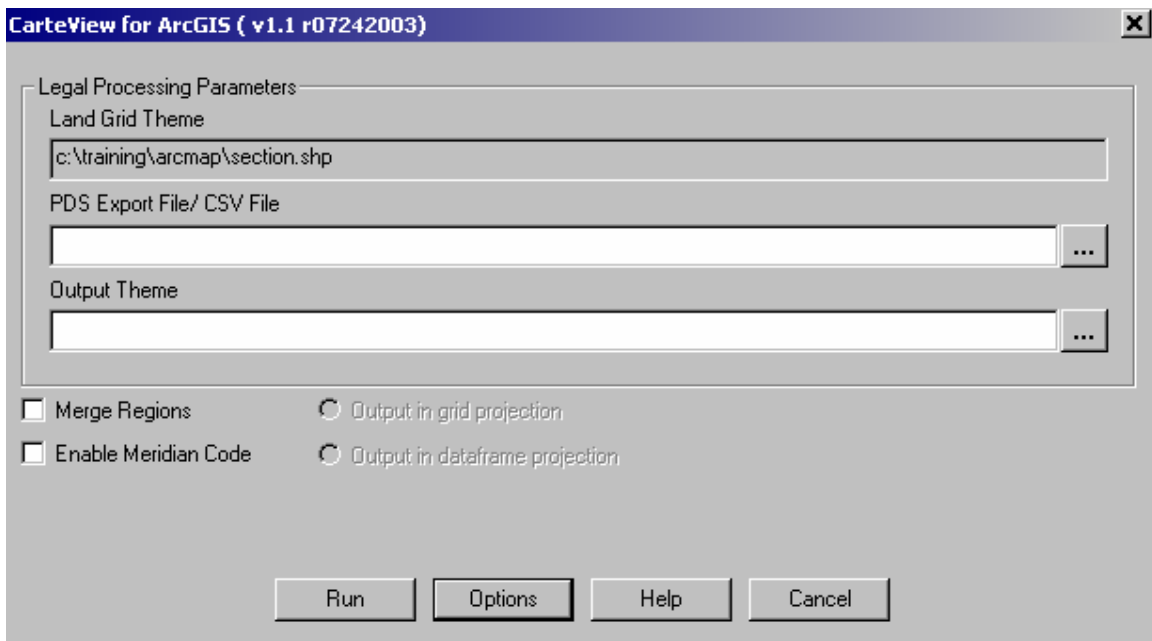
- Right click on the township layer and select data, then export data. Save the file to the desired directory and call the layer township. Add the data to the existing map.
- Repeat the process for the section layer. Save the file as sections.
- Remove the original data layers from the map by right clicking on the layer and selecting remove.
- You will need to change the display properties of both the new township and section grid layers as was done previously. Labels will also need to be added.

- You may need to do some further editing of the section layer, especially if the townships are offset. To edit individual sections make sure your editor toolbar is visible. If not, right click on the main toolbar and the various toolbar options will be available. Highlight the editor toolbar. On the editor toolbar click on the editor and select start editing. Make sure you have selected Cut Polygon Features in Task and have selected sections in Target. With the editor arrow  draw a box around the sections you wish to remove and hit the your delete key. Repeat the process until you've removed all the desired sections. Click on editor and select Save Edits. Click on Stop Editing.

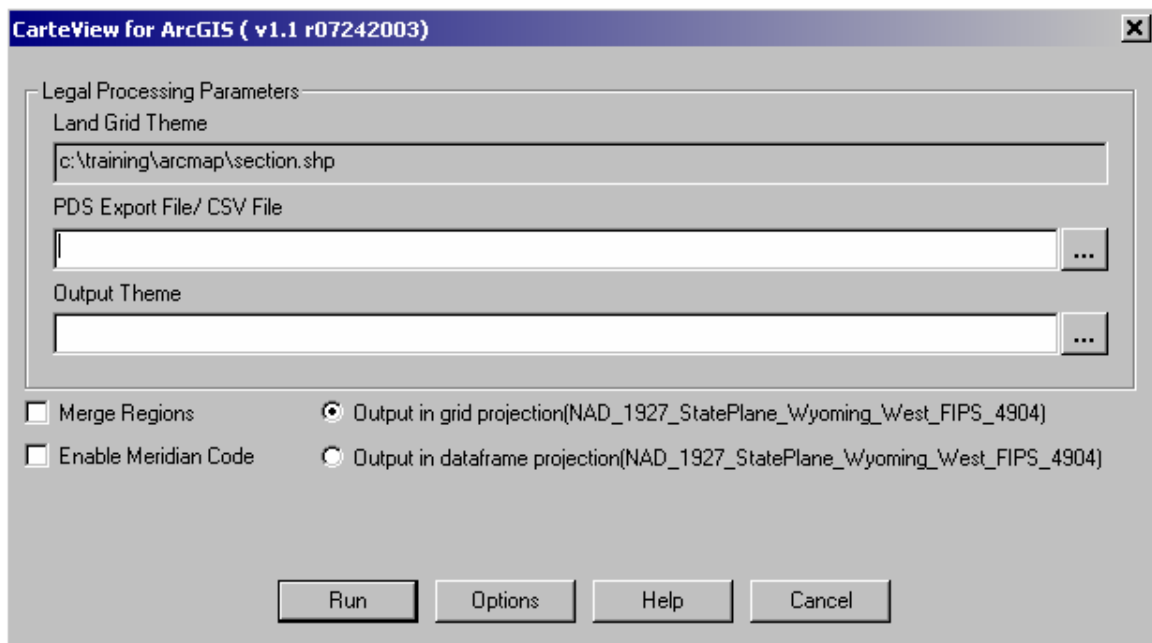


We are now ready to process Premier *.exp files create via PDS Studio or other sources.

Click on the CarteView icon  on the toolbar. The CarteView dialog box will appear. If the CarteView icon is not visible refer to Appendix B for instructions.

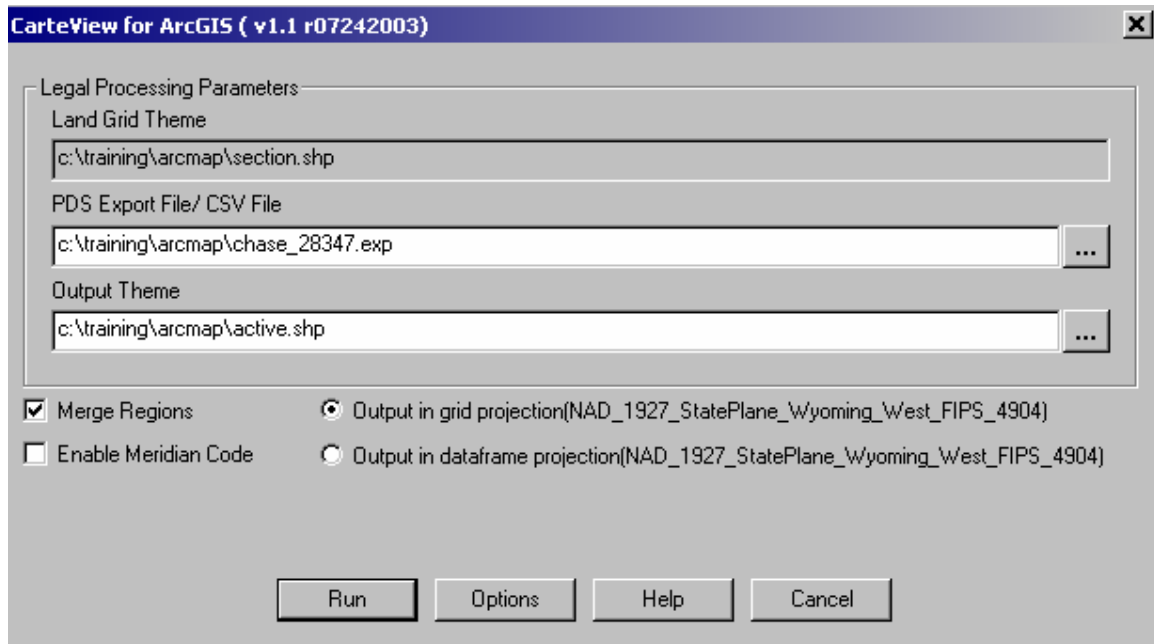


- If the Output in grid projection and Output in dataframe projection is grayed out the section grid does not have an associated *.prj file with its projection information. In this case, the output of the processed data will have the same projection of the section grid you have open. If you wish to define a coordinate system for a layer refer to appendix A for instructions.
- If your section grid has an accompanying prj file with the projection information and data frame projection information is set CarteView for ArcGis will look like:

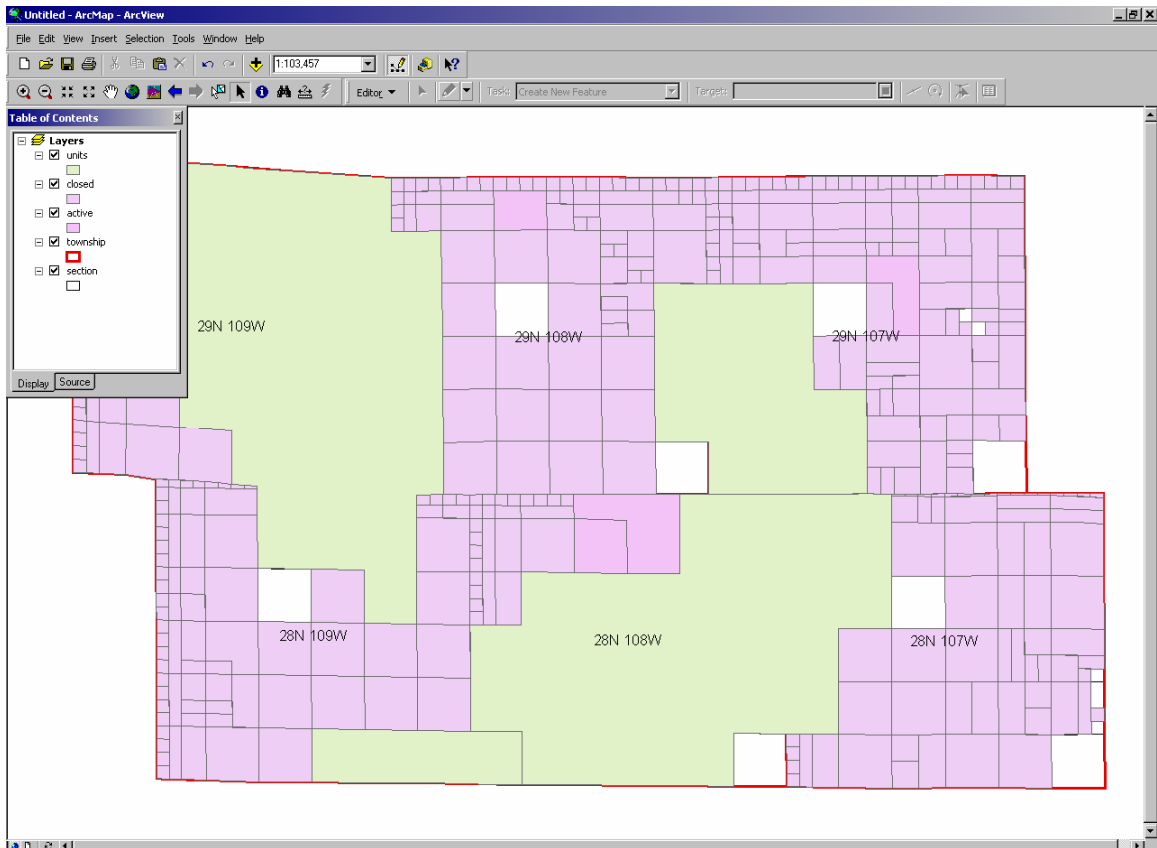


You may select to output the data in the grid projection or in the dataframe projection. To change the projection of the dataframe please refer to Appendix A.

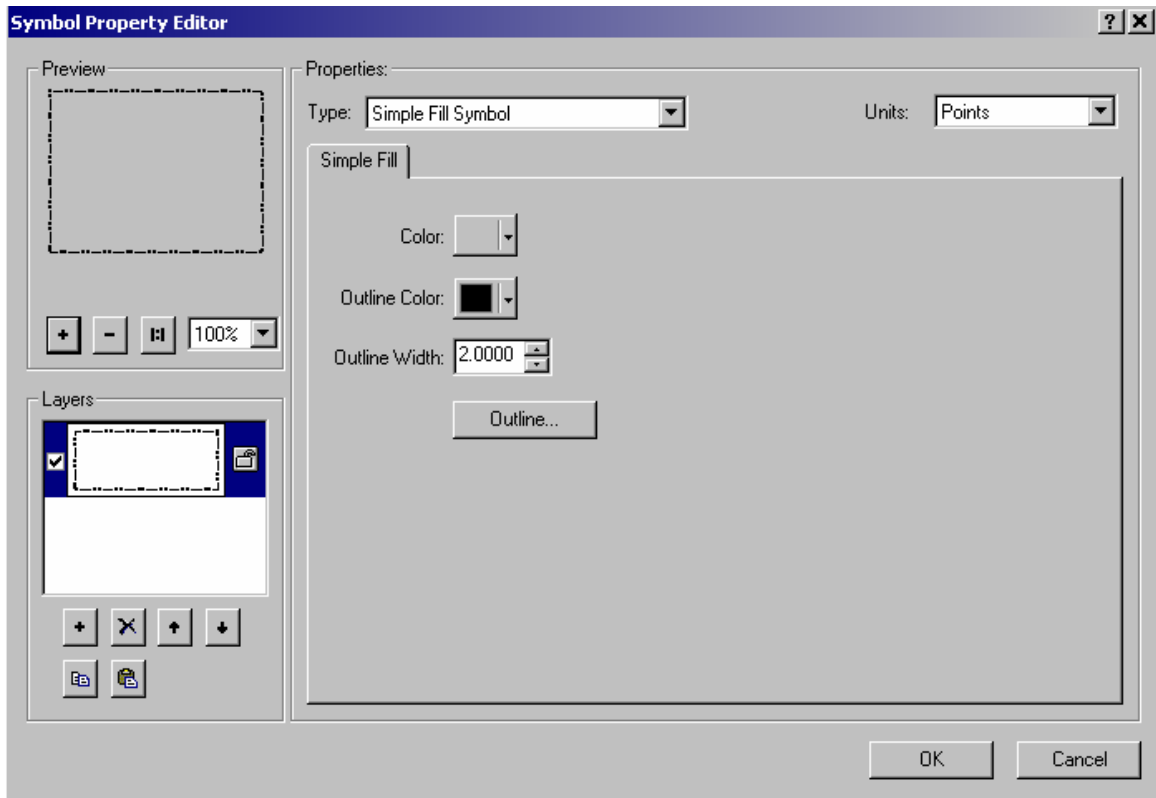
Click on the ellipses button (...) under PDS Export File/CSV File to navigate to and select the desired PDS Studio export file to process. Click on the ellipses button under Output Theme and navigate to the file folder you wish to put your output shape file. Type in the name of the output shape file.



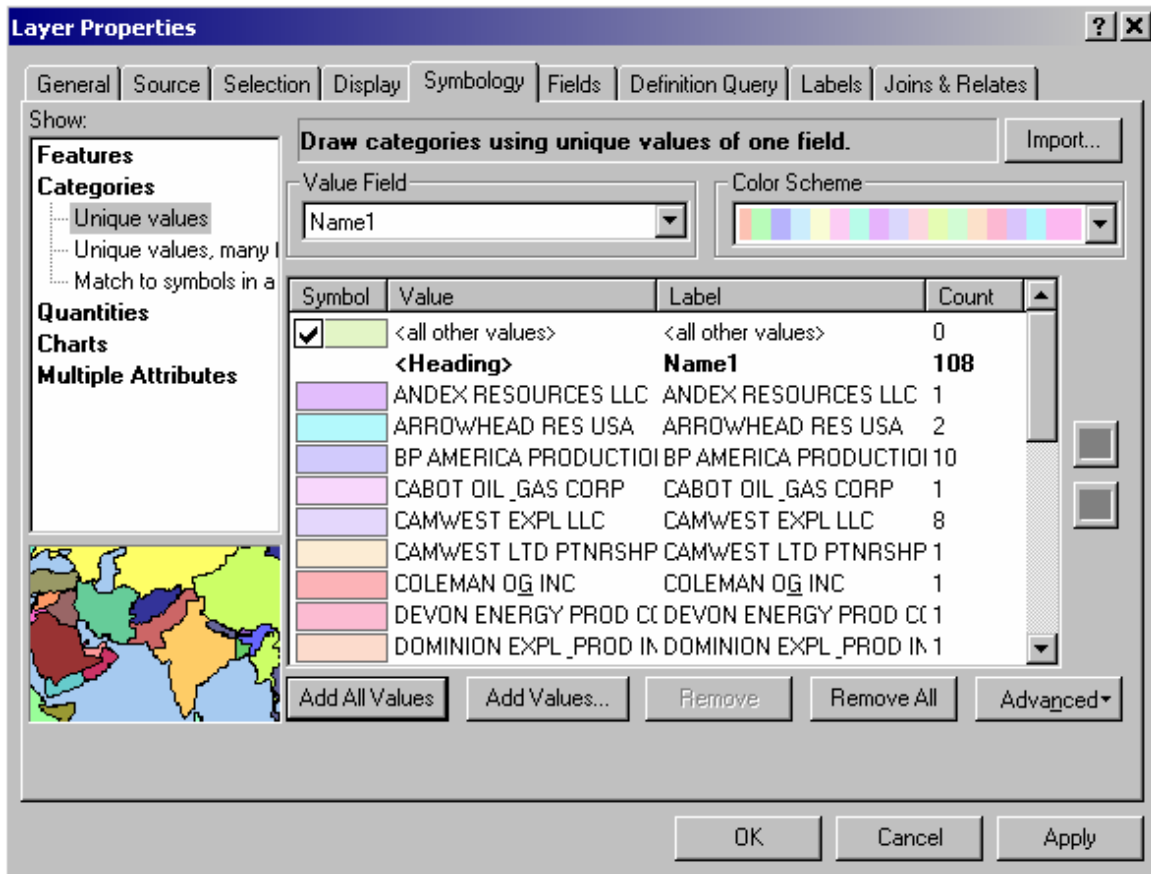
- Enable Merge Regions. Enable Meridian if necessary. Enabling meridians is necessary only when processing data in a map area with multiple meridians that contain identical townships. Select output projection. Click on Run. Repeat the process for all the export files you created in PDS Studio to produce the individual layers in ArcGIS.



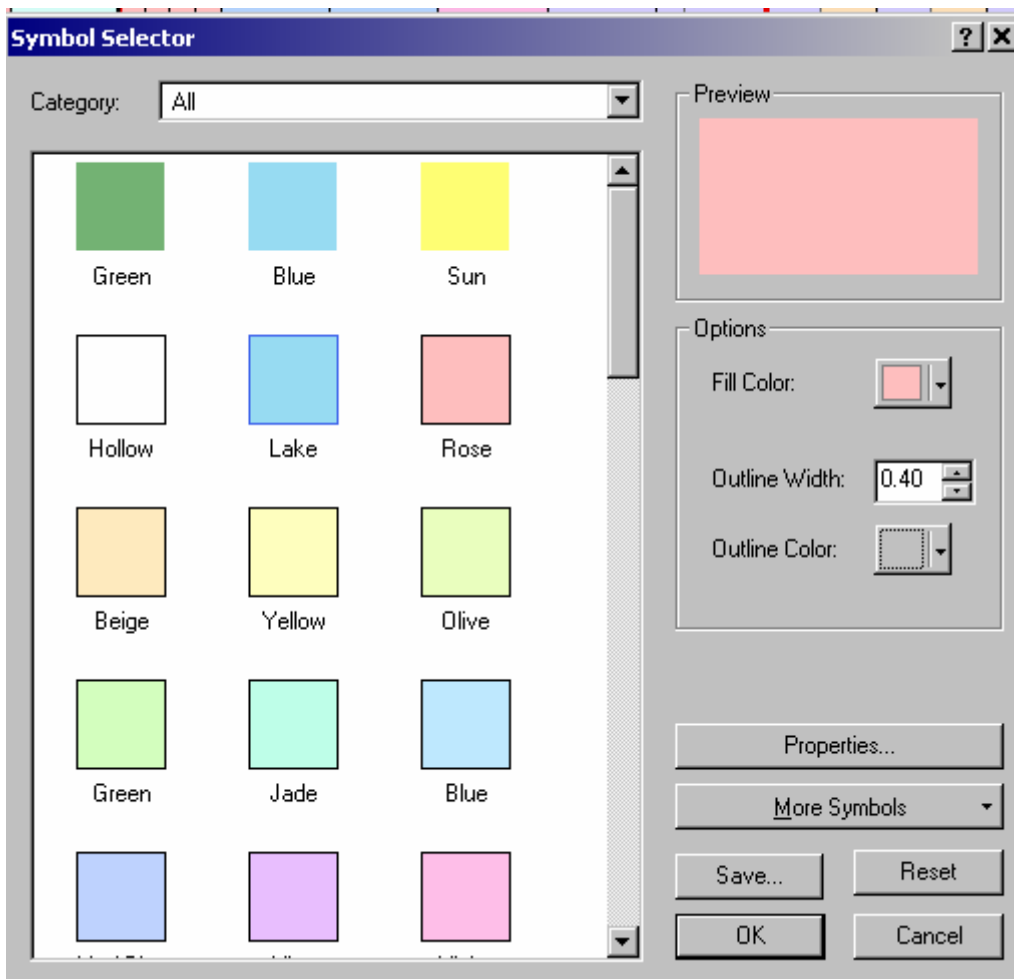
- Reorder the layers and change the symbology of the layers to create the desired map. To reorder the layers, simply highlight the layer you wish to move. Click and hold on the layer and drag it up or down as desired.
- Move the units layer to the top. Click on the symbol under units to initiate the Symbol Selector Dialog box. Click on Hollow for fill. Click on Properties. Click on Outline. Scroll down to Dashed with 2 Dots and select. Change the width to 2.0. Click on OK three times to return to the Data View screen.




- Move the township layer directly below the units layer.
- Move the section layer directly below the township layer.
- Move the active layer directly below the section layer. Right click on the active layer and select Properties. Select the Symbology tab. Under Show on the left, click on Categories. Click on Unique values. Under Value Field use the drop menu to select Name1. Select the desired color scheme using the drop down menu. Click on Add All Values.



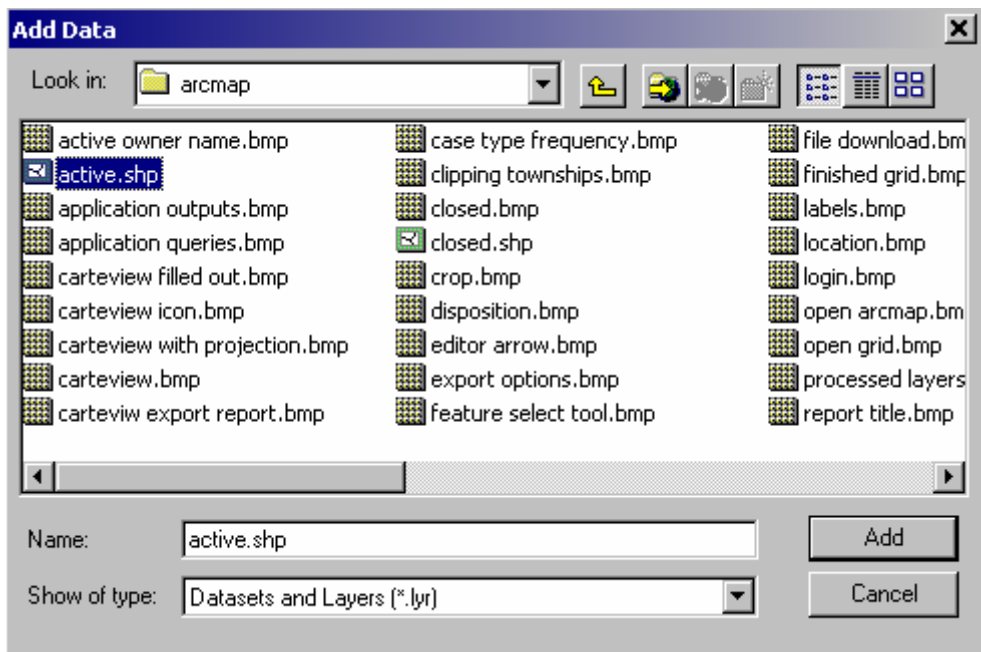
- Move closed to the bottom of the list. Click on the symbol under the Closed layer in the legend to initiate the Symbol Selector Dialog box. Select Rose for the fill color. Select No Color for the outline color. Click OK to return to the Data View screen.



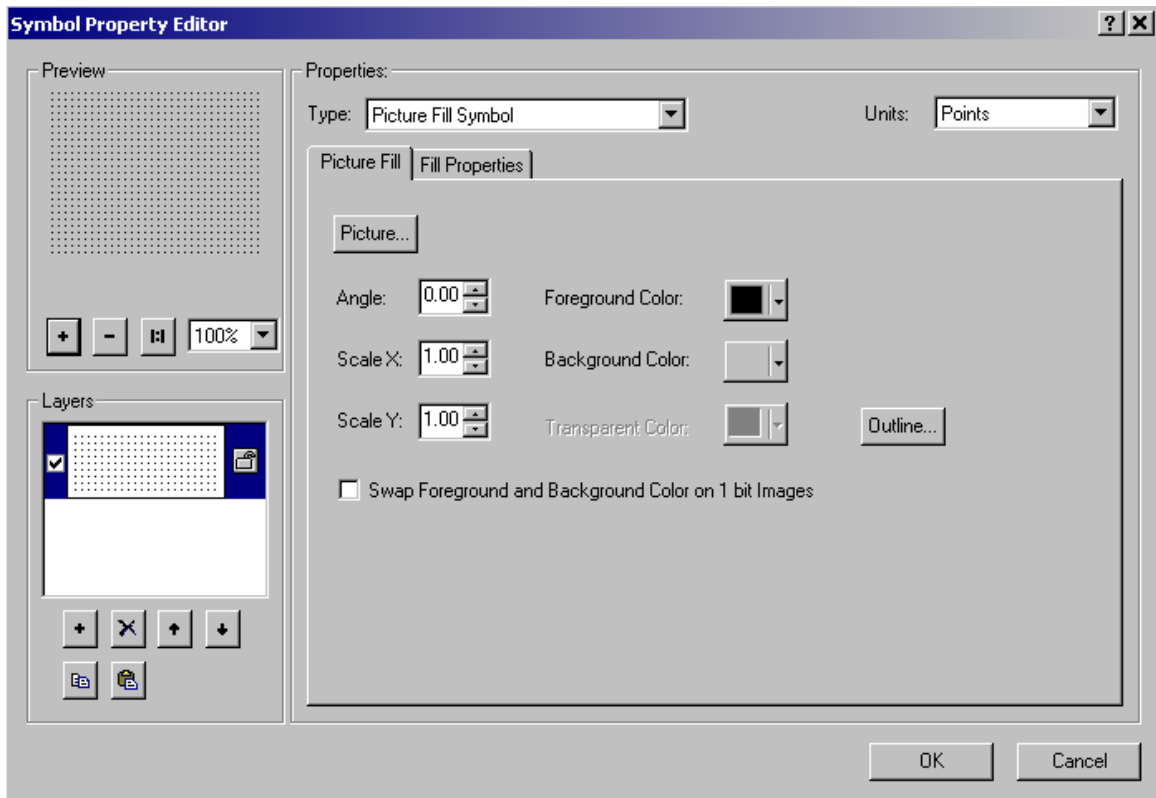
- Click of the add data icon  and add the active shape file layer again.

OR

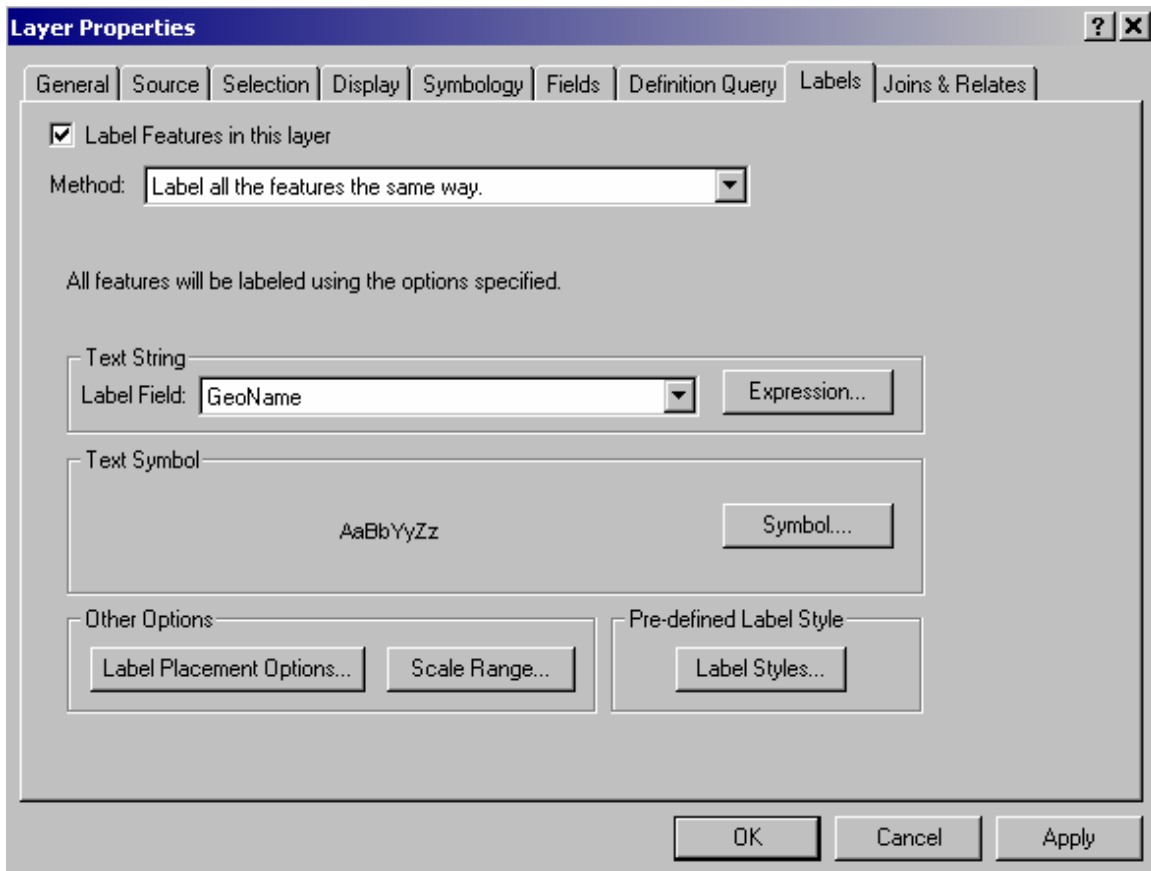
- You may copy and paste the active layer back into the data frame. Right click on the active layer and choose copy. Then right click on the layers data frame and choose Paste Layer.



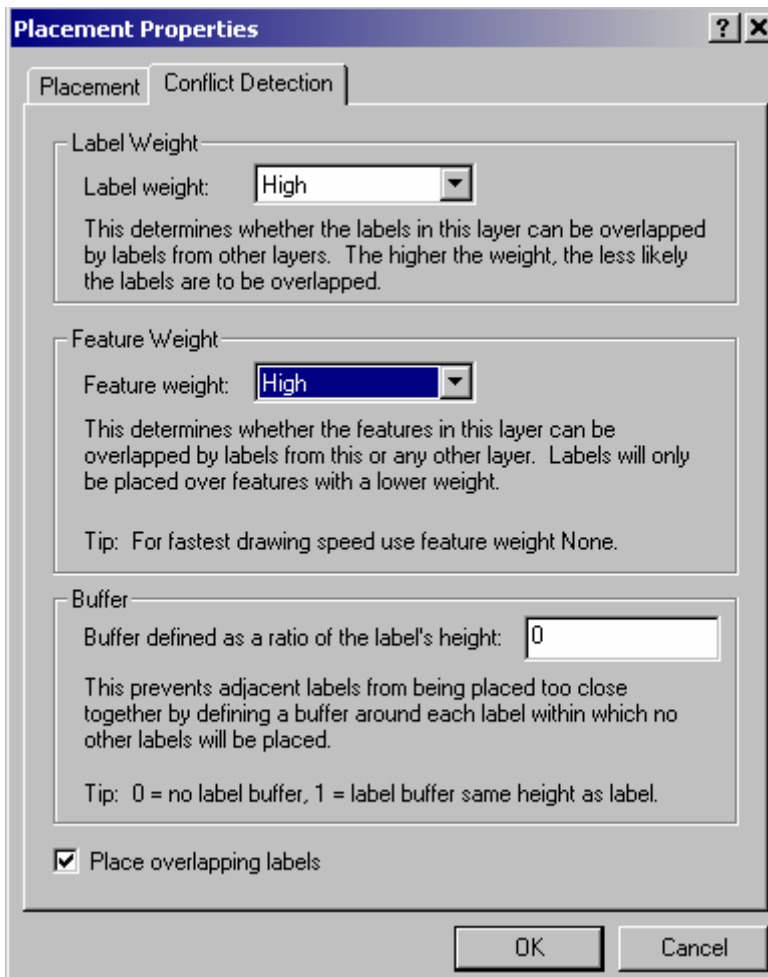
- Right click on the top active layer. Select Properties. Select Symbology. Under Show, on the left, select Categories. Select Unique values. Under Value Field select HBP. Click on Add All Values. Double click on the Symbol that doesn't have a value, these are the leases that are not HBP. In the Symbol Selector click on Hollow. For the Outline Color select No Outline Color. Click OK. Unclick <all other values> so the non-HBP leases are not shown. Click on the symbol next to HBP. Scroll down to and select 10% Ordered Stipple. Click No Outline Color. Click on Properties. In the Symbol Property Editor select Background Color on Picture Fill tab and click on No Color.



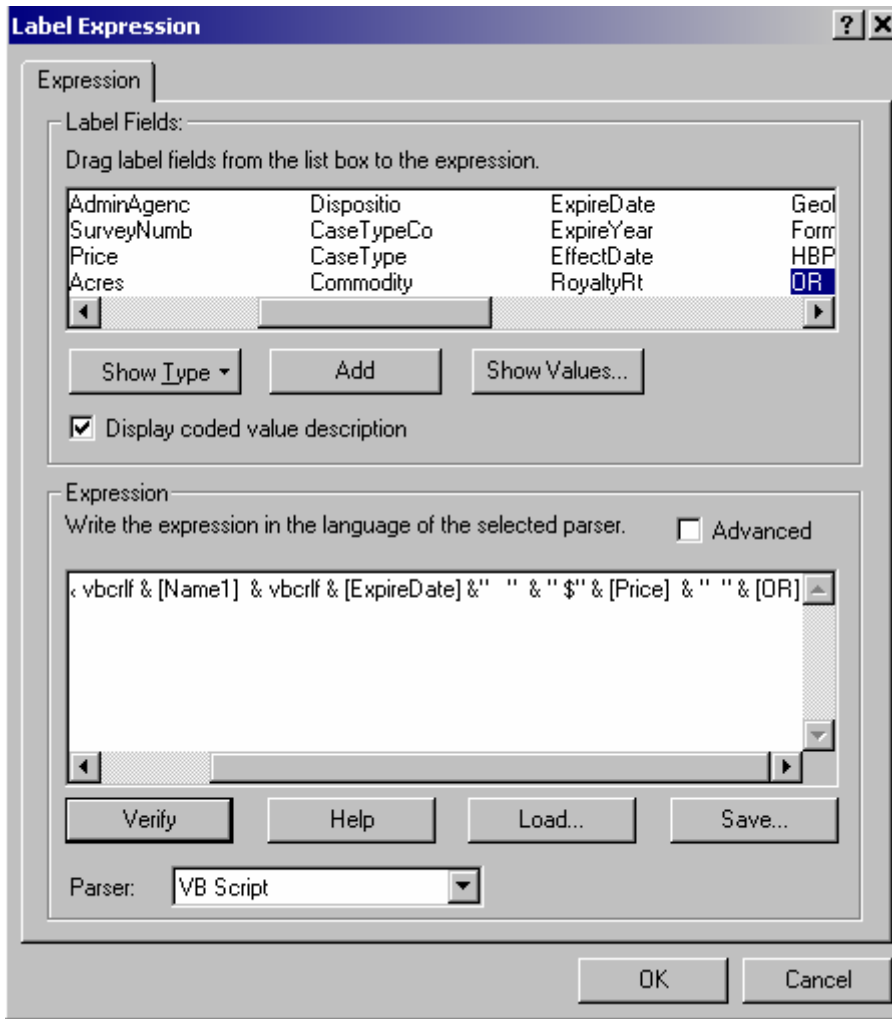
- Click OK three times to get back to the Data View screen.
- Highlight the units layers and right click and select Properties. Select the Labels tab. Put a check mark in the Label Features in this layer box. Leave Method as Label all the features the same way. Use the drop down menu under Text String and Label Field with GeoName. Click on Symbol under Text Symbol and select desired font, size and color. Click on Properties for additional font options. Click OK to return to the main screen.



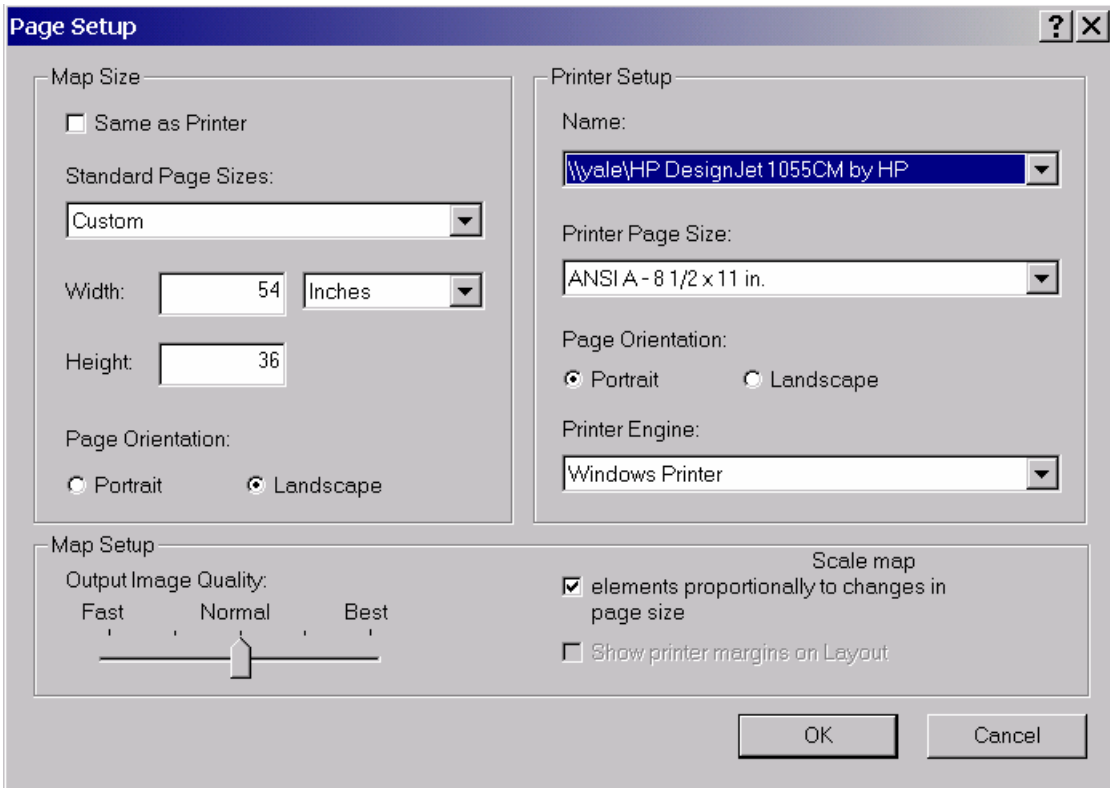
- At the Label tab click on Label Place Options under Other Options. Under the Conflict Detection tab, using the drop down menu choose Label Weight as High. Under Feature Weight , using the drop down menu choose Feature Weight as High. Place a check mark in the Place Overlapping labels box. Click OK twice to return to the data view screen.



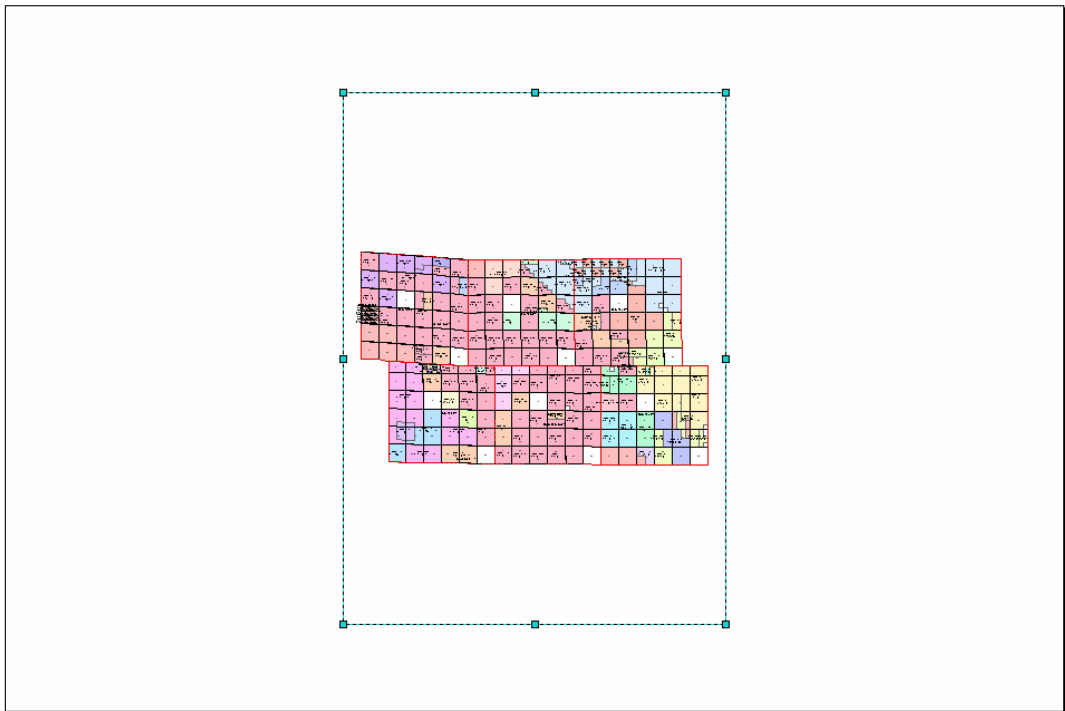
- Highlight the lower active layer and right click and select Properties. Select the Labels tab. Click on Expression. Delete any label currently in the white Expression box. Under Label Fields highlight SerialNumb and click Add. Repeat the process with Name1, ExpireDate, Price, and OR. This will place all the labels on the same line. To insert carriage returns and spaces between the labels type in the following:
- [SerialNumb] & vbCrLf & [Name1] & vbCrLf & [ExpireDate] & " " & "\$" & [Price] & " " & [OR]



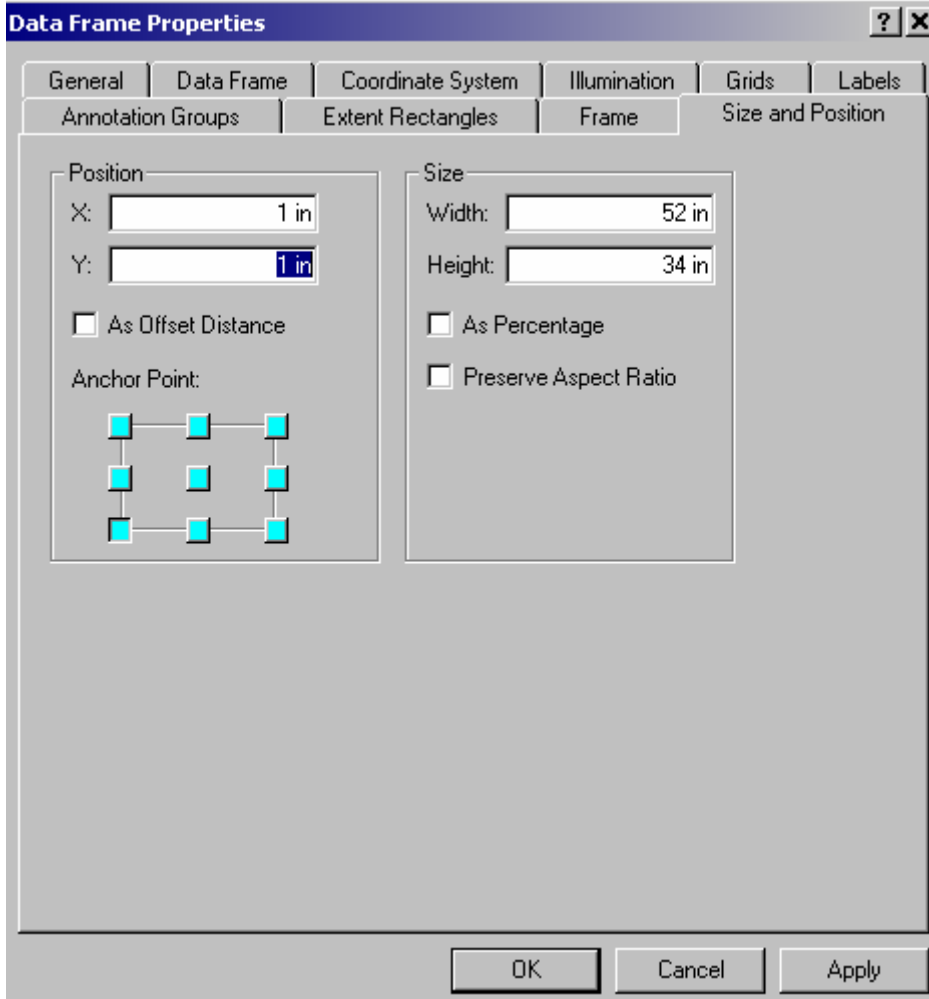
- This will put a carriage return after the serial number and after Name1, which is the majority record title owner. It will also put spaces between Expiredate and Price and OR, which indicates if operating rights have been severed. A dollar sign will also be added in front of the numerical dollar amount bonus bid for a particular lease. Click OK. Click on Label Placement Options under Other Options. Select High for both Label Weight and Feature Weight. Put a check mark in the Place overlapping labels box. Click OK. Verify that you have a check mark in the Label Features in this layer box. Click OK.
- At the top of ArcMap, select View, select Layout View. Under File select Page Setup. Select desired printer/plotter under Printer Setup Name. Select Portrait or Landscape. Select Printer Page Size if you want a preformatted default paper size. If you want a custom print size, type in the desired width and height under Map Size.

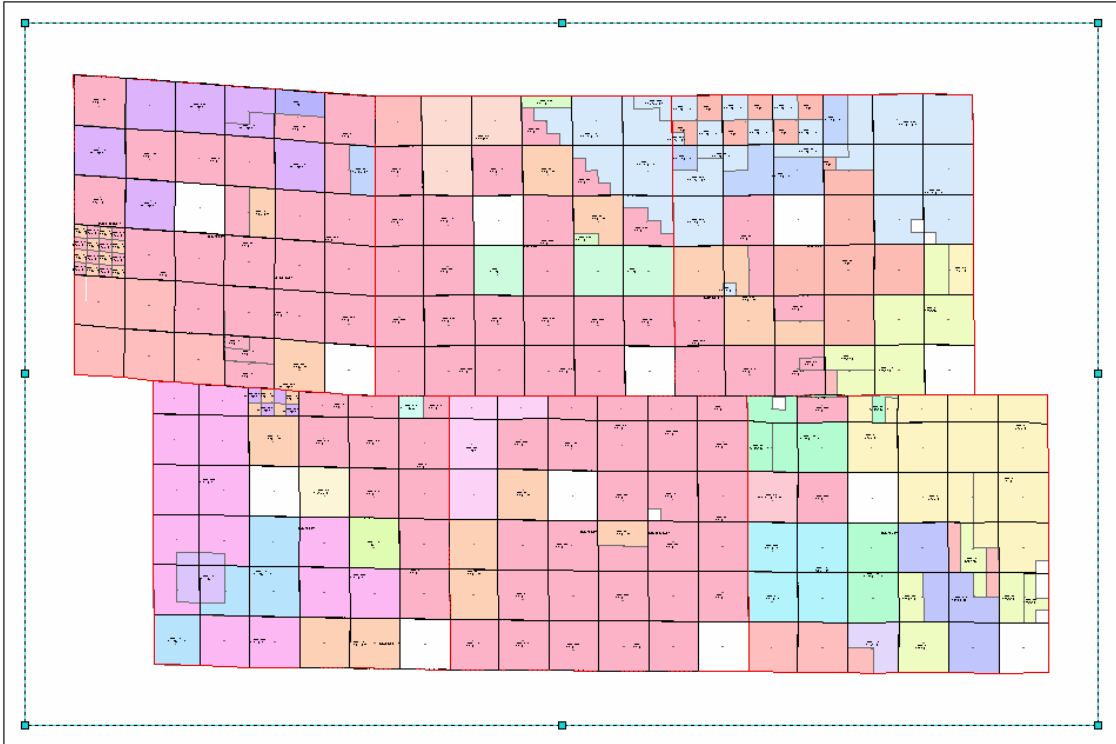


Drag corners of outlined map to position and size the map on your desired page size.

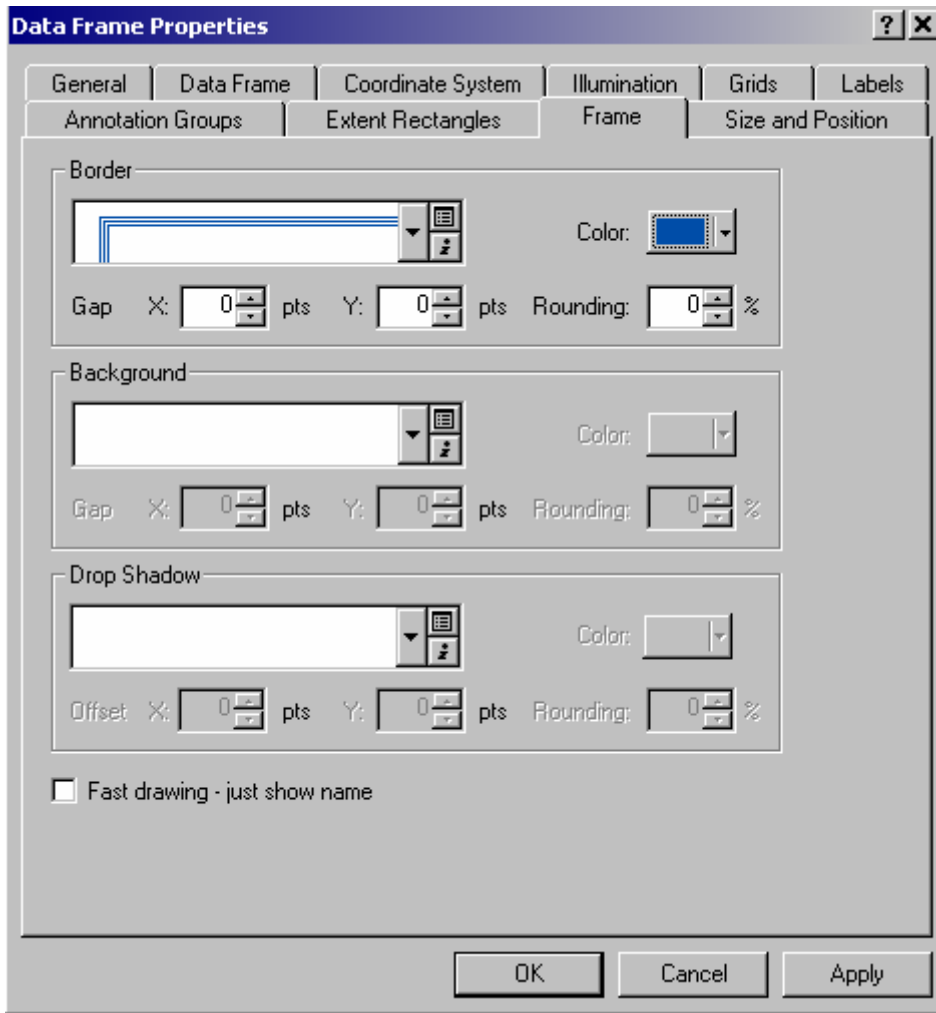


- You may also right click on the virtual layout map, select properties and select the Size and Position tab and type in your desired map size and position. Be sure to allow for print margins. For standard paper sizes you may right click outside the map area, select page setup and place a checkmark next to display printer margins on layout.

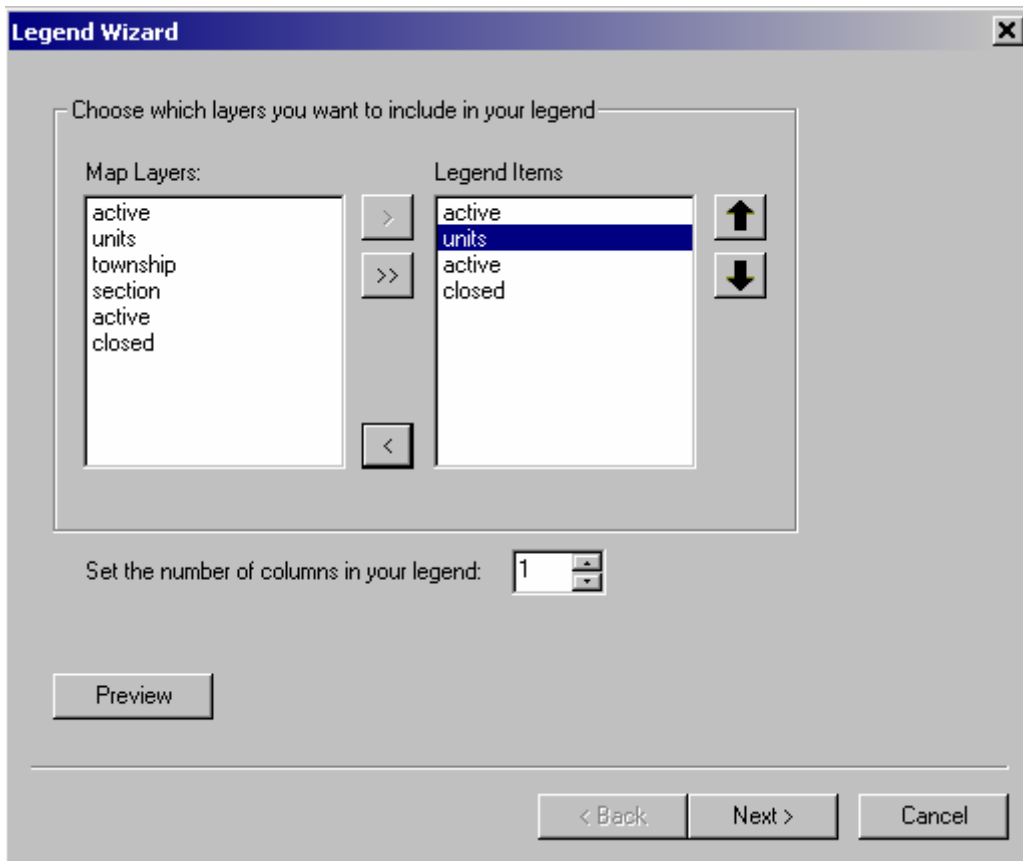




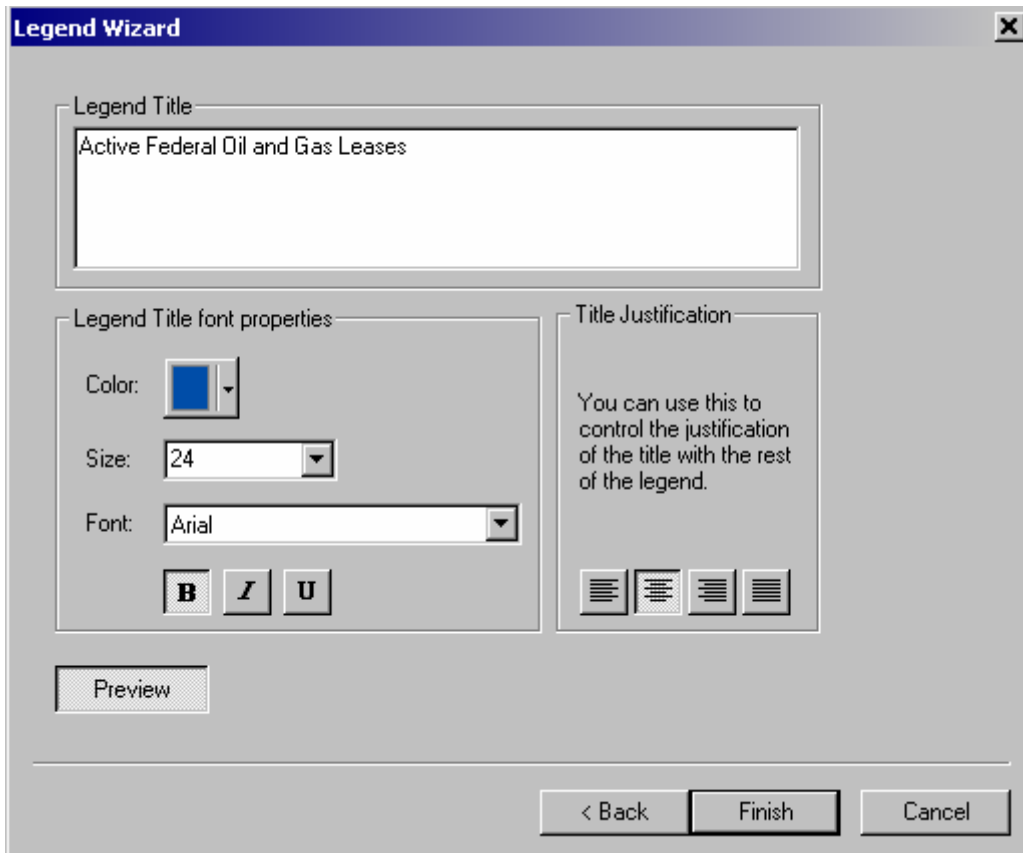
- Right click on your map, select Properties, select Frame. Choose your desired Border type and color, as well as, other desired properties and click OK.



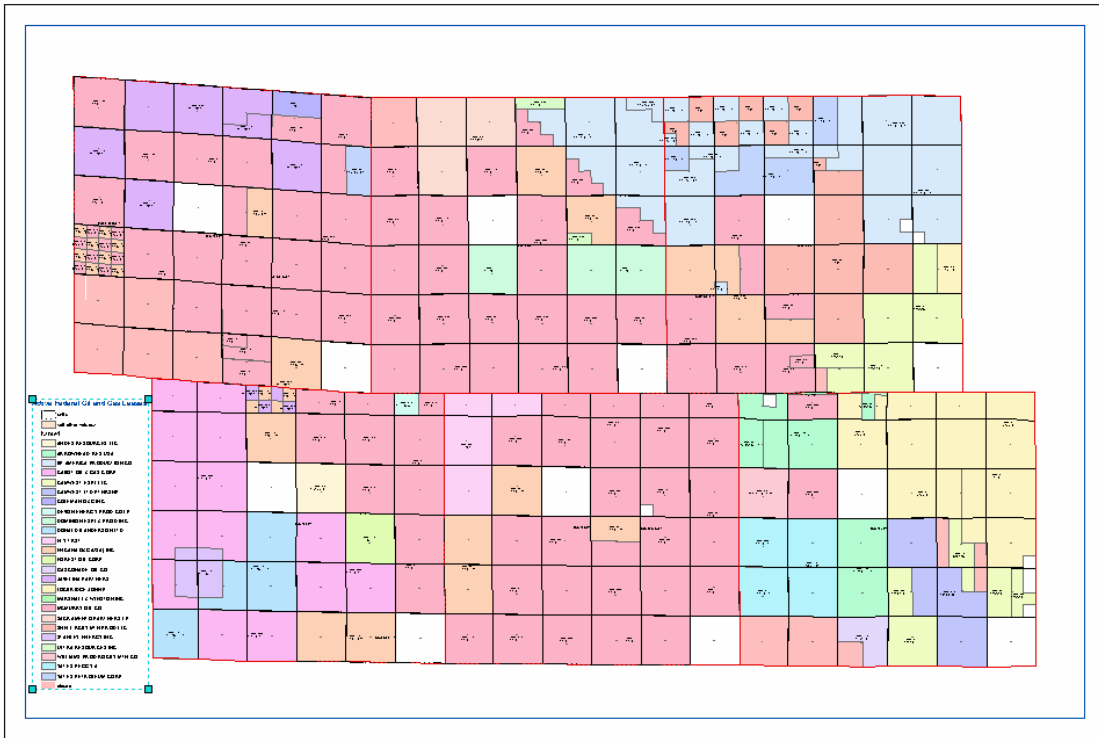
- Click on Insert Menu at the top of the screen and select Legend.



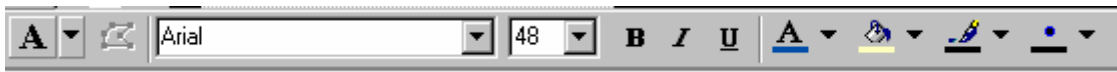
- Remove map layers you do not want to display in your legend by highlighting them and moving them to the left under Map Layers using the left pointing arrow. Move map layers that you want to display in your legend to the right window under Legend Items. Move layers in your Legend up or down using the arrows. Click on Next. Add Legend title, change font size and color, choose justification, etc as desired.



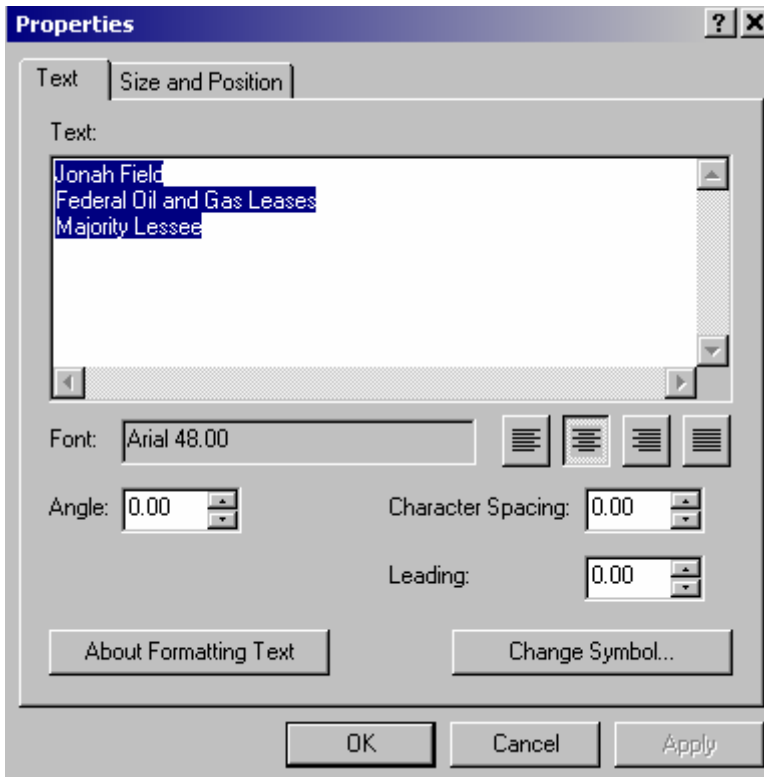
- Click on Next to change Legend Frame. Click on next to change legend patch size and shape. Click on next to change legend format. Click on Finish.
- Click on the map. The anchor points of the map will appear. Right click on the map, select order, select send to back. Right click on the legend, the anchor points of the legend should appear. Click and hold on the legend and drag the legend to its desired location.



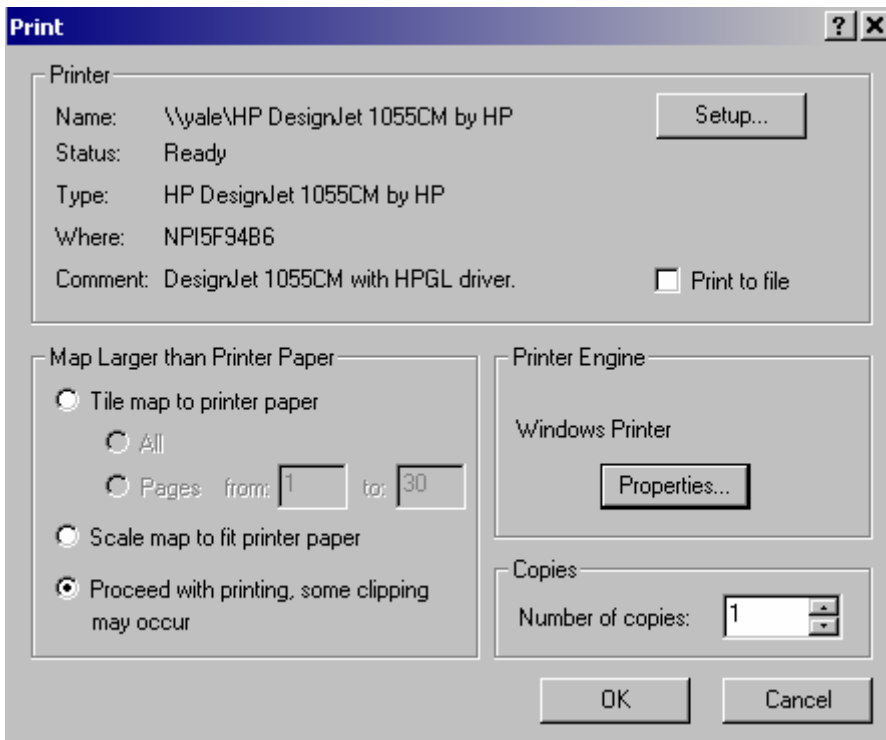
- At the bottom of layout view select font type, size and color of additional text you wish to add.



- Click on the A on the tool bar. Move to the location you want to type in additional text. Right click and type in the desired text. Click on the box to move the text to another location. Right click on the text box and select properties to change text, font size, color and other attributes.



- Under File select Print. Click on Setup to verify plotter and paper size and orientation. You will need to also click on Properties under Printer Engine, Windows Printer to verify paper size and orientation for custom paper sizes.



Appendix A CarteView for ArcGIS And Coordinate Systems

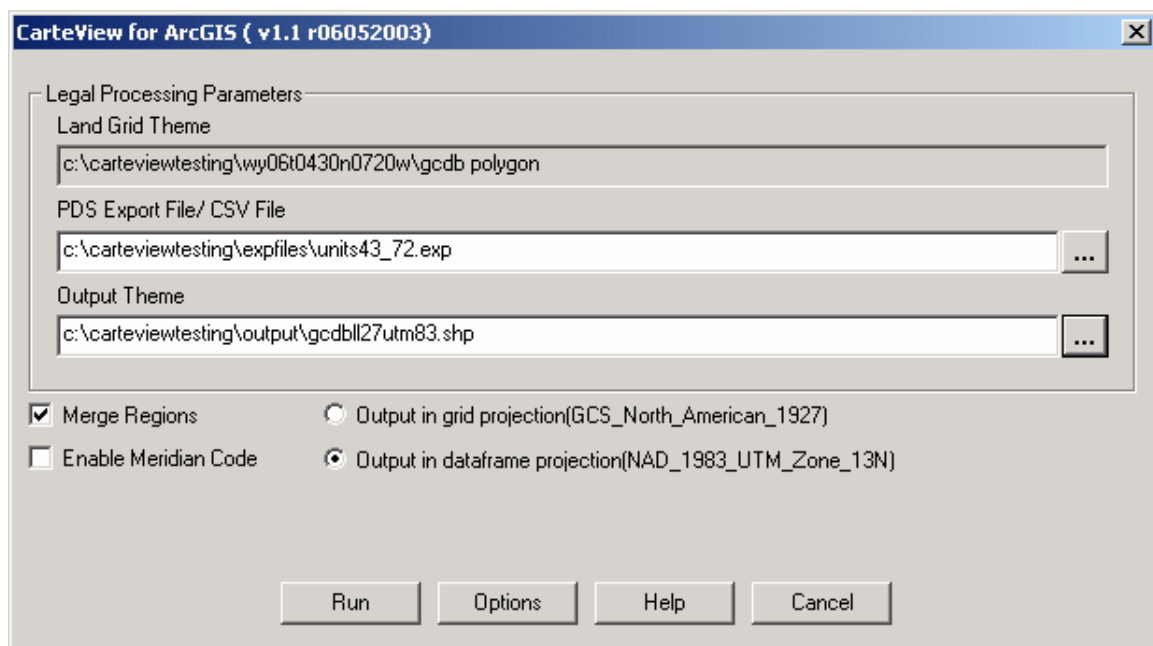
CarteView provides the ability to produce the output shape file in either the coordinate system of the input land grid or the coordinate system of the ArcMap data frame when the coordinate system of the input land grid is known. For example, you can create an output shape file in a specified UTM zone, NAD83 when your land grid is stored in geographic, NAD 27.

To take advantage of the reprojection capabilities of both ArcMap and CarteView, it is recommended to have valid coordinate system information for your land grid files. The land grid coordinate system definition requirements outlined here are ESRI standards. A shapefile's coordinate system parameters are stored in the same location as the shapefile, in a .prj file with the same name as the shapefile. For example section.prj would be the projection file for the section.shp file. A coverage's coordinate system parameters are stored in the same location as the other coverage files. The gcdb\prj.adf file would be the projection file for the gcdb coverages. Instructions on how to create these files if they do not exist are detailed below in *How to Define A Coordinate System For A Layer*.

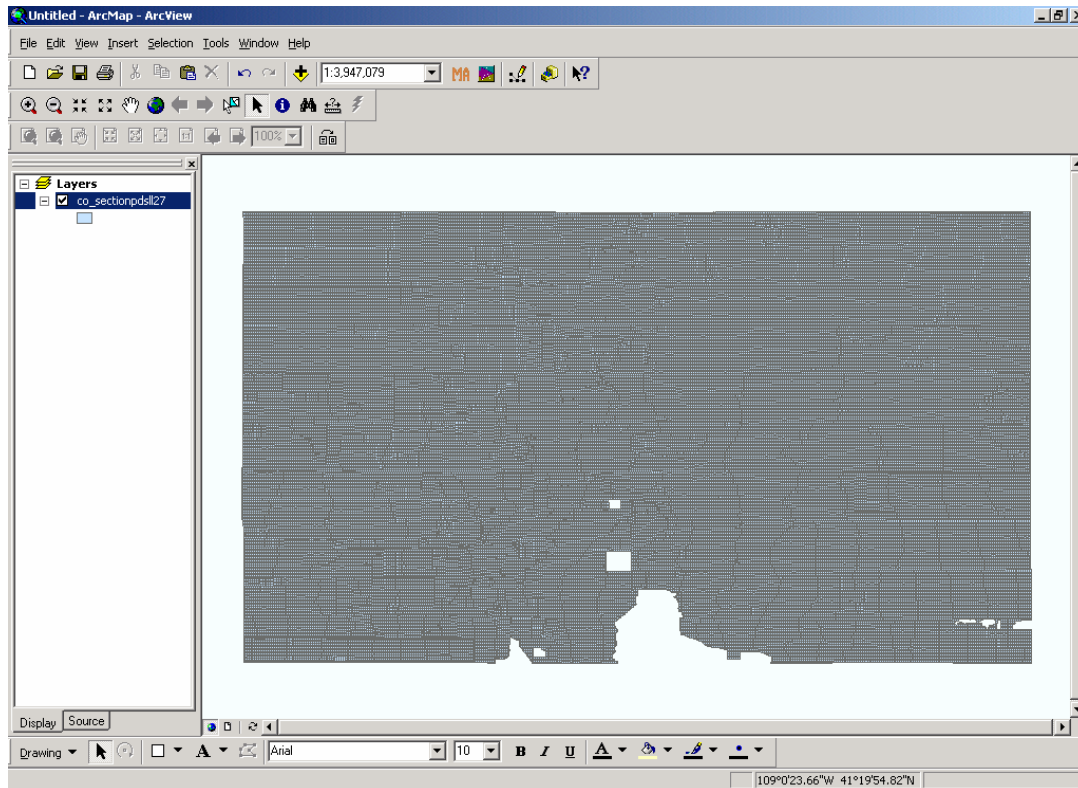
When Coordinate System Information Is Available

CarteView supports output in either the input land grid coordinate system or that of the data frame. By default, the output will be in the coordinate system of the input land grid. When you want the output shape file in a different coordinate system, you can change the ArcMap data frame projection and choose to have your output in that projection. For example, if your input grid is in Geographic (lat/long) NAD 27, CarteView can generate your output in State Plane, UTM, or any of the other ESRI-supported projections with a NAD27, NAD83 or other supported datum. If you just want to view your data in these projections, CarteView can keep your output in Geographics, and ArcMap will reproject it only for display.

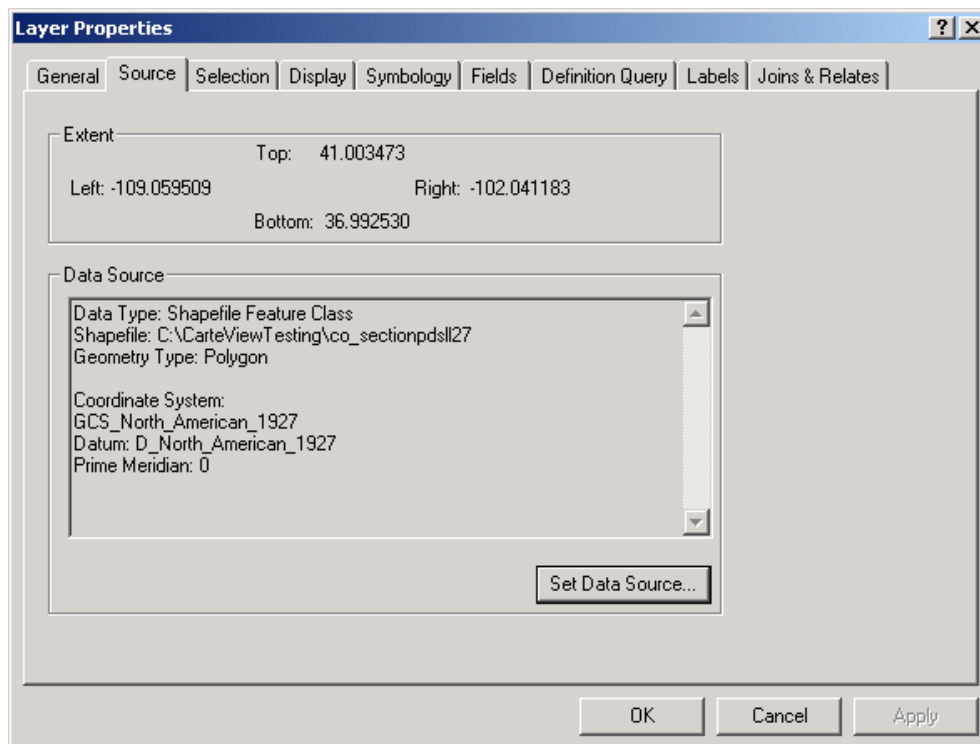
The CarteView dialog box has a toggle for selecting the land grid or data frame projection.



To view the spatial reference property of a layer, right click on it in the legend to bring up the *Layer Properties* dialog box.

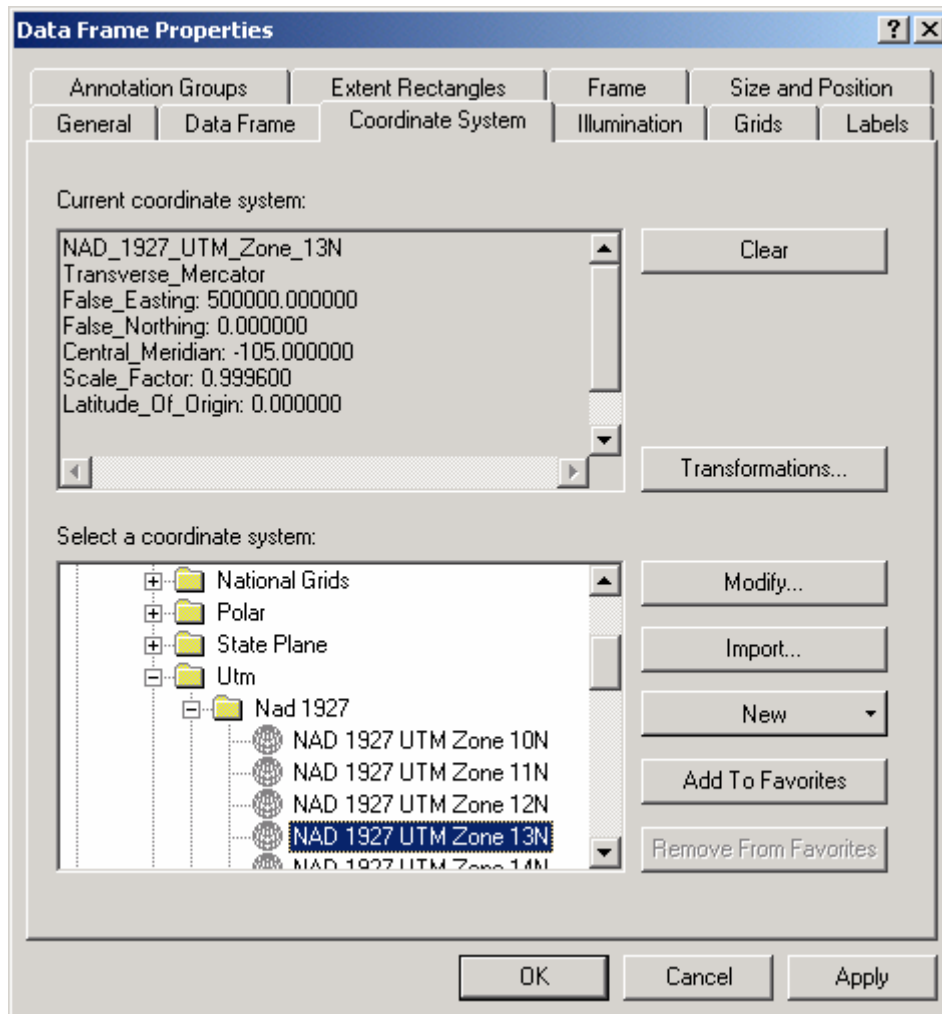


Choose the *Source* tab.

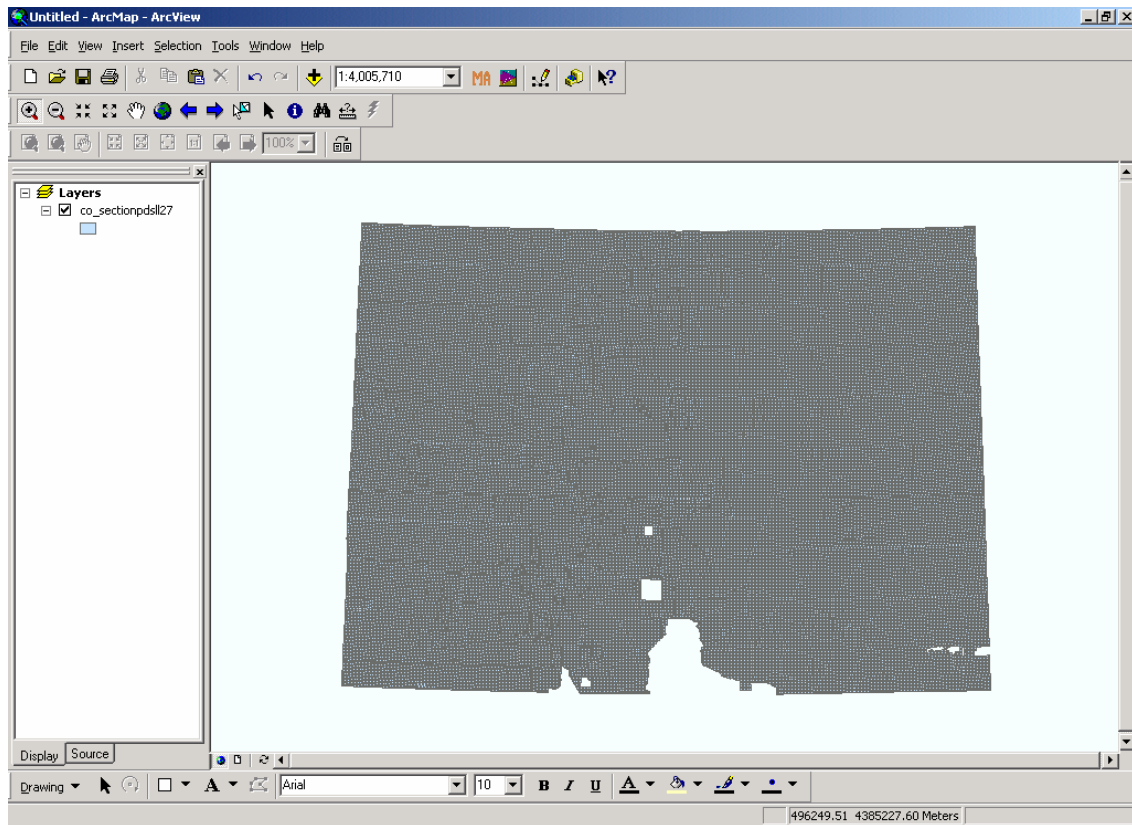


To set the coordinate system of the data frame to something other than the first layer added to that data frame, follow the steps below from ESRI's ArcGIS Desktop Help:

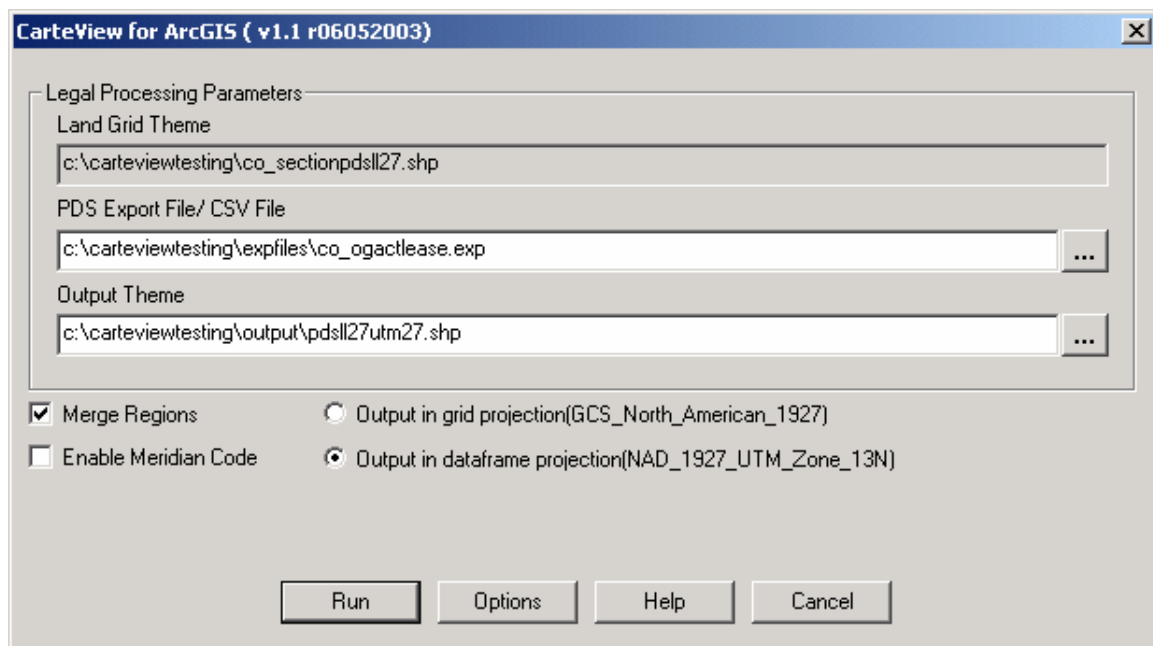
1. Right-click the data frame that you want to set the coordinate system of and click Properties.
2. Click the Coordinate System tab.
3. Double-click Predefined.
4. Navigate through the folders until you find the coordinate system you want and click it.
5. Click OK. All layers in the data frame will now be displayed with that coordinate system.



Your map will have changed coordinate systems and depending on the extent and projection chosen, its appearance.

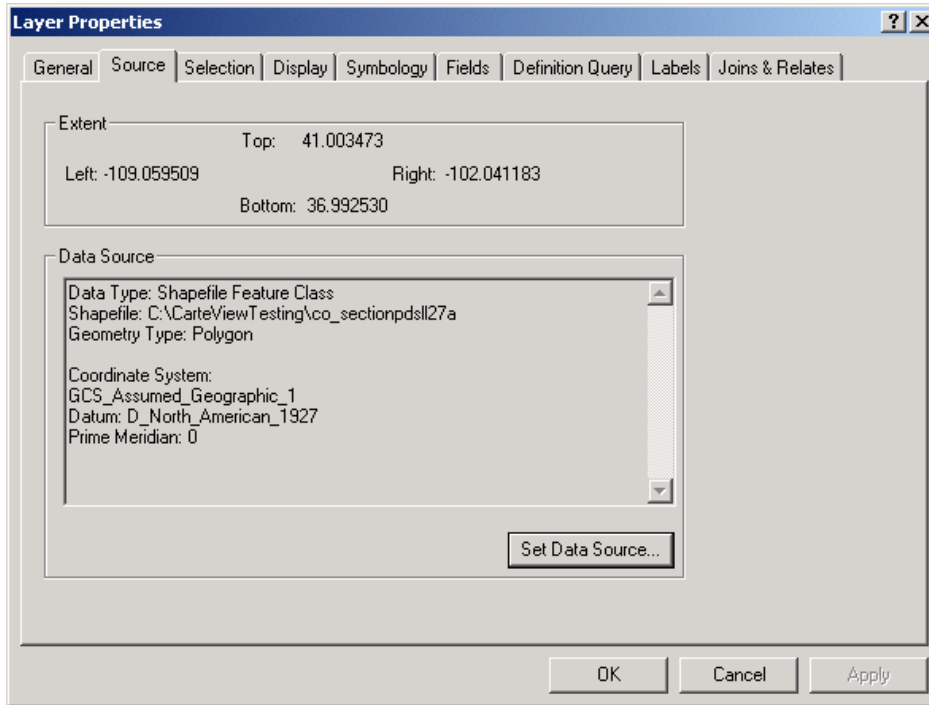


You can now choose either the land grid projection or the data frame projection for your CarteView output.

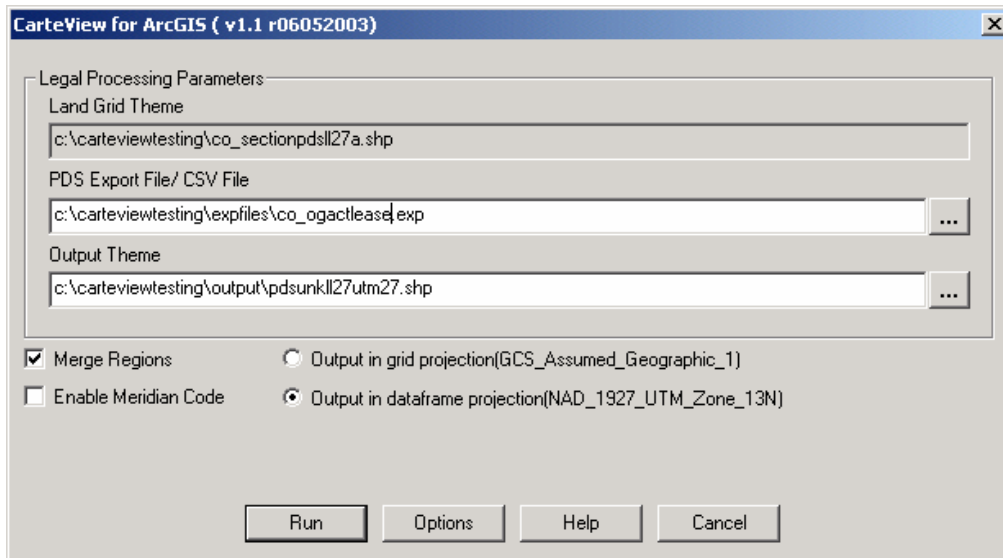


When No Coordinate System Information Is Available

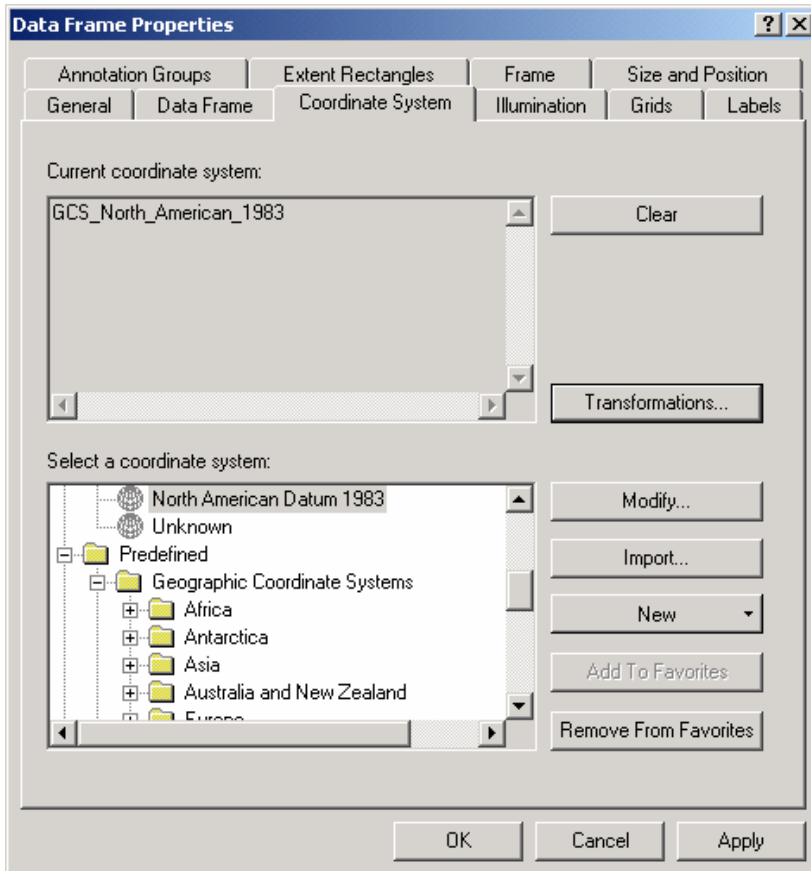
When a land grid shapefile or coverage does not have any information defining its coordinate system, CarteView follows the ArcMap model for determining the possible projection of the map. There are two basic behaviors. If the map's extent is within the range of -180 and 180 in the x direction and -90 and 90 in the y direction, ArcMap and CarteView assume the data to be geographic and its datum to be NAD27. In this case, the land grid's Spatial Reference property will be *GCS_Assumed_Geographic_1*. To view the spatial reference property of a layer, right click on it in the legend to bring up *Layer Properties* dialog box. Choose the *Source* tab.



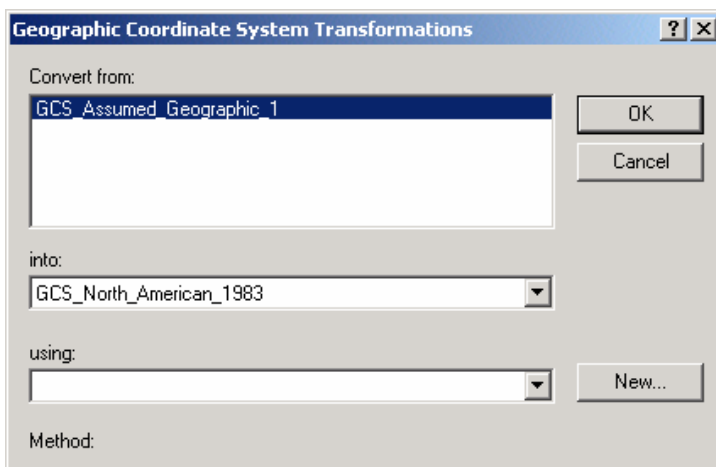
CarteView will be able to generate the output shape file in either this assumed coordinate system or in the coordinate system of the data frame.



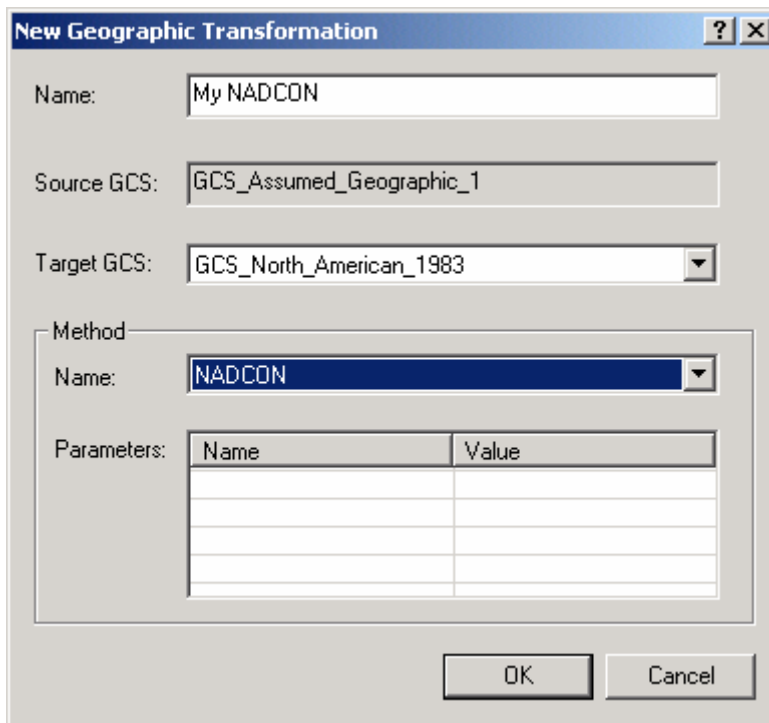
Note however, that when the spatial reference property of a layer is *GCS_Assumed_Geographic_1*, ArcMap does not automatically perform datum shifts. Therefore, any datum shift used on the data frame coordinate system will not be calculated correctly in the output shapefile unless you define a datum transformation for ArcMap to use. For example, if the land grid is really in Geographic NAD 27, you must tell it to use the NADCON translation method to go from *GCS_Assumed_Geographic_1* to any coordinate system that uses NAD 83. In the following example, you are changing the data frame to Geographic with a NAD 83 datum. After selecting the new coordinate system, press the *Transformations...* button.



There are no predefined transformations from which to choose. Select *New...*

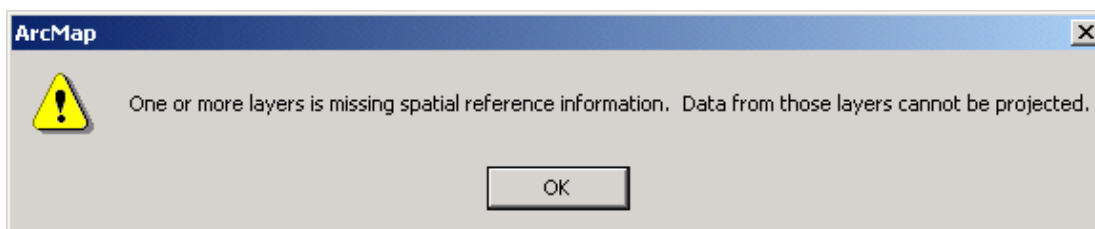


Choose the NADCON method, give your transformation a name, and press *OK*.

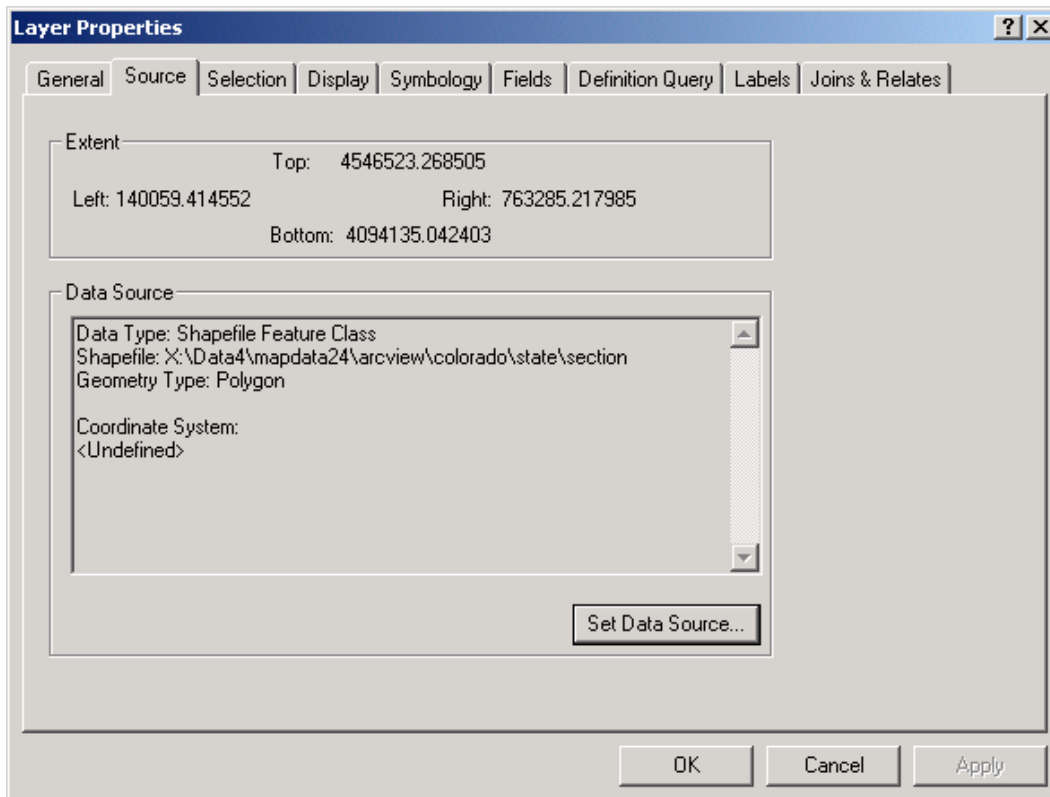


Press *OK* in the *Geographic Coordinate System Transformations* dialog box and *OK* on the *Data Frame Properties* dialog box to accept the new transformation. Your datum shift will now work properly between NAD 27 and NAD83. See the ArcGIS Desktop Help section on *Geographic transformation methods* for more information.

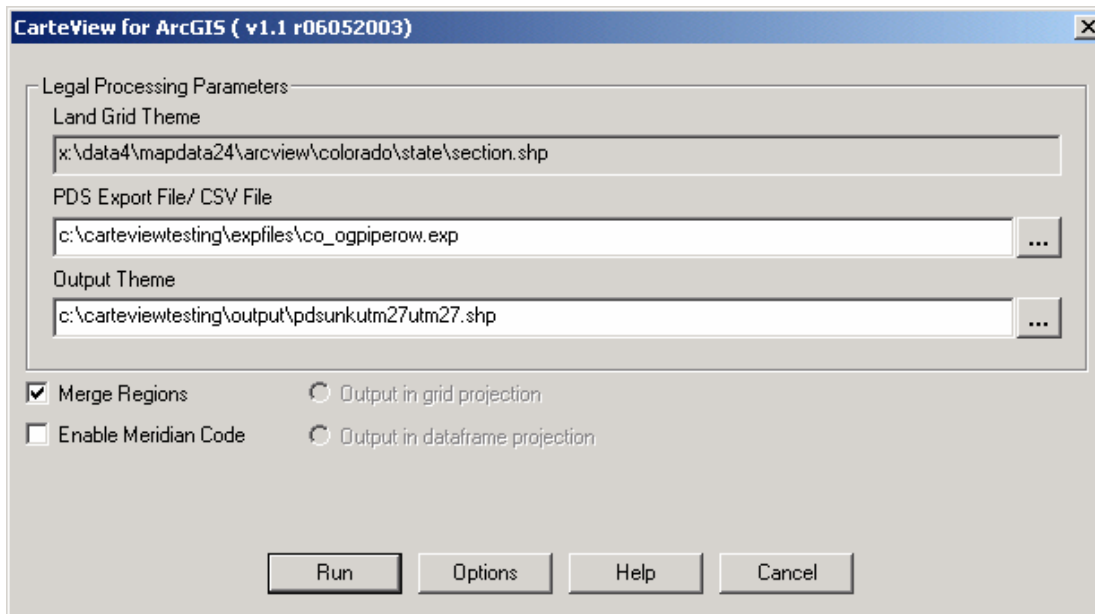
When the land grid shapefile or coverage does not have any projection information and its extent is outside the range of -180 to 180 in the x direction and -90 to 90 in the y direction, CarteView and ArcMap do not make any attempt to determine the projection. When you add the land grid to the data frame ArcMap displays the following warning message:



The land grid's Spatial Reference property will be "Undefined".



The CarteView check boxes for choosing a projection are ghosted, you are not allowed to choose a projection. You are shown a message stating that the land grid projection is unknown and no reprojection is possible.



The CarteView output file will actually be in the projection of the input grid, even though it is unknown to ArcMap and CarteView. Note that you can change the coordinate system of the data frame, but it will have no effect on either the ArcMap display or the CarteView results.

How to Define a Coordinate System for a Layer

You can define shapefile and coverage coordinate systems in ArcCatalog or ArcToolBox. You can select one of the predefined coordinate systems provided by ESRI, import the coordinate system parameters used by another map, or define a new coordinate system. You must know what the coordinate system of the land grid actually is before you define it. Setting the definition file will not actually make the data stored in that coordinate system; it only informs ArcMap and CarteView of the projection so they may perform accordingly. As a *very general rule* for many land grids in the US:

- If the Y coordinates are within 0-90, the projection is Geographics.
- If the Y coordinates are in the hundreds of thousands, the projection is State Plane.
- If the Y coordinates are in the millions, the projection is UTM.

There are three maps at the end of this document that show where the UTM and State Plane boundaries are for the Western United States. If your data extends farther than a single zone, it is most likely in the zone that covers the majority of the area. Note that there is no general rule for determining the datum of the data. At present, most data is in either NAD 27 or NAD 83.

A shapefile's coordinate system parameters are stored in the same location as the shapefile, in a .prj file with the same name as the shapefile.

To activate ArcCatalog from ArcMap, simply press the ArcCatalog button on the toolbar. The following instructions are from ESRI's ArcGIS Desktop Help for ArcCatalog, under the title *Defining a shapefile's coordinate system*:

1. Click the shapefile whose coordinate system you want to define.
2. Click the File menu and click Properties.
3. Click the Fields tab.
4. Click the Shape column in the column list.
5. In the Properties list below, click the ellipses button (...) next to the Spatial Reference property.
6. In the Spatial Reference Properties dialog box, click Select and then choose a predefined coordinate system.

Or, click Import and then choose the data source whose coordinate system parameters you want to copy. Or, click New, click Geographic or Projected, and then define a new, custom coordinate system.

7. Click OK in the Spatial Reference Properties dialog box.

In the Shapefile Properties dialog box, the name of the coordinate system appears next to the Spatial Reference property in the Field Properties list.

8. Click OK in the Shapefile Properties dialog box

A coverage's coordinate system parameters are stored in the same location as the other coverage files (e.g. the gcdb directory), in a file named prj.adf. You must have an ArcInfo or ArcEdit license to generate the prj.adf file for a coverage; an ArcView license will not provide this capability.

To activate ArcCatalog from ArcMap, simply press the ArcCatalog button on the toolbar. The following instructions are from ESRI's ArcGIS Desktop Help for ArcCatalog, under the title *Defining a coverage's coordinate system*:

1. Click the coverage whose coordinate system you want to define.
2. Click the File menu and click Properties.
3. Click the Projection tab.
4. Click Define.
5. Click Next.
6. Click the appropriate coordinate system in the Projections list on the left.

A description of the coordinate system appears on the right.

7. Click Next.
8. Enter the appropriate parameter values for the coordinate system; each one has a different set of parameters.
9. Click Next.
10. If the coverage uses a projected coordinate system, click the datum it uses, or click Spheroid and define the spheroid's parameters.
11. Click Next.
12. Review the summary of the coordinate system that will be assigned to the coverage. If you want to change something, you can go back through the wizard by clicking the Back button. Click Finish if you want to use this coordinate system.

The coordinate system and its parameters now appear in the Coverage Properties dialog box.

13. Click OK.

Available On-Line Help

The following is a list of ArcGIS Desktop Help topics that may be of interest. To get help for ArcMap, select *Help* from the menu bar, and then choose *ArcGIS Desktop Help*. Use the Search tab to find these titles. If you check *Search titles only* in the bottom left corner of the ArcGIS Desktop Help screen, you will find the exact topic entered. If you check *Match similar words*, you will find similar articles that may also help you learn more about map projections, datums, and coordinate systems.

Specifying a coordinate system
Defining a shapefile's coordinate system
Defining a coverage's coordinate system

Universal Transverse Mercator
State Plane Coordinate System
Geographic Coordinate System
Datums
North American datums
U.S. state plane zones (NAD 1983)
U.S. state plane zones (NAD 1927)
Geographic transformation methods

About coordinate systems
About map projections
About projected coordinate systems
About geographic coordinate systems

The screenshot shows the ArcGIS Desktop Help application window. The search bar contains 'geographic coordinate' and the search results table is displayed below it. The article 'Geographic transformation methods' is selected and its content is shown in the main pane. The article includes a diagram showing the transformation from NAD 1927 to WGS 1984 and a 3D diagram of a geocentric coordinate system.

ArcGIS Desktop Help
File Edit View Go Help

Hide Back Forward Print Options

Contents Index Search Favorites

Type in the word(s) to search for:
geographic coordinate

List Topics Display

Select topic: Found: 2

Title	Location	Rank
About geographic coordinate ...	Map projections	1
Geographic Coordinate System	Map projections	2

Geographic transformation methods

[Related topics](#)

Moving your data between coordinate systems sometimes includes transforming between the [geographic coordinate systems](#).

Input geographic coordinate system
NAD 1927

Output geographic coordinate system
WGS 1984

Because the geographic coordinate systems contain datums that are based on [spheroids](#), a geographic transformation also changes the underlying spheroid. There are several methods, which have different levels of accuracy and ranges, for transforming between datums. The accuracy of a particular transformation can range from centimeters to meters depending on the method and the quality and number of control points available to define the transformation parameters.

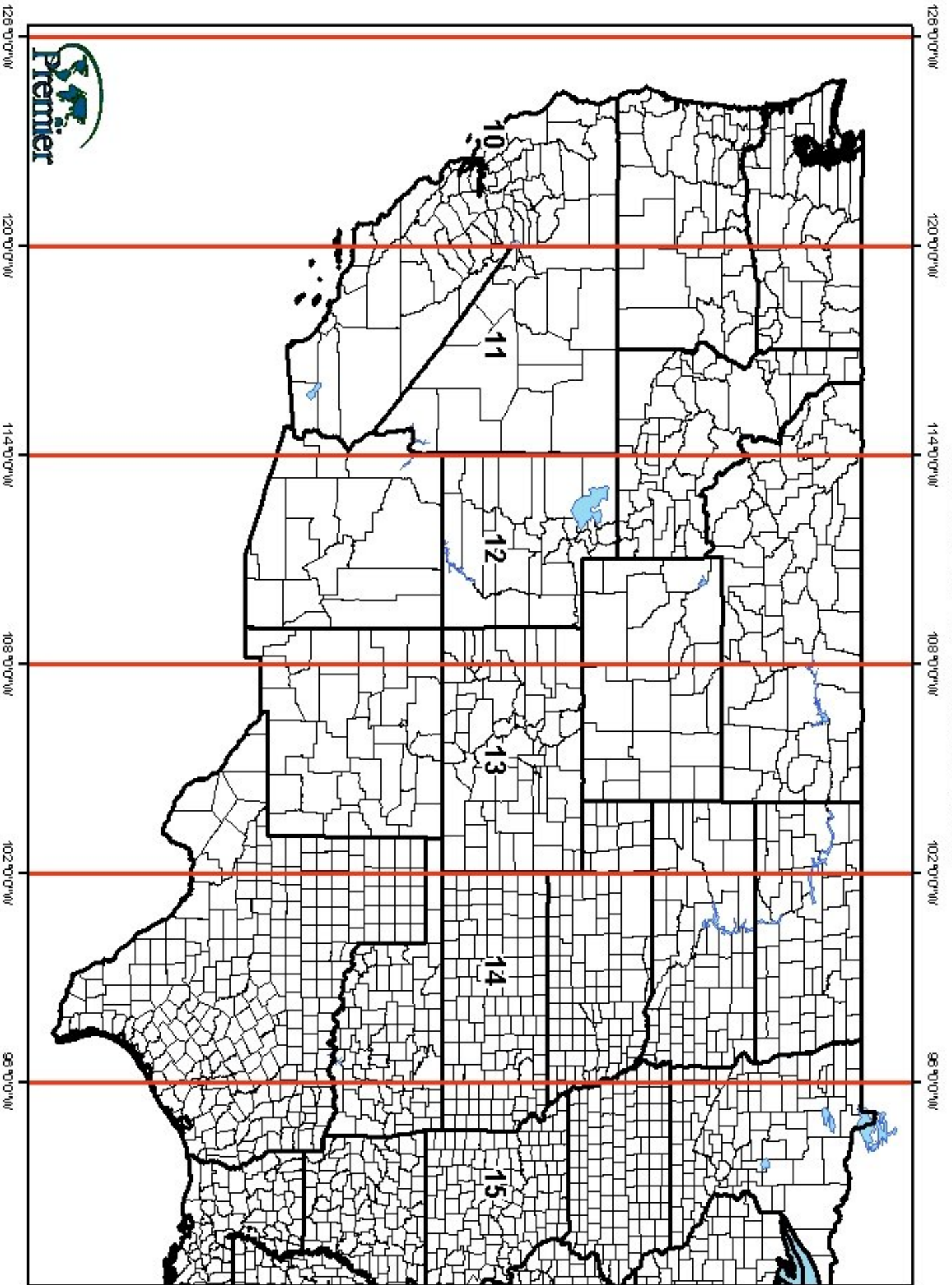
A geographic transformation always converts geographic (longitude-latitude) coordinates. Some methods convert the geographic coordinates to geocentric (X,Y,Z) coordinates, transform the X,Y,Z coordinates, and convert the new values back to geographic coordinates.

These include the Geocentric Translation, Molodensky, and Coordinate Frame methods. See [Equation-based methods](#) for more information.

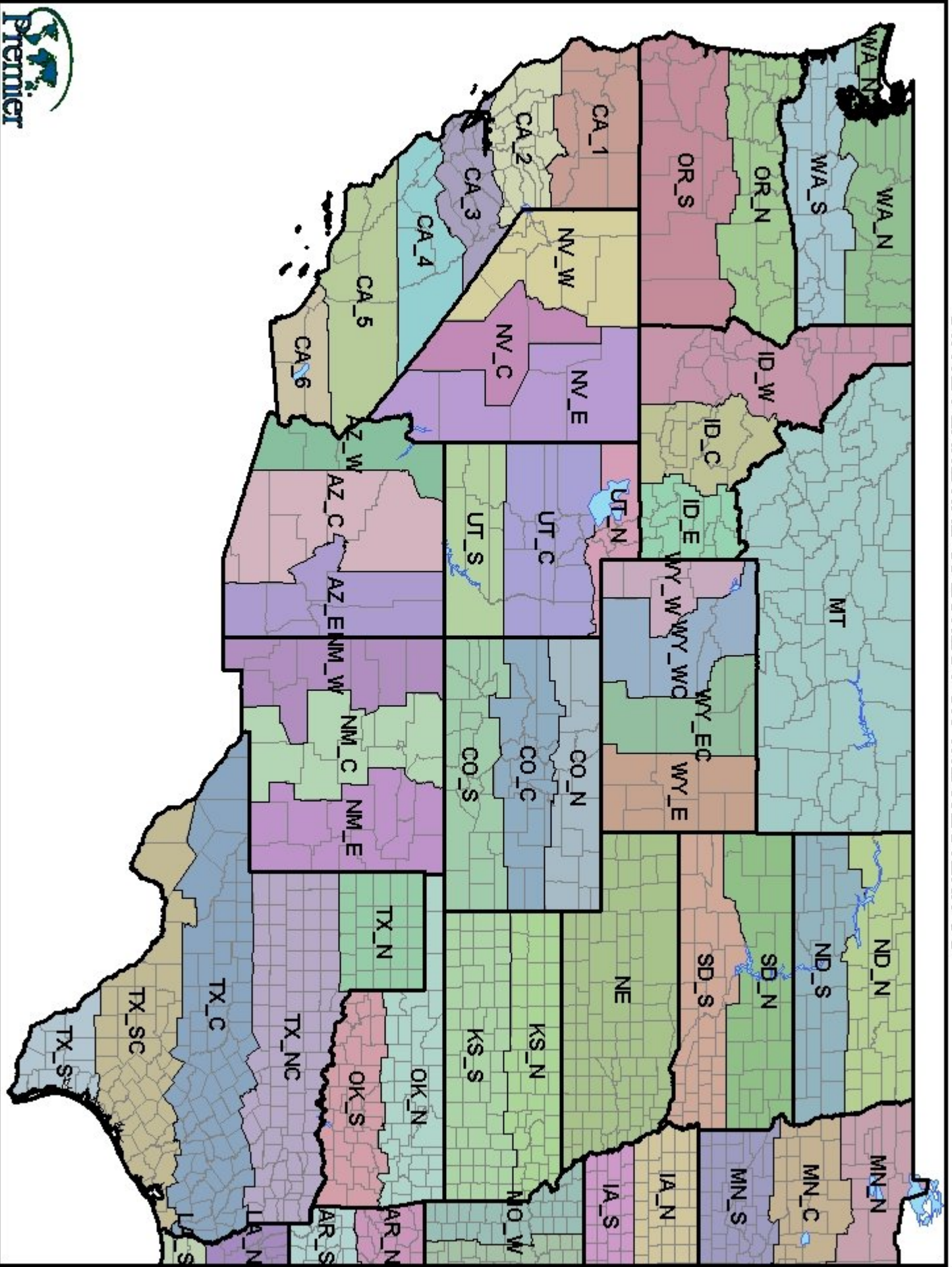
Other methods such as NADCON and NTv2 use a grid of differences and convert the longitude-latitude values directly. See [Grid-based methods](#) for more information.

Search previous results
 Match similar words
 Search titles only

UTM ZONES FOR THE WESTERN US



STATE PLANE NAD 83 ZONES FOR THE WESTERN US



Appendix B. Adding the CartéView Command to ArcMap

After you finished installing ArcGIS and CartéView for ArcGIS, you must manually add the CartéView command to the ArcMap toolbar.

- Start ArcMap.
- Click the Tools menu and click the Customize option.
- Select the Commands tab and click the Add from file... button.
- Navigate to the "\\arcgis\arcexe81\Bin" folder and select the "CVArcMap.dll" file and click the Open button.
- The "Added Objects" dialog should display listing CarteViewForArcMap in the dialog. Click OK.
- The Commands tab in the "Customize" dialog should now have Premier Data Services listed under the Categories list and CarteView listed as the corresponding command under the Commands list.
- Click and drag the CarteView command from the Commands list and drop it on the toolbar.
- Click the Close button.

You will now see the CartéView button on the toolbar every time you open ArcMap.