

CST
Customer Service Toolkit

**GIS Data Layers for
NRCS Field Offices**

Toolkit

Next Generation



- Purpose is to provide the field offices a more efficient way to access and view ancillary GIS layers from the geodata server (F:\geodata\).
- GIS layers can be accessed by adding only one “.lyr” file to a current Toolkit project. This one file can be added to an ArcMap project, but will add multiple layers instead of a single layer.
- This “.lyr” file is located in **F:\geodata\project_data\nrcs\Toolkit**.
- These data layers can be saved into a new Toolkit template for new customers projects, and would eliminate the confusion of what data layers are available or where they are located.

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To access this layer file in CST:

1. Click the “Add Data” icon.

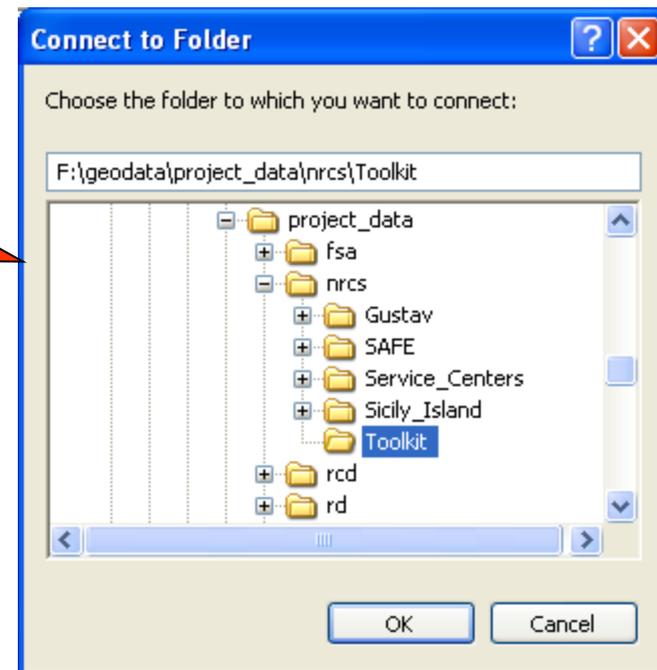
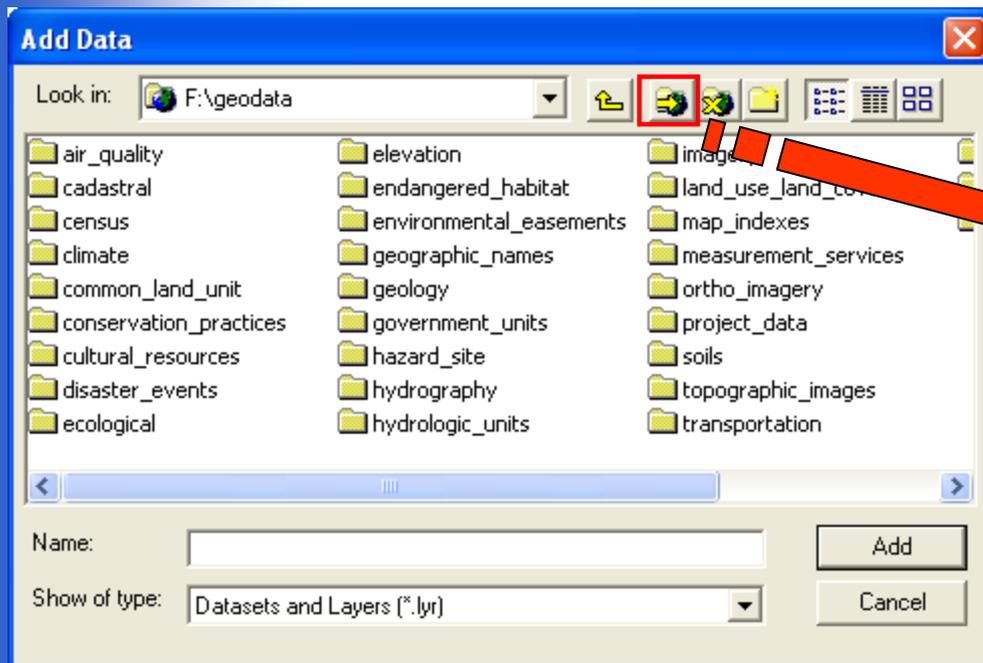


2. Click the “Connect to Folder” icon.



3. Within the “Connect to Folder” box, navigate to the

F:\geodata\project_data\nrcs\Toolkit directory, then click “OK”.

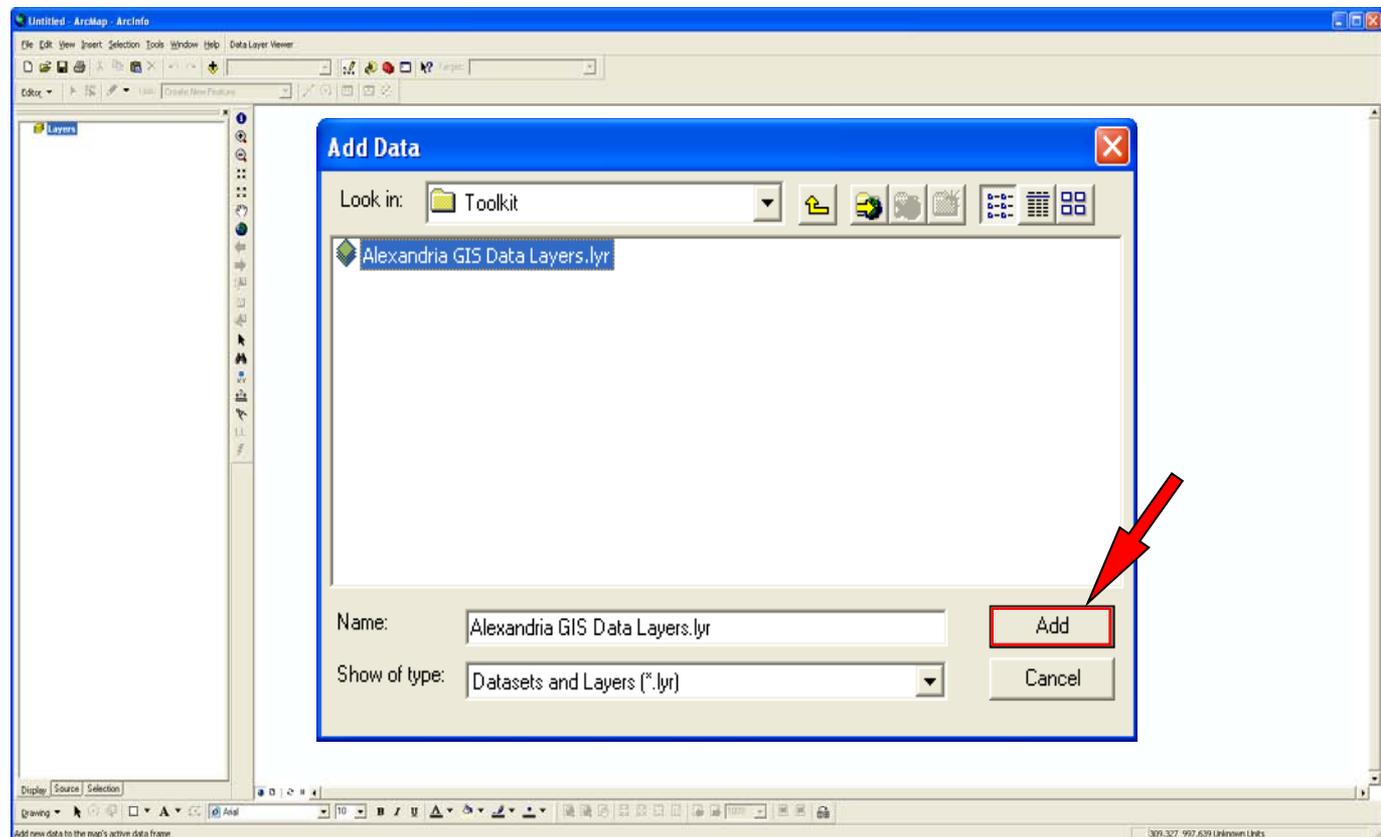


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The “.lyr” file will appear in the “Add Data” box.

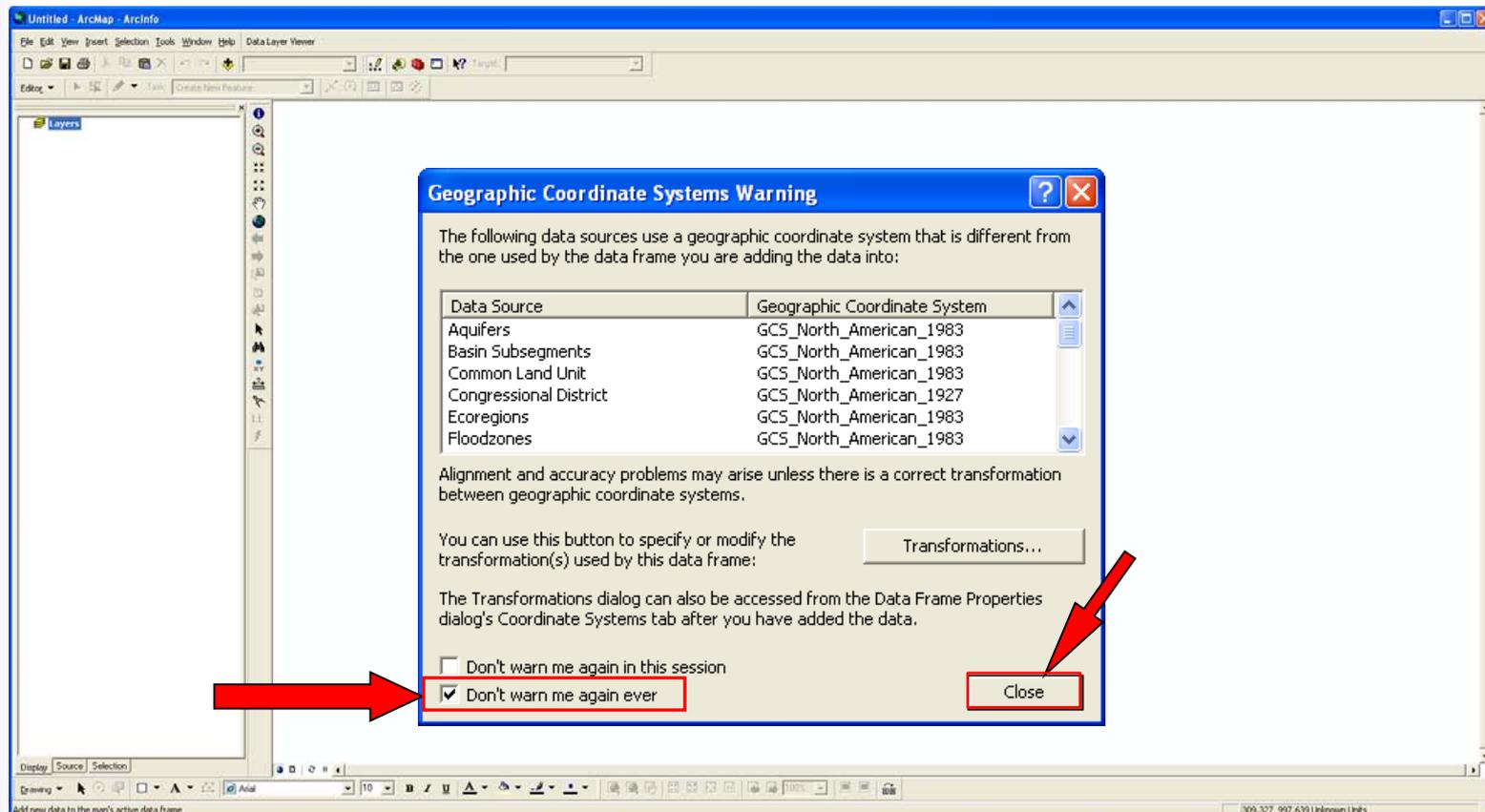
Double-click on the file, or click the file once then press “Add”.



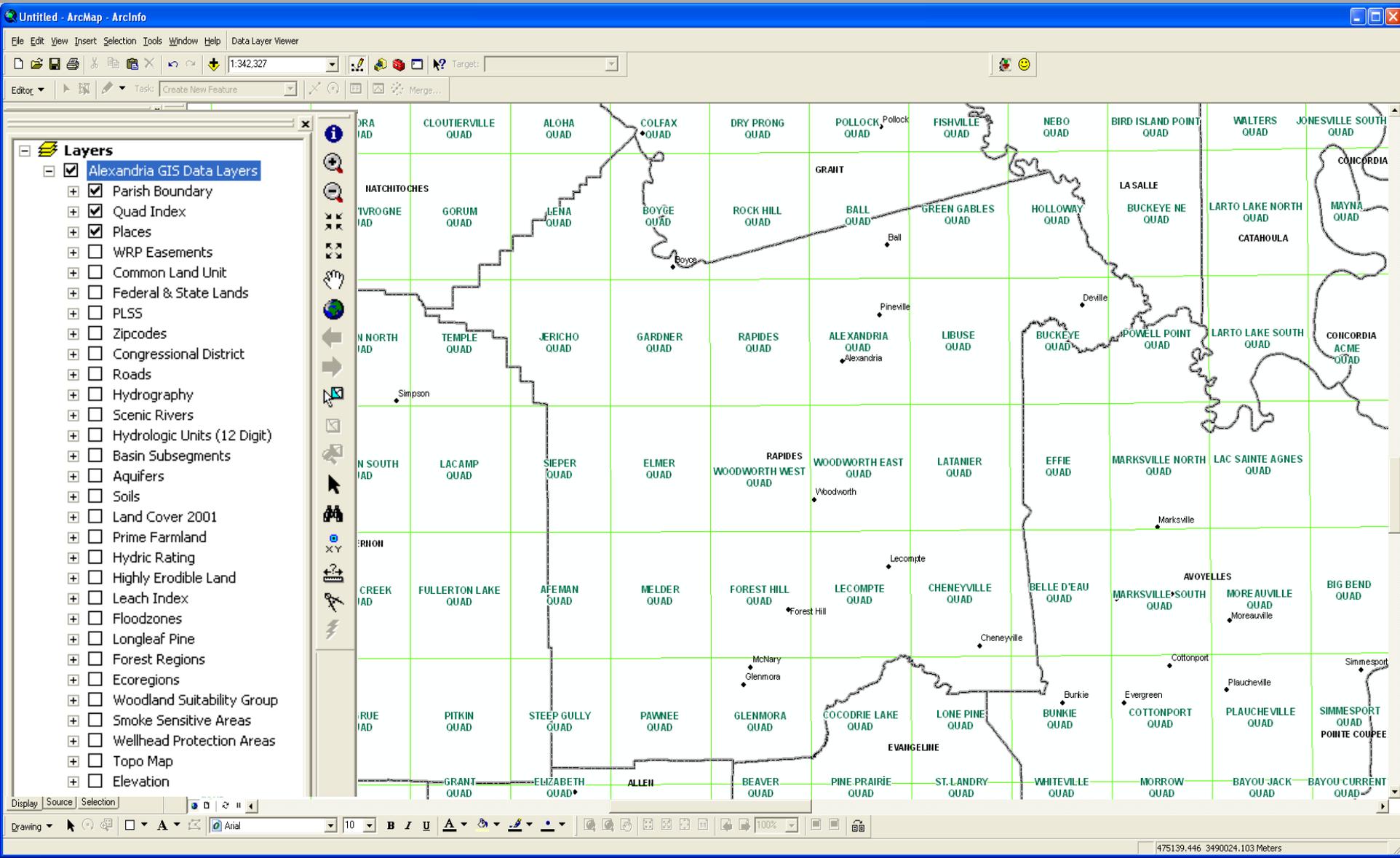
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If there is a warning message, click “Don’t warn me again ever” option, then close out of the box. All of the layers should re-project (if needed) into UTM. Then click “Close”.



Currently, there are over 30 GIS layers included in this “.lyr” file. Field offices will be notified when new GIS data layers and updates become available.

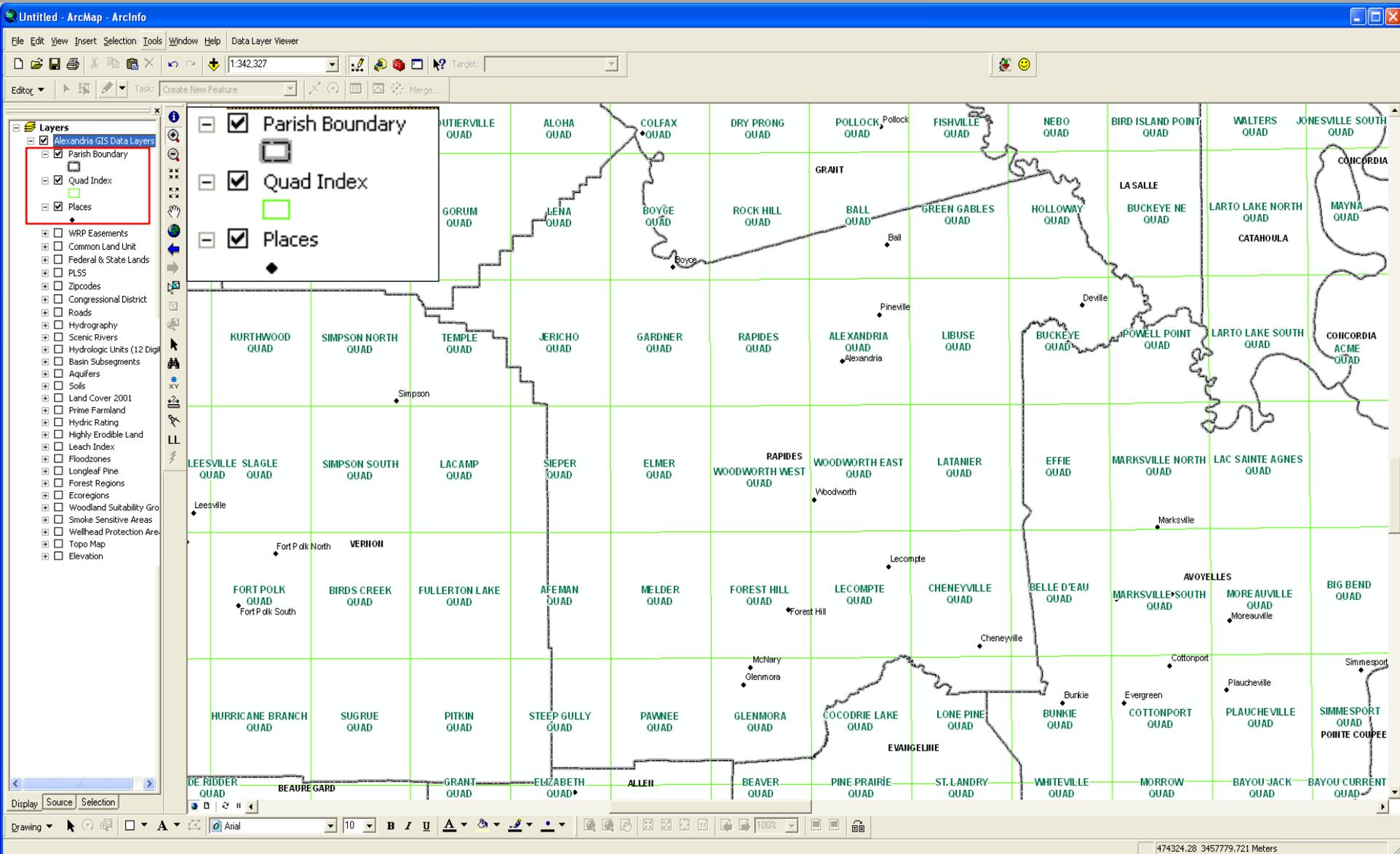


These layers include:

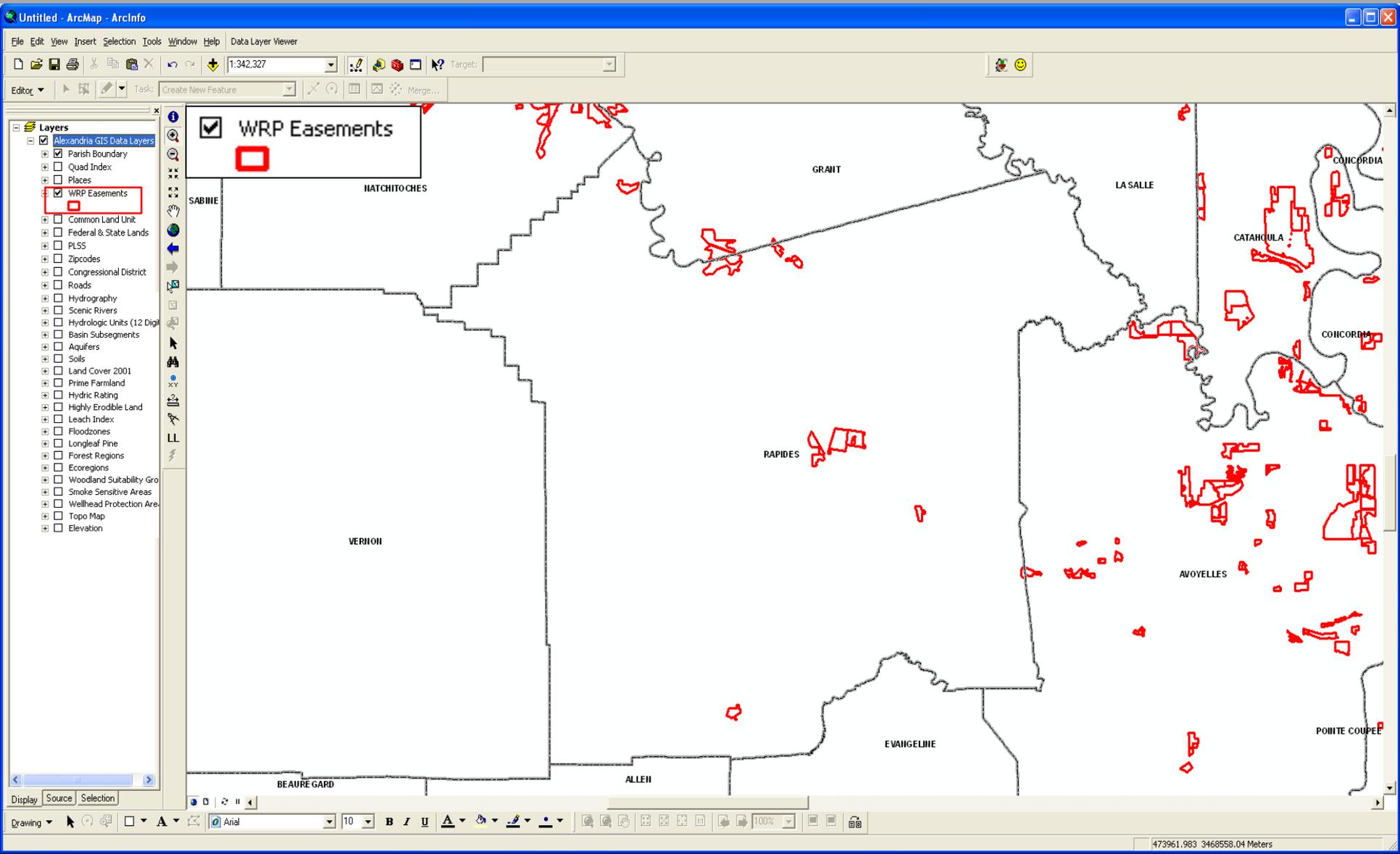
Parish Boundary: Boundary of Louisiana parishes.

Quad Index: Boundary of quadrangles (7.5-minute topo) at 1:24,000 scale.

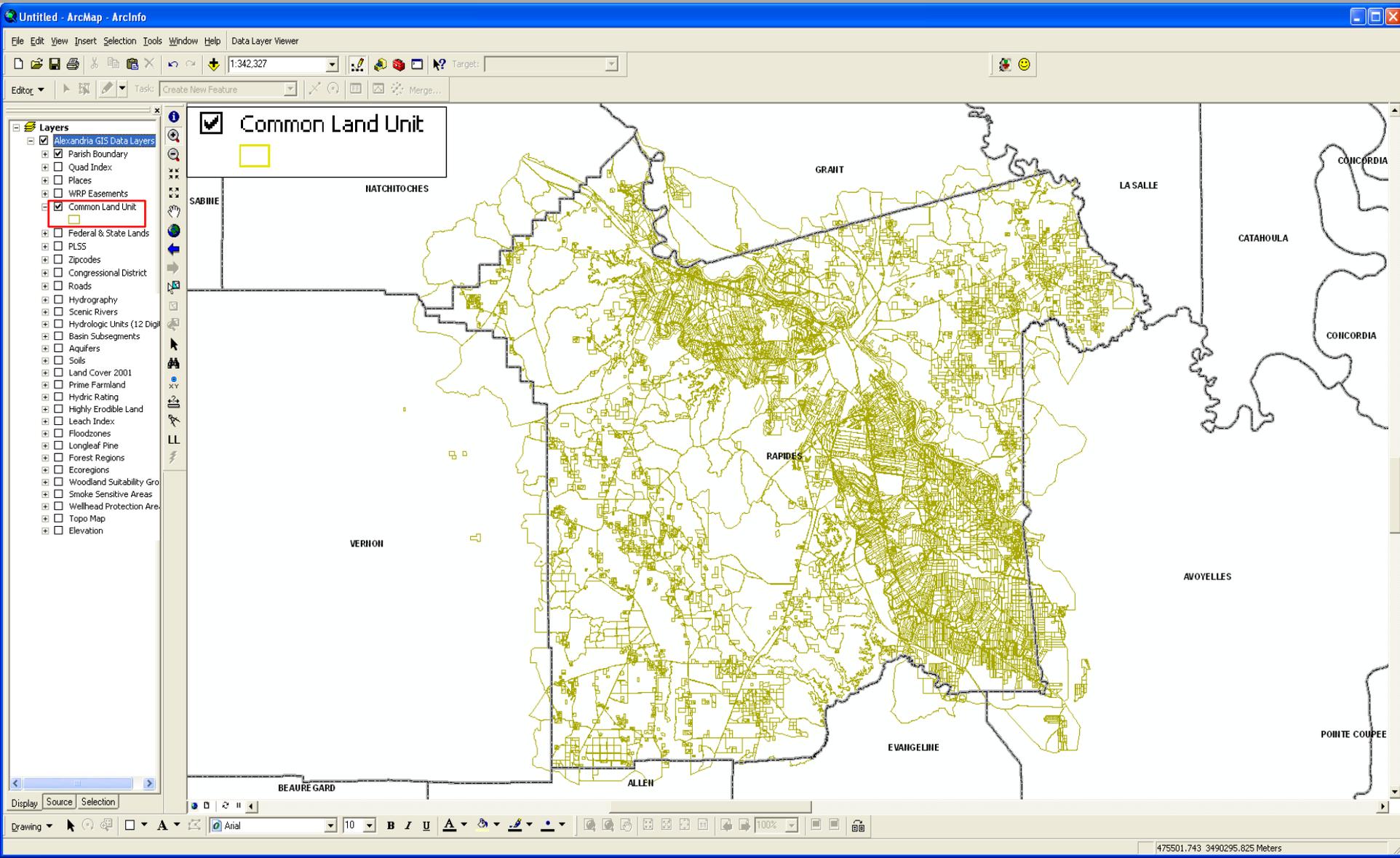
Places: Towns and cities of Louisiana.



WRP Easements: Wetlands Reserve Program easement boundaries.

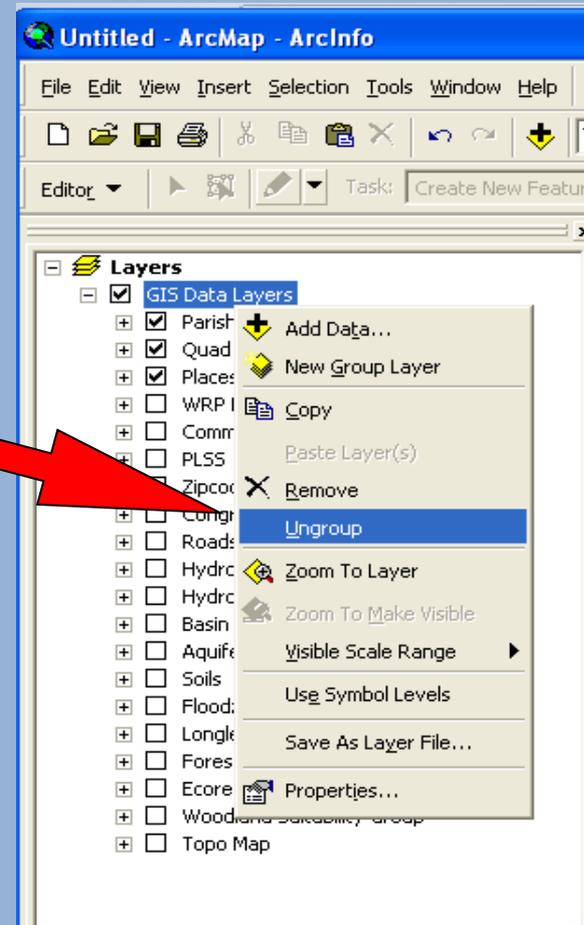
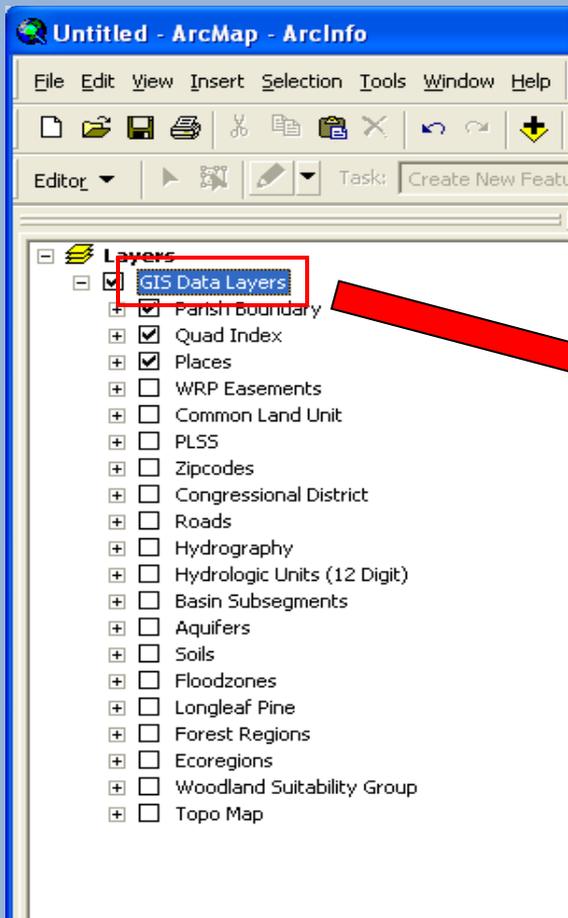


Common Land Unit: – Copy of the original CLU data layer that is administered by FSA.



Common Land Unit: (Cont.)

Please Note: In order for Customer Service Toolkit to work properly with the Common Land Unit layer, you either have to ungroup the “GIS Data Layers”

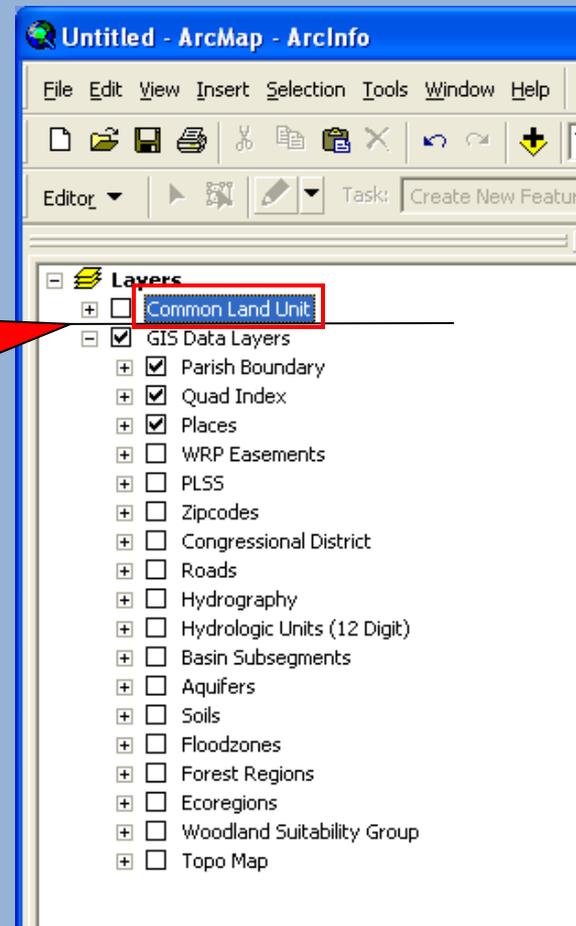
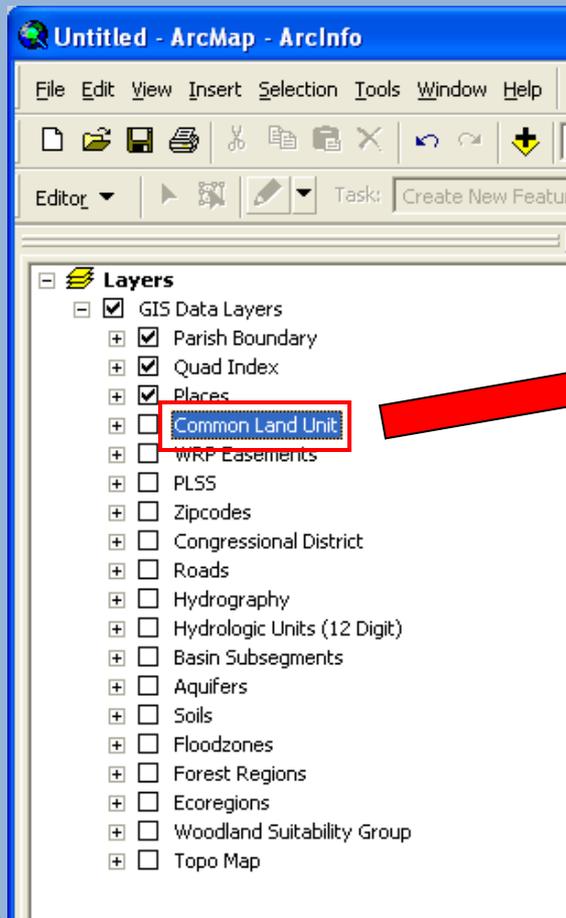


- Right click “GIS Data Layers” group

- Select “Ungroup”

Common Land Unit: (Cont.)

.....OR “drag and drop” the Common Land Unit layer outside of the “GIS Data Layers” group.

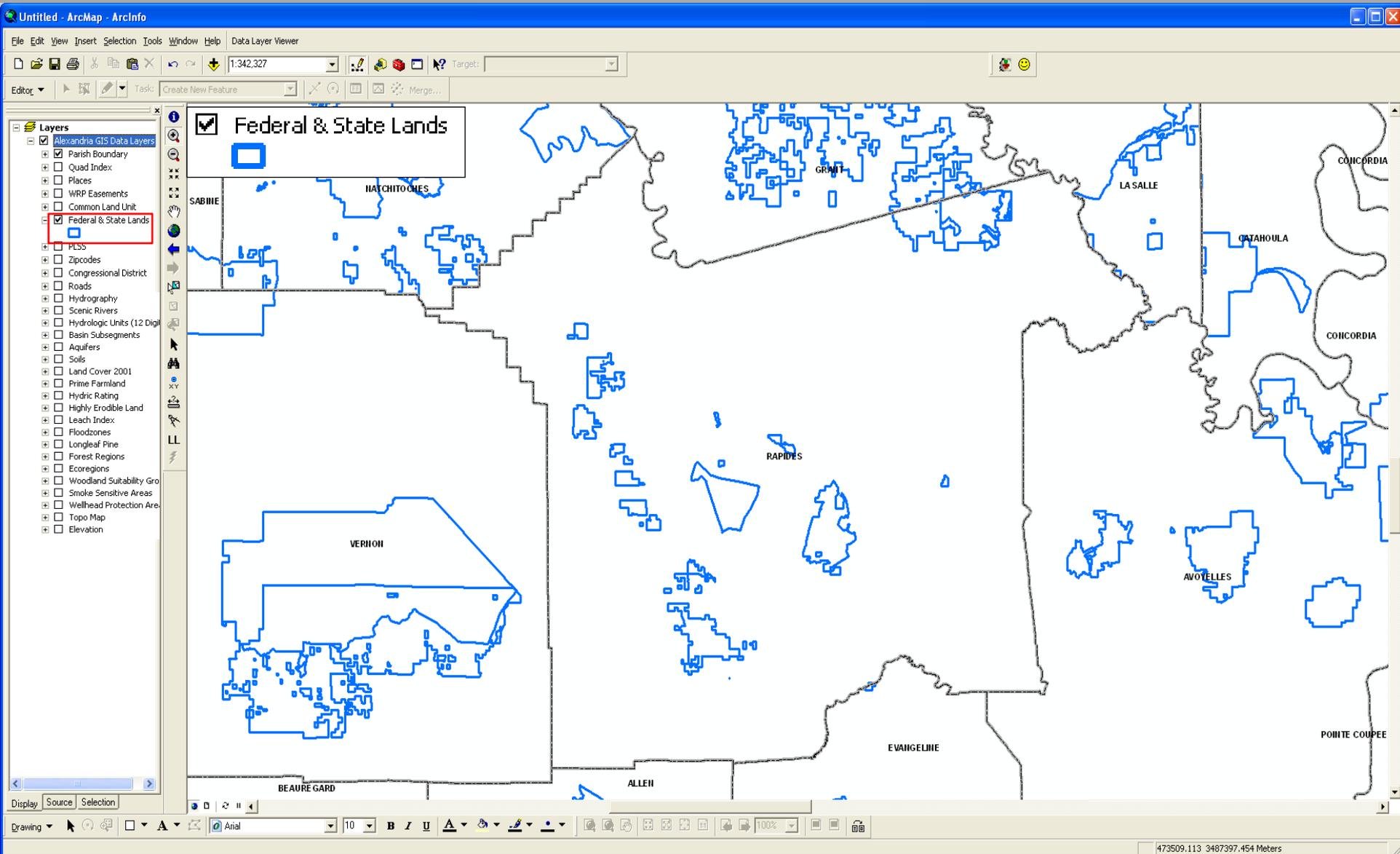


- Click left button on mouse on CLU.

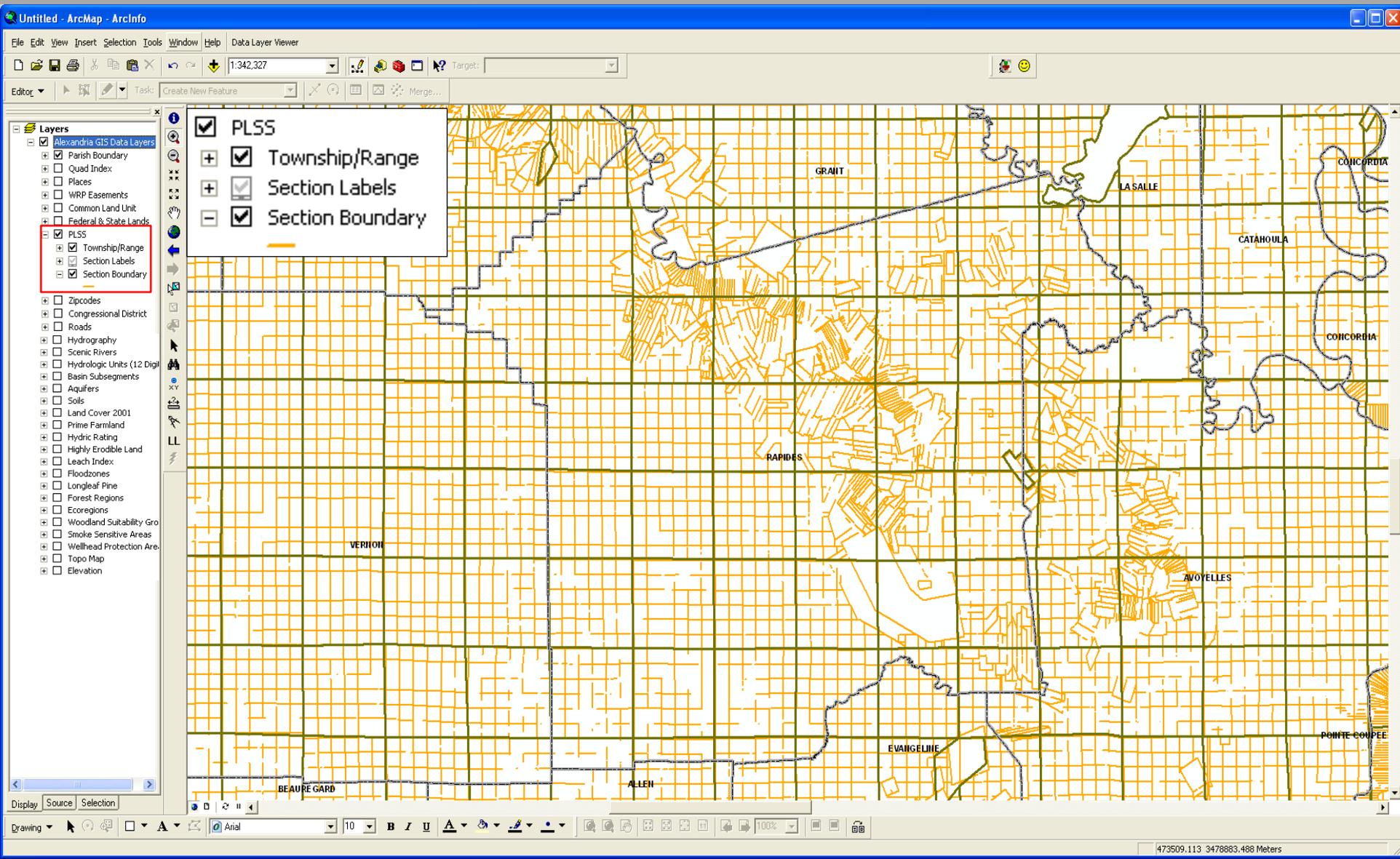
- Drag on top of “GIS Data Layers” group.

- Release button.

Federal & State Lands: Lands owned and managed by federal and state agencies.



PLSS – (Public Land Survey System) - includes Township, Range, and Section boundaries, digitized from existing topo maps for the entire state.



PLSS: (Cont.) – when zoomed in within 1:250,000, the “Section Labels” point layer will label the sections on the map. Additionally, the attribute table for “Section Labels” contains the SECTN_CALL field that combines township, range, and section into one item.

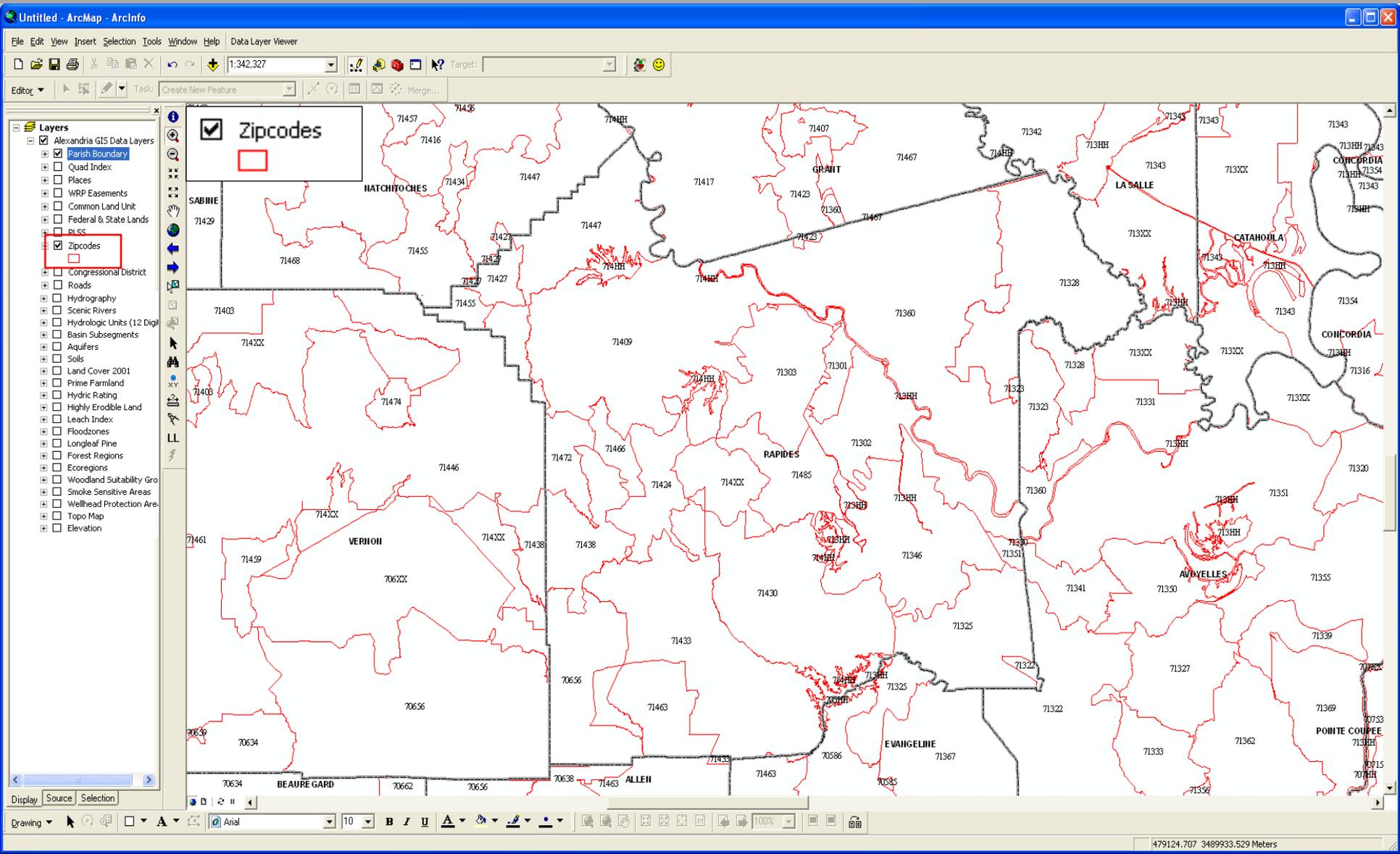
The screenshot shows the ArcMap interface with a map of section boundaries. The legend on the left includes the following layers:

- PLSS (checked)
- Township/Range (checked)
- Section Labels (checked)
- Section Boundary (checked)

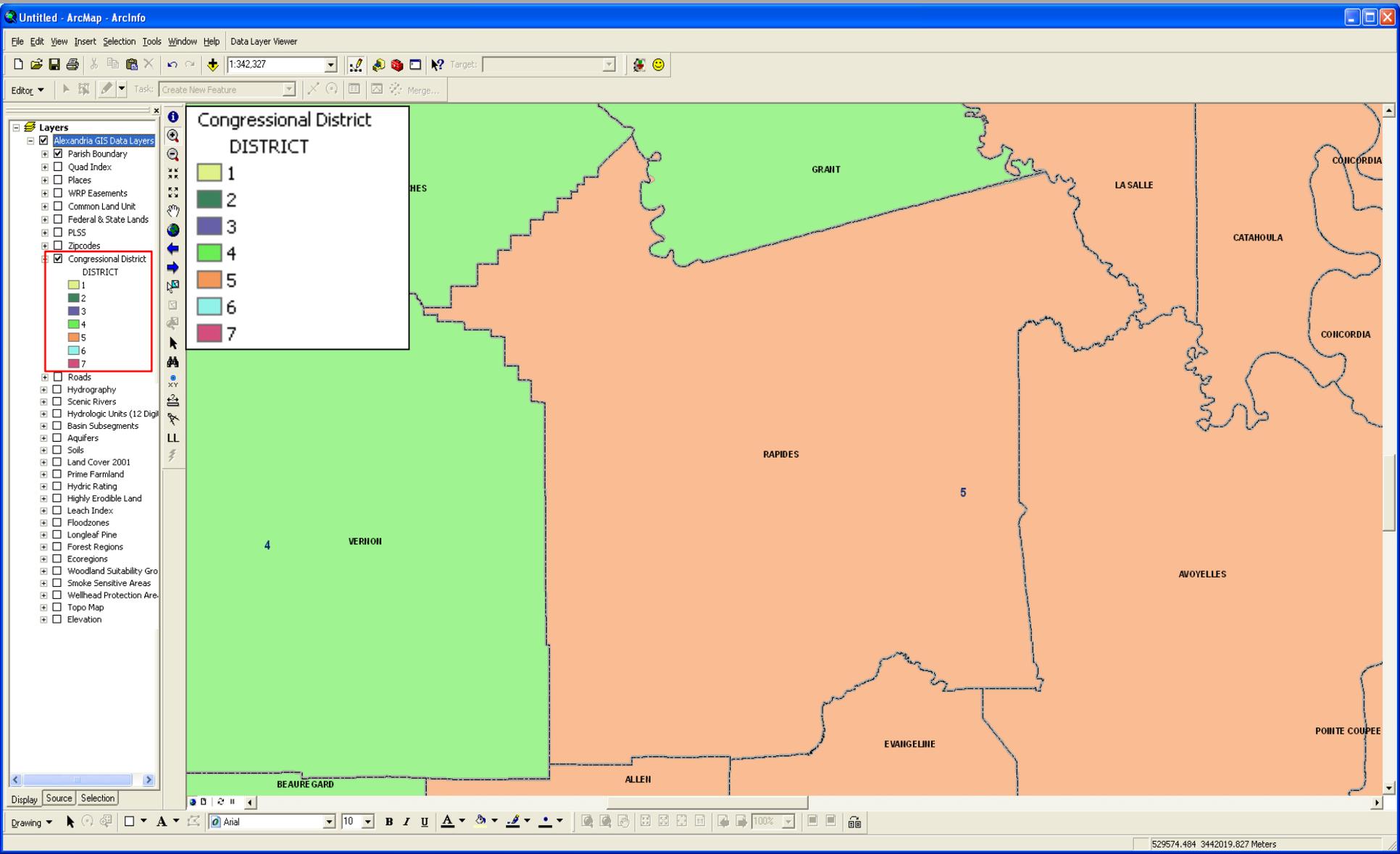
The attribute table window, titled "Attributes of Section Labels", displays the following data:

FID	Shape	SECTN_CALL	TWPNRG_CALL	TOWNSHIP	RANGE	SECTION	MERIDIAN	USGS_BLOCK
0	Point	T19SR28W7.0	T19SR28W	T19S	R28W	7	5th Principal	33094
1	Point	T19SR28W8.0	T19SR28W	T19S	R28W	8	5th Principal	33094
2	Point	T19SR28W18.0	T19SR28W	T19S	R28W	18	5th Principal	33094
3	Point	T19SR28W17.0	T19SR28W	T19S	R28W	17	5th Principal	33094
4	Point	T19SR28W16.0	T19SR28W	T19S	R28W	16	5th Principal	33094
5	Point	T19SR28W15.0	T19SR28W	T19S	R28W	15	5th Principal	33094
6	Point	T19SR28W19.0	T19SR28W	T19S	R28W	19	5th Principal	33094
7	Point	T19SR28W20.0	T19SR28W	T19S	R28W	20	5th Principal	33094
8	Point	T19SR28W21.0	T19SR28W	T19S	R28W	21	5th Principal	33094
9	Point	T19SR28W22.0	T19SR28W	T19S	R28W	22	5th Principal	33094
10	Point	T19SR28W9.0	T19SR28W	T19S	R28W	9	5th Principal	33094
11	Point	T19SR28W10.0	T19SR28W	T19S	R28W	10	5th Principal	33094
12	Point	T19SR28W27.0	T19SR28W	T19S	R28W	27	5th Principal	33094
13	Point	T19SR28W28.0	T19SR28W	T19S	R28W	28	5th Principal	33094
14	Point	T19SR28W29.0	T19SR28W	T19S	R28W	29	5th Principal	33094
15	Point	T19SR28W30.0	T19SR28W	T19S	R28W	30	5th Principal	33094
16	Point	T19SR28W31.0	T19SR28W	T19S	R28W	31	5th Principal	33094
17	Point	T19SR28W32.0	T19SR28W	T19S	R28W	32	5th Principal	33094
18	Point	T19SR28W33.0	T19SR28W	T19S	R28W	33	5th Principal	33094
19	Point	T19SR28W34.0	T19SR28W	T19S	R28W	34	5th Principal	33094
20	Point	T20SR28W6.0	T20SR28W	T20S	R28W	6	5th Principal	33094
21	Point	T20SR28W5.0	T20SR28W	T20S	R28W	5	5th Principal	33094
22	Point	T20SR28W4.0	T20SR28W	T20S	R28W	4	5th Principal	33094

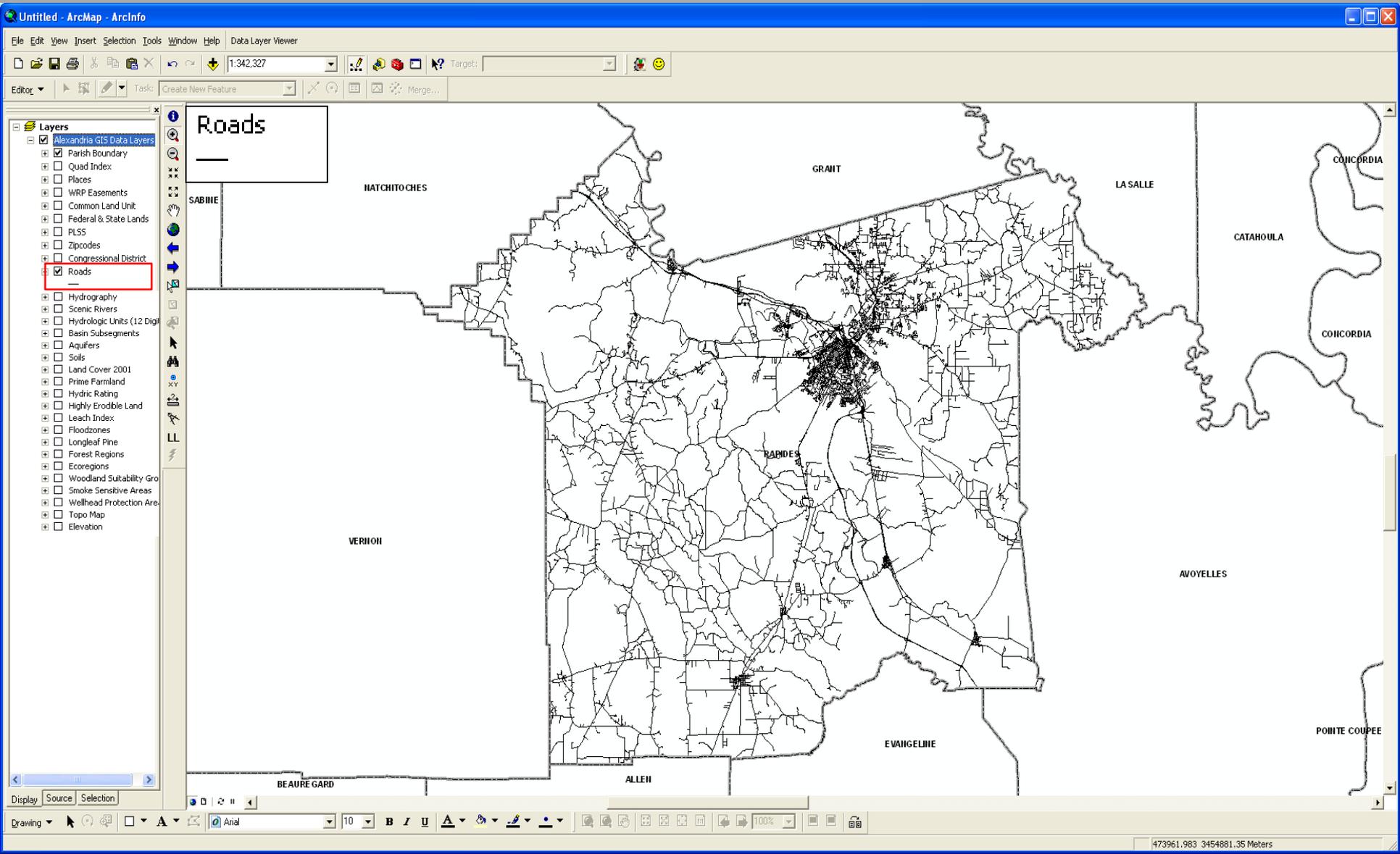
Zipcodes



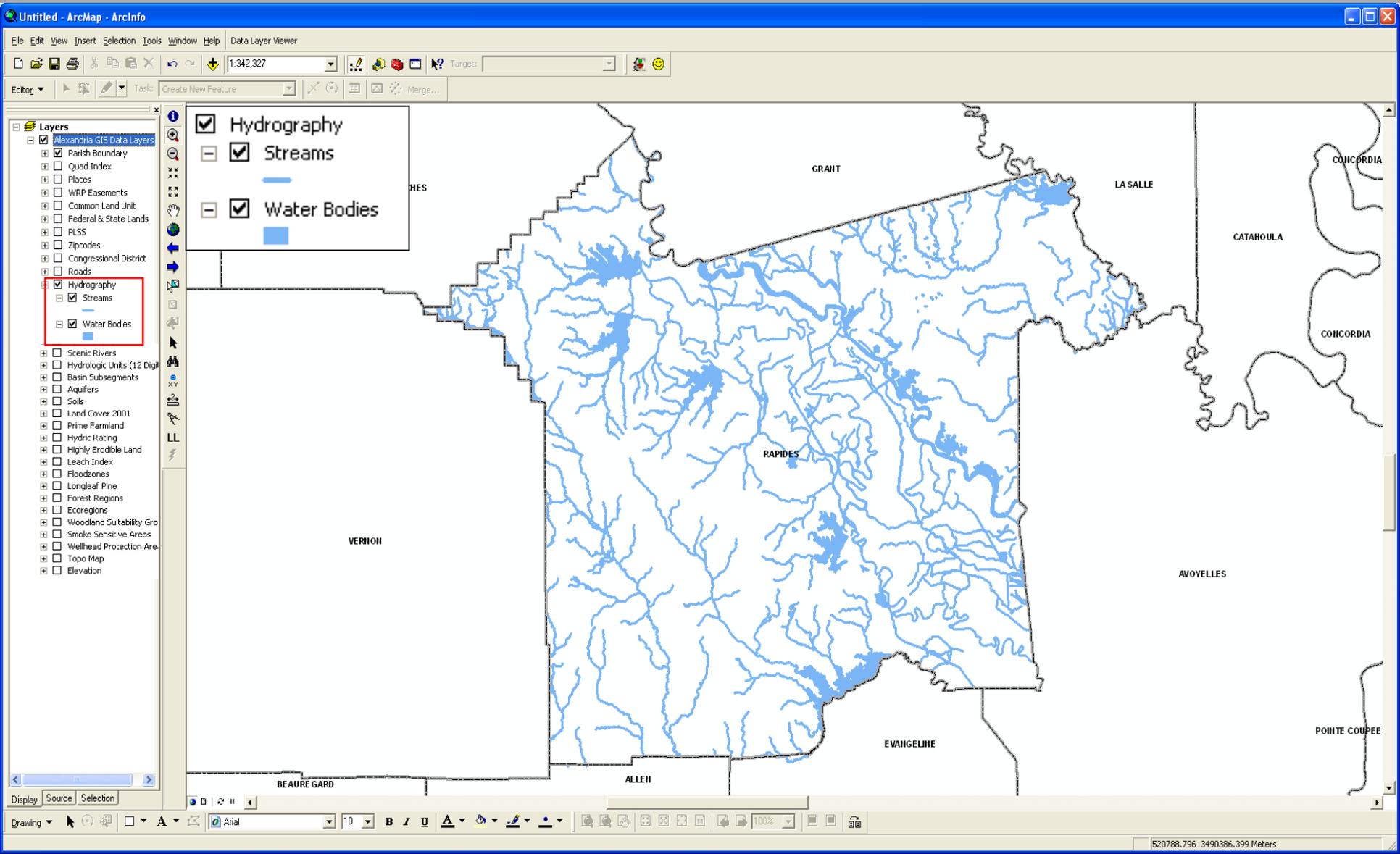
Congressional Districts



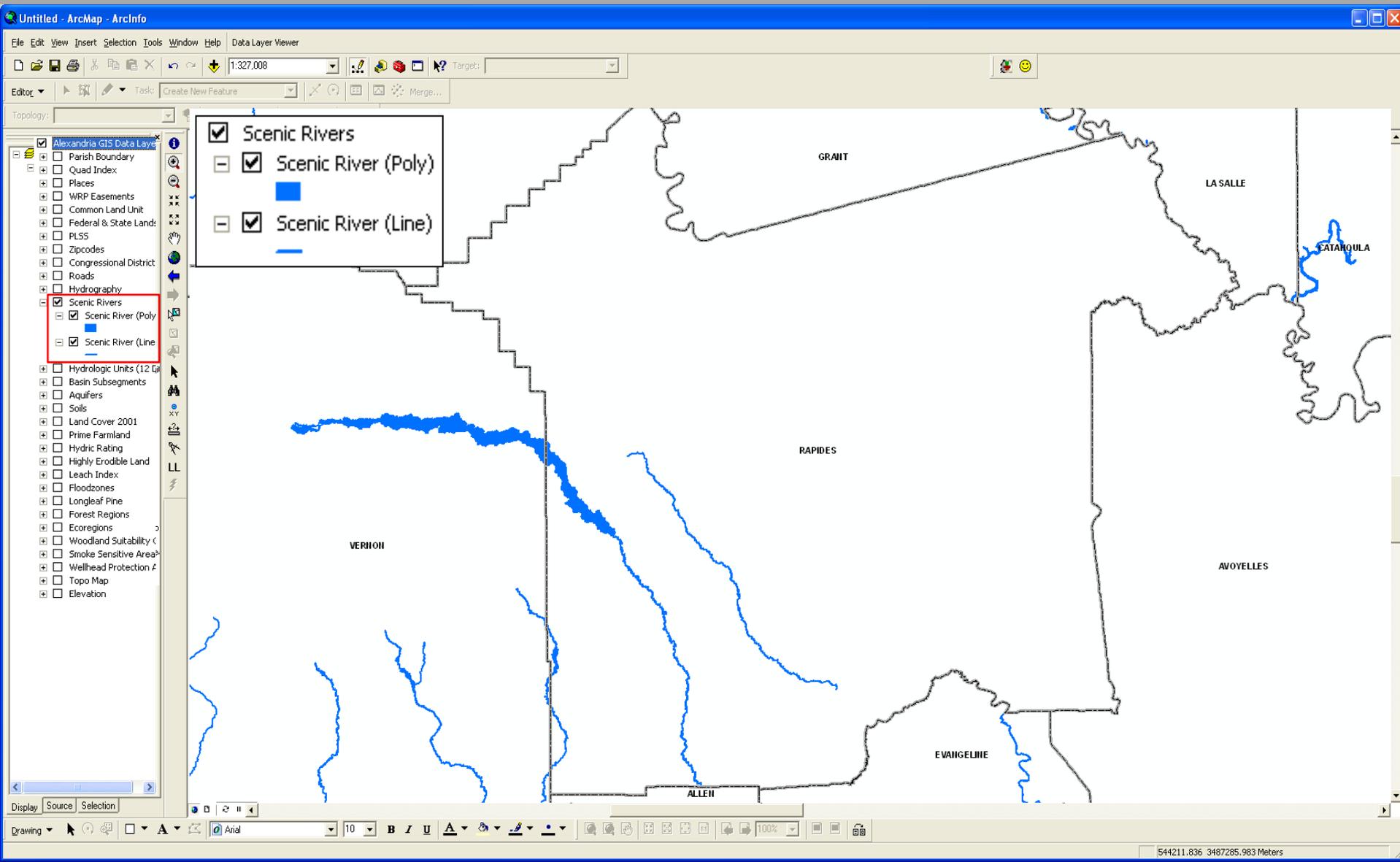
Roads: Major highways, state and parish roads.



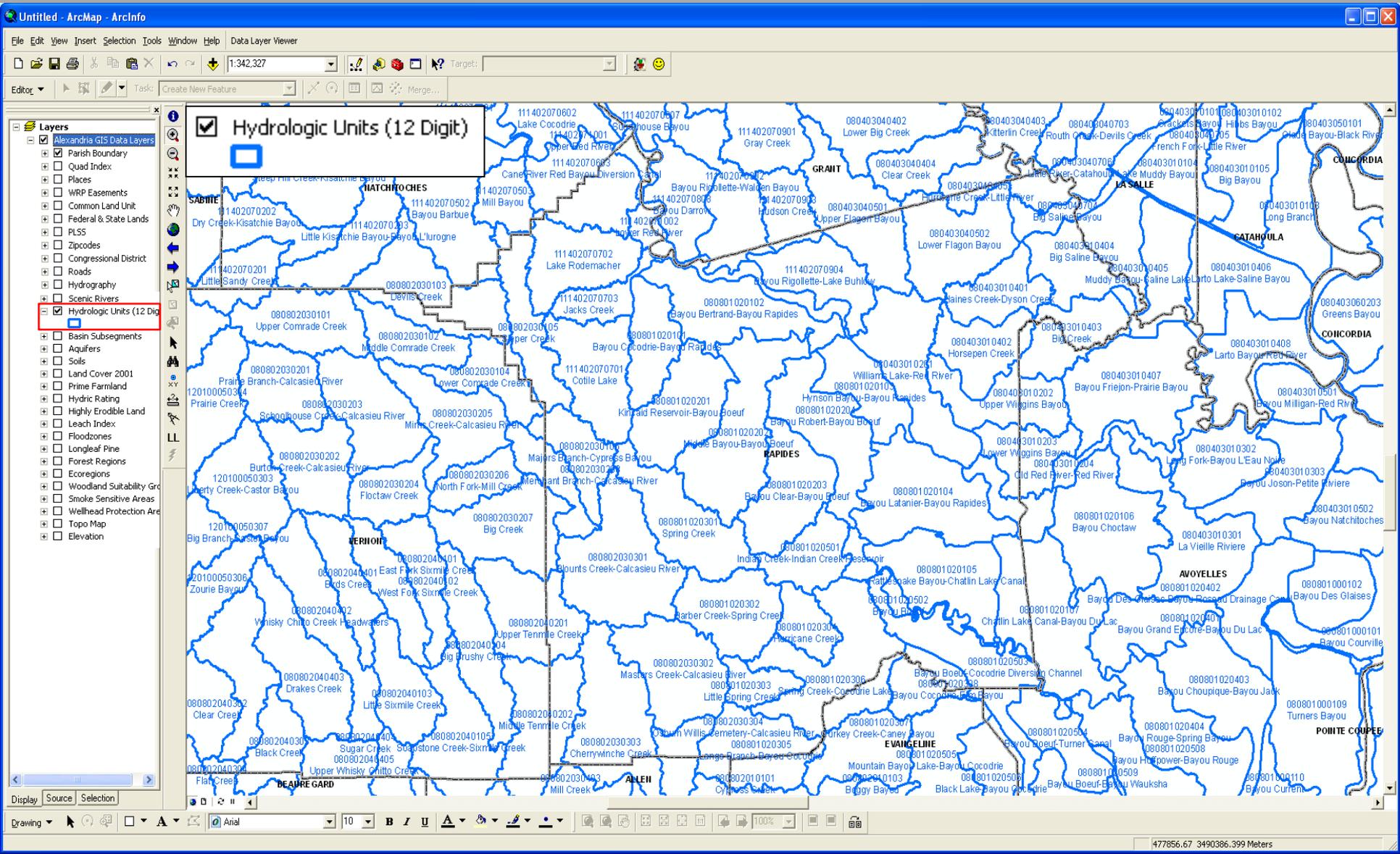
Hydrography: Major and minor streams & water bodies.



Scenic Rivers: Rivers and bayous, designated by the Louisiana Department of Wildlife and Fisheries, with special ecological and/or picturesque qualities.



Hydrologic Units (12 digit): HUC boundaries digitized at 1:24,000 scale for the entire state.



Basin Subsegments: Data layer created by LDEQ used for water quality planning and regulatory tasks. This layer contains the fields **Priority of Receiving Water** and **Fully Supporting Designated Use** that will assist NRCS field offices in answering 'Question 1 for State Issues' when ranking applications.

The screenshot shows the ArcMap interface with the 'Basin Subsegments' layer selected in the Layers panel. The Identify window is open, displaying the following information for the selected feature:

Identify from: Basin Subsegments

Basin Subsegments

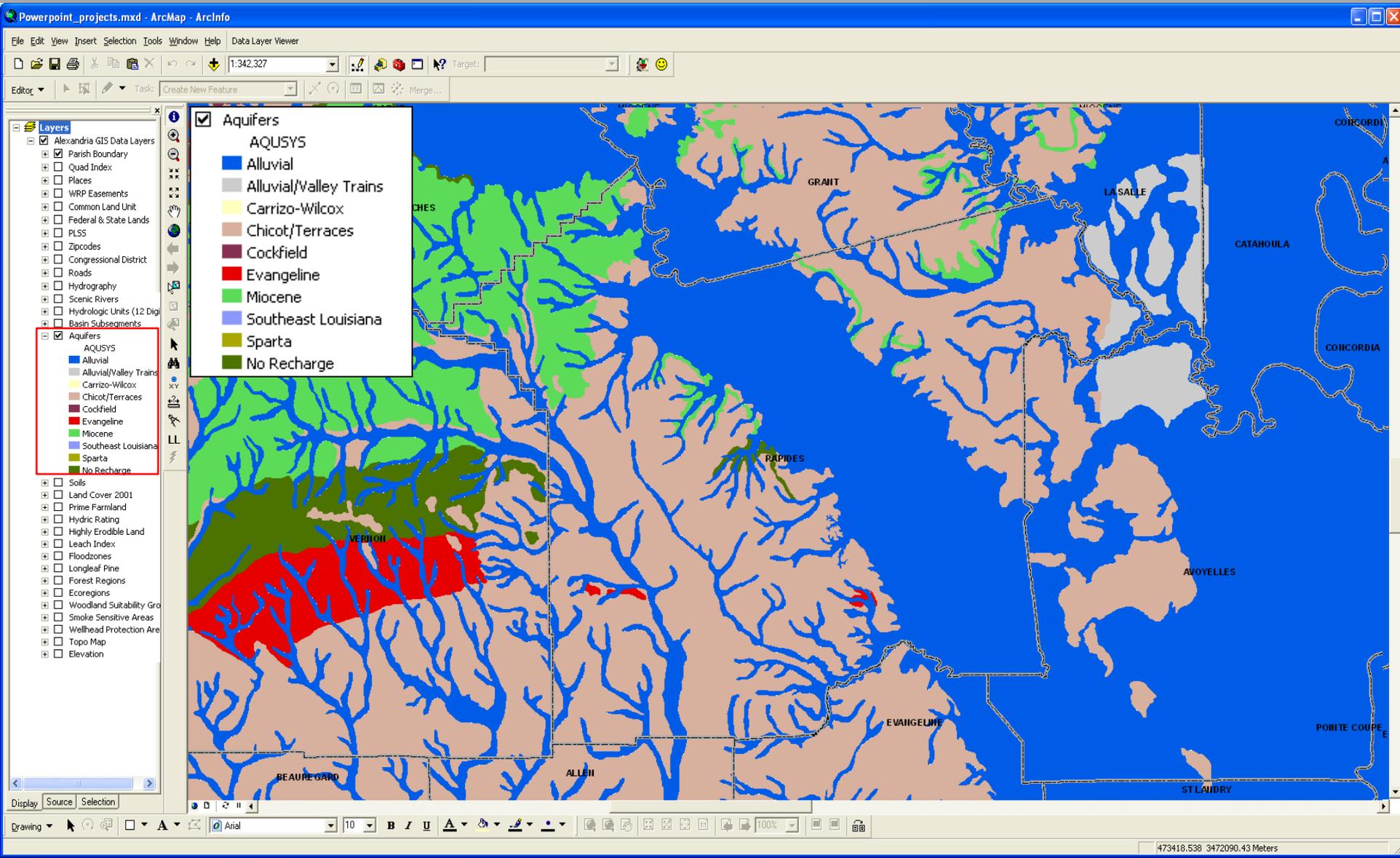
- Bayou Boeuf

Location: 552,753.444 3,450,517.547 Meters

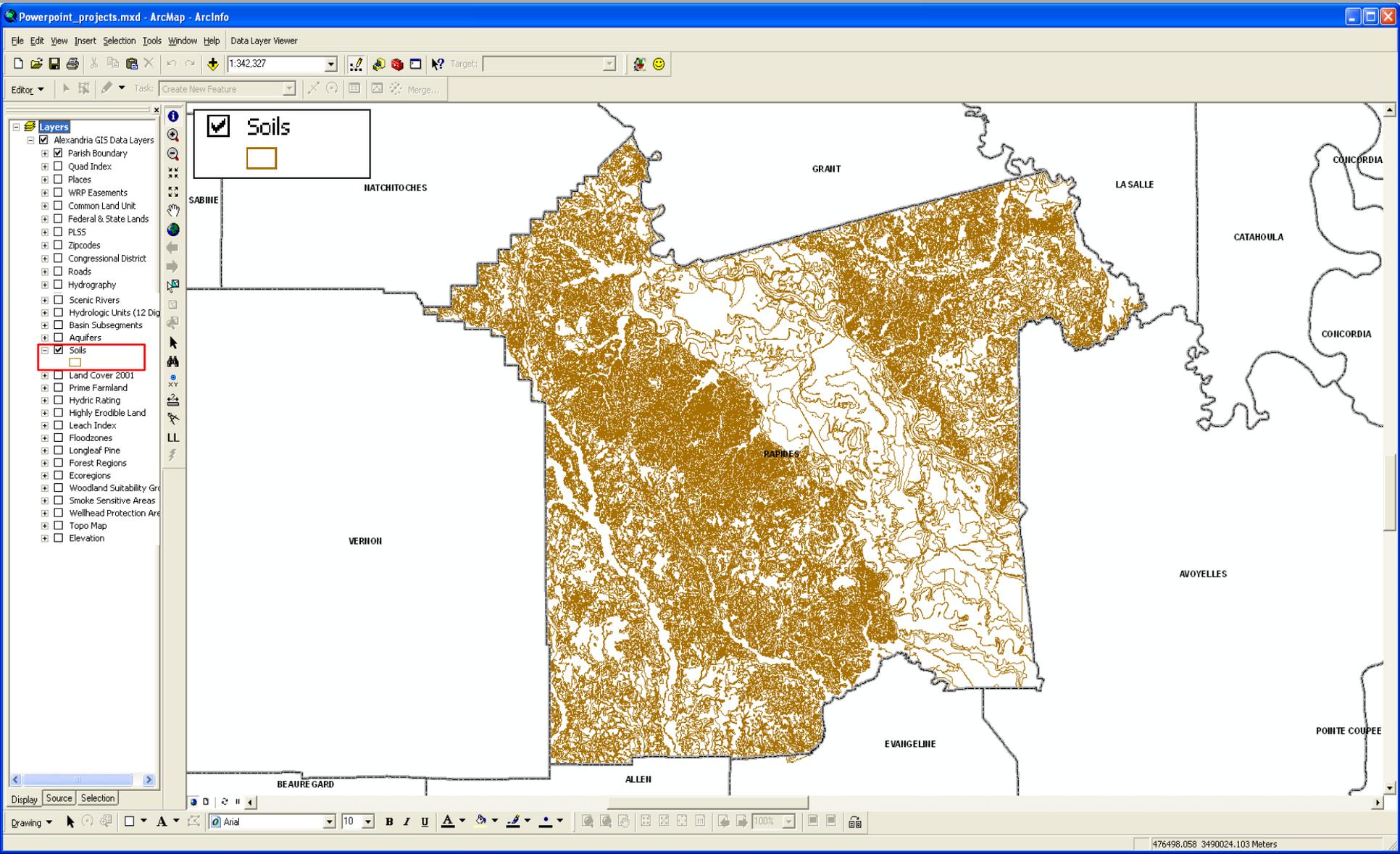
Field	Value
FID	161
Shape	Polygon
OBJECTID	142
AREA	172308.184389
PERIMETER	276775.518
SUBSEG02	143
SUBSEG02ID	79
SUBSEGMENT	060208
NAME	Bayou Boeuf
DESCRPTIO	Headwaters to Bayou Courtableau
BASIN	VERMILION-TECHE
Shape_Leng	2.586552
Shape_Area	0.066001
Priority of Receiving Water	High
Fully Supporting Designated Use	No

Identified 1 feature

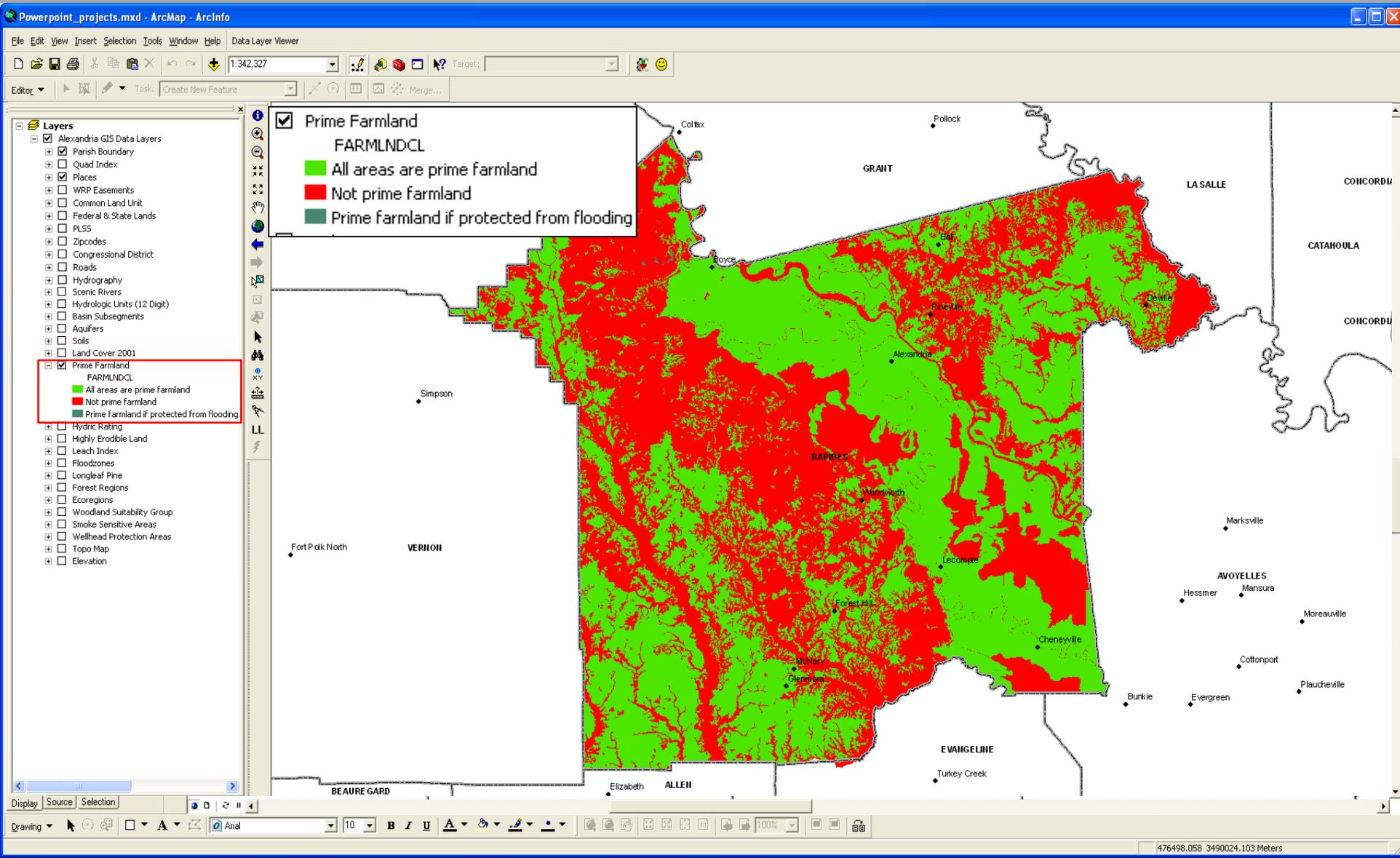
Aquifers: Data layer depicting the aquifer system boundaries for the entire state. They are also classified for recharge potential from the field **AQURECH**: **0** – no recharge potential, **1** – low recharge potential, **2** – moderate recharge potential, **3** – high recharge potential.



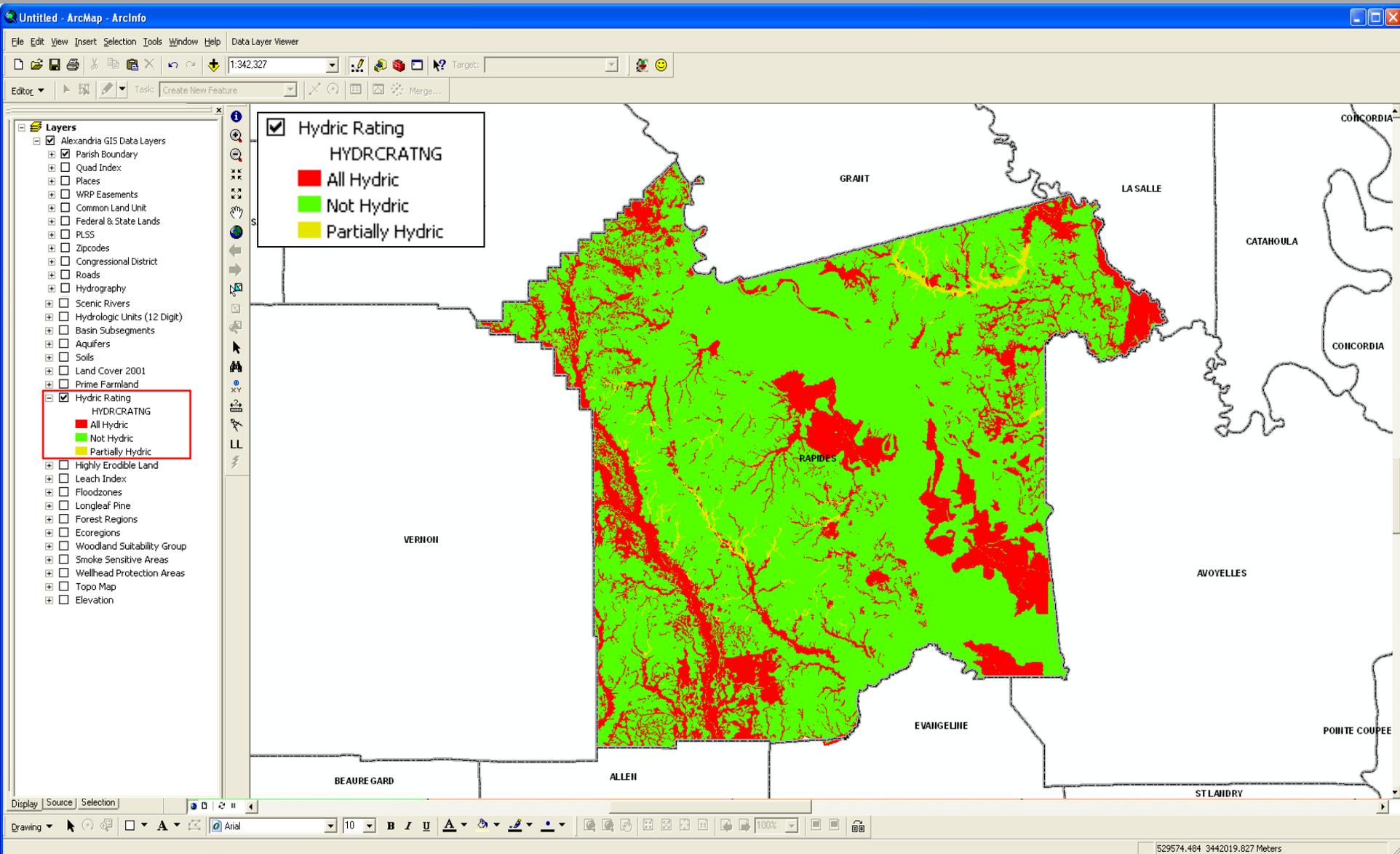
Soils: SSURGO (Soil Survey Geographic database) – soils digitized at 1:24,000 scale.



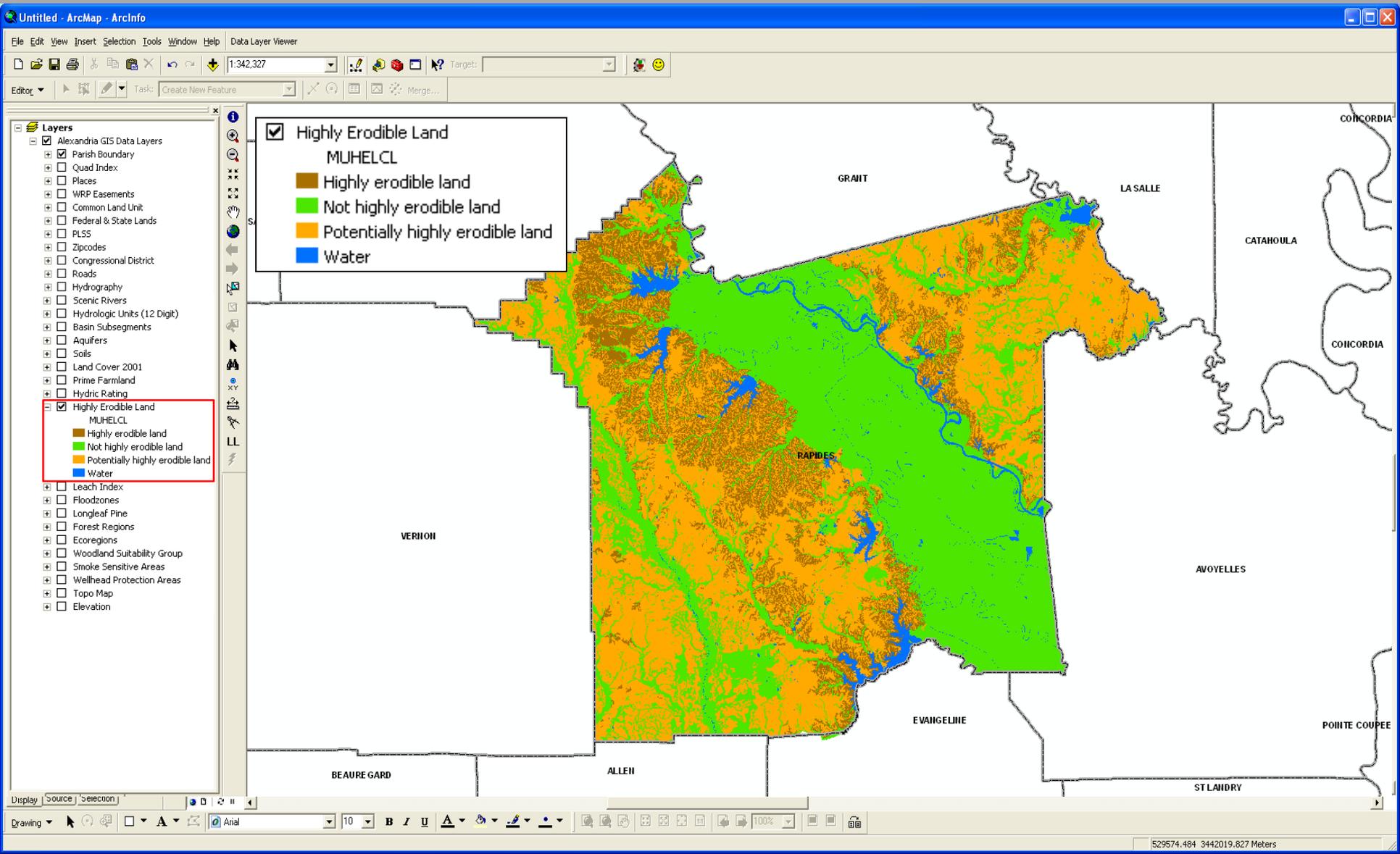
Prime Farmland: Lands that have the best combination of physical and chemical characteristics for producing food, feed, fiber, forage, and oilseed crops.



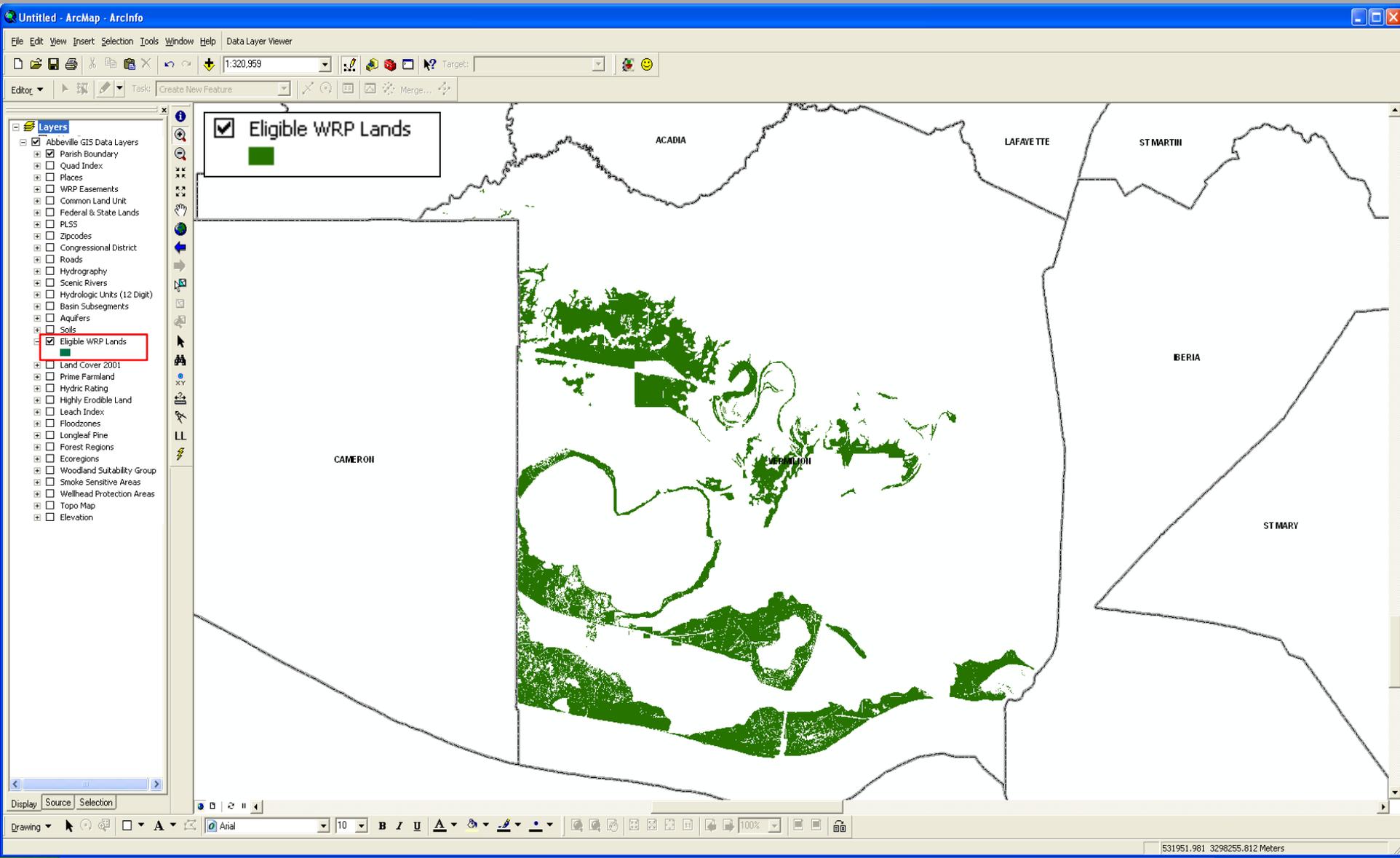
Hydric Rating: Rating of soils that formed under conditions of saturation, flooding, or ponding long enough during the growing season to support the growth and reproduction of hydrophytic vegetation.



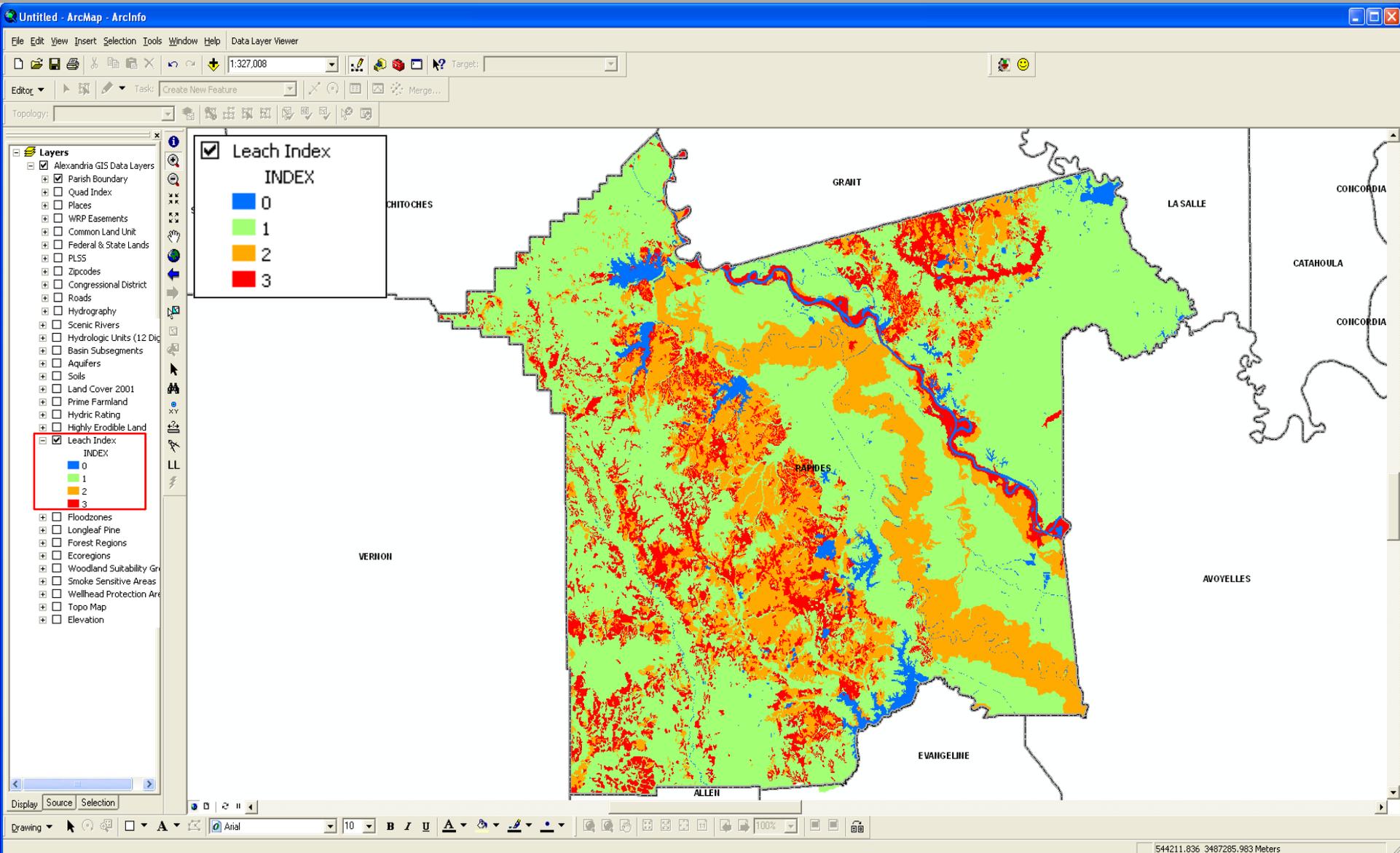
Highly Erodible Land: Erodibility index of a soil map unit.



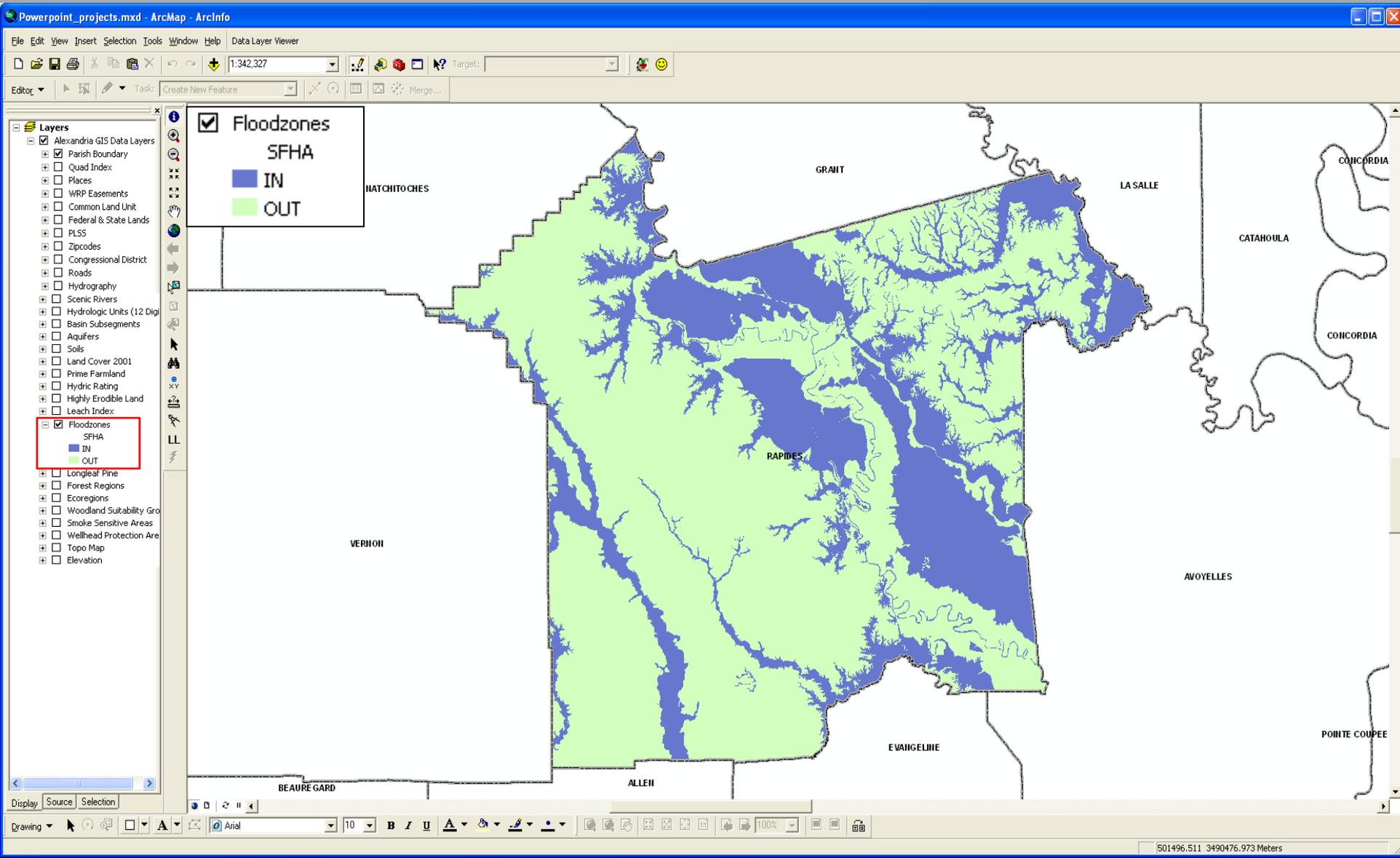
Eligible WRP Lands: Lands based on depth of organic surface material overlaying mineral material in MLRA 151 (coastal parishes only).



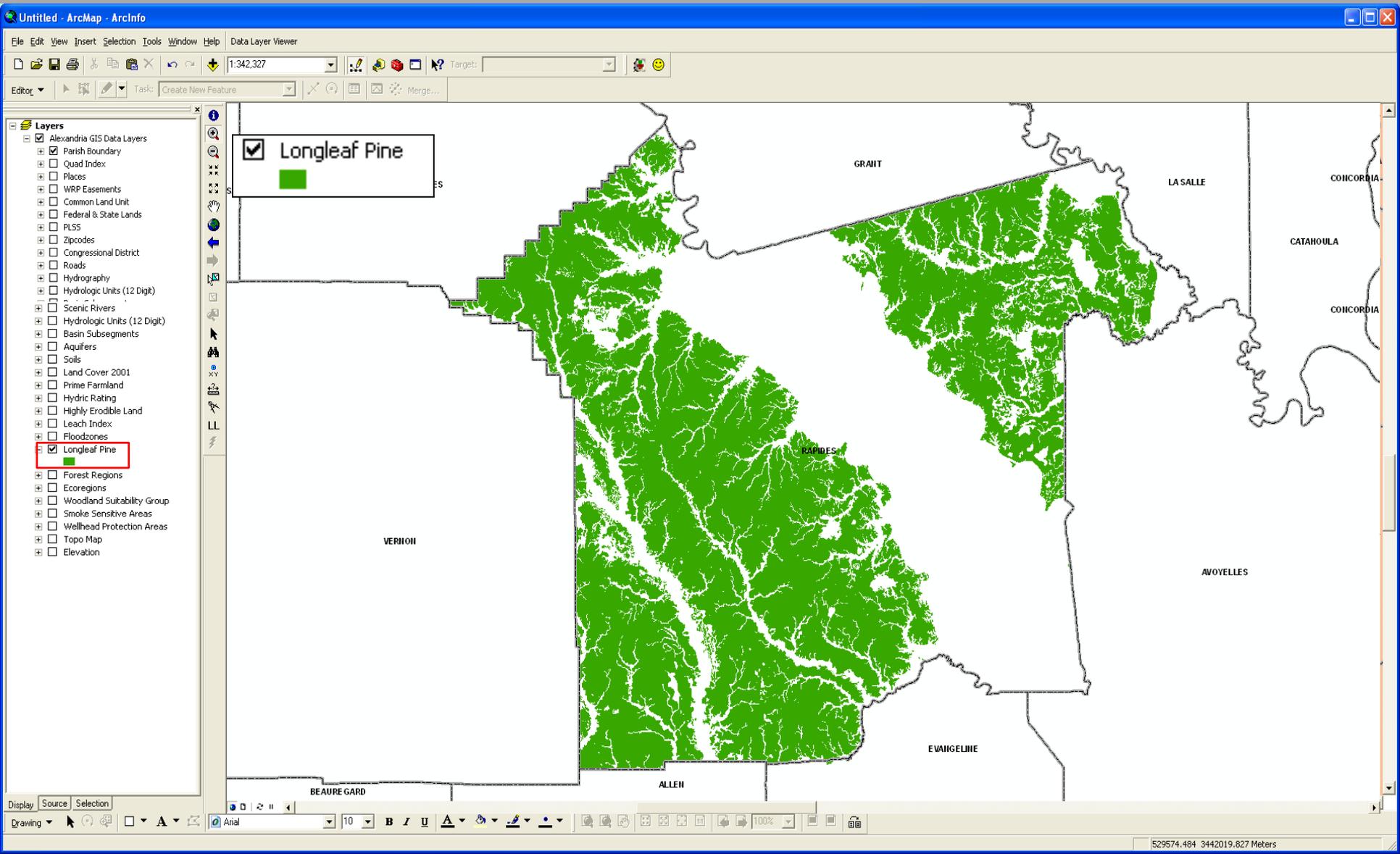
Leach Index: Soils with potential of leachable materials reaching the bottom of the soil profile.
INDEX field classified as **0** = water, **1** = low potential, **2** = moderate potential, & **3** = high potential.



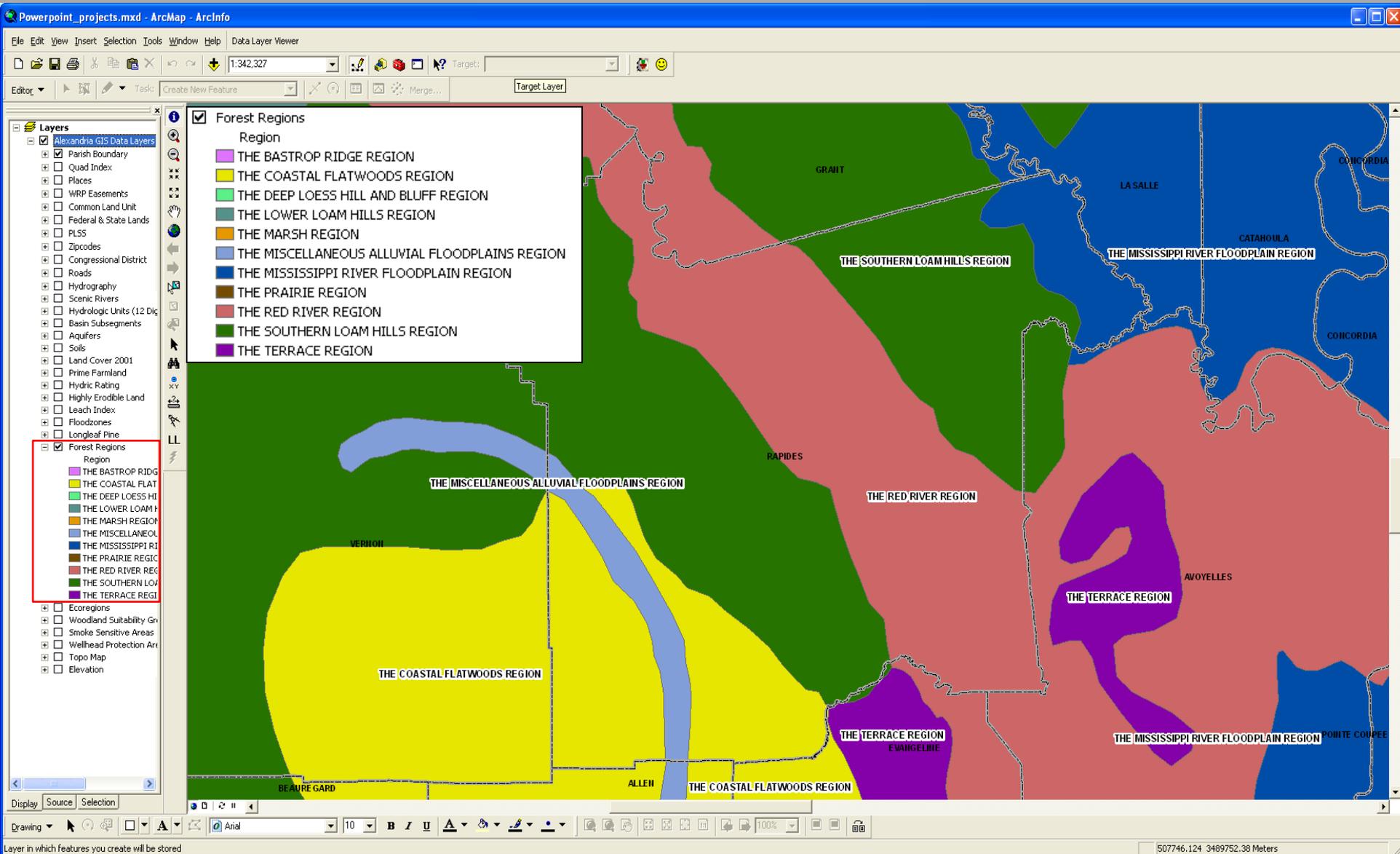
Floodzones: Flood zone areas digitized at 1:24,000 scale (certain parishes not available yet). As shown, areas are either **IN** or **OUT** of the flood zone from the **SFHA** field. The FEMA flood zone codes, i.e., “**A**”, “**X**”, “**X500**” are found in the **ZONE** field and described in detail here: <http://www.floodinsights.com/floodlookups/floodzon.htm>



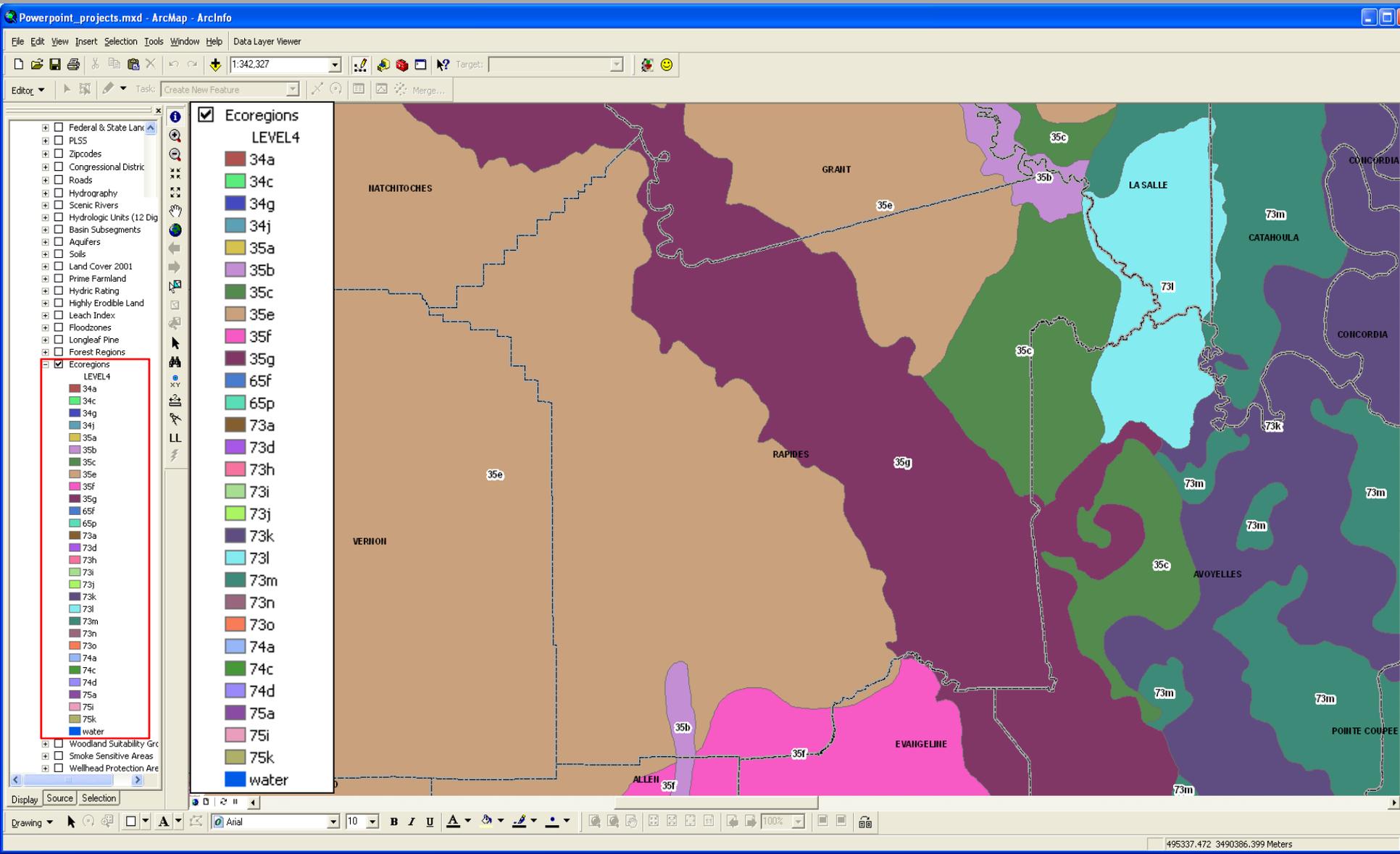
Longleaf Pine: Soils that will support Longleaf forested growth and development.



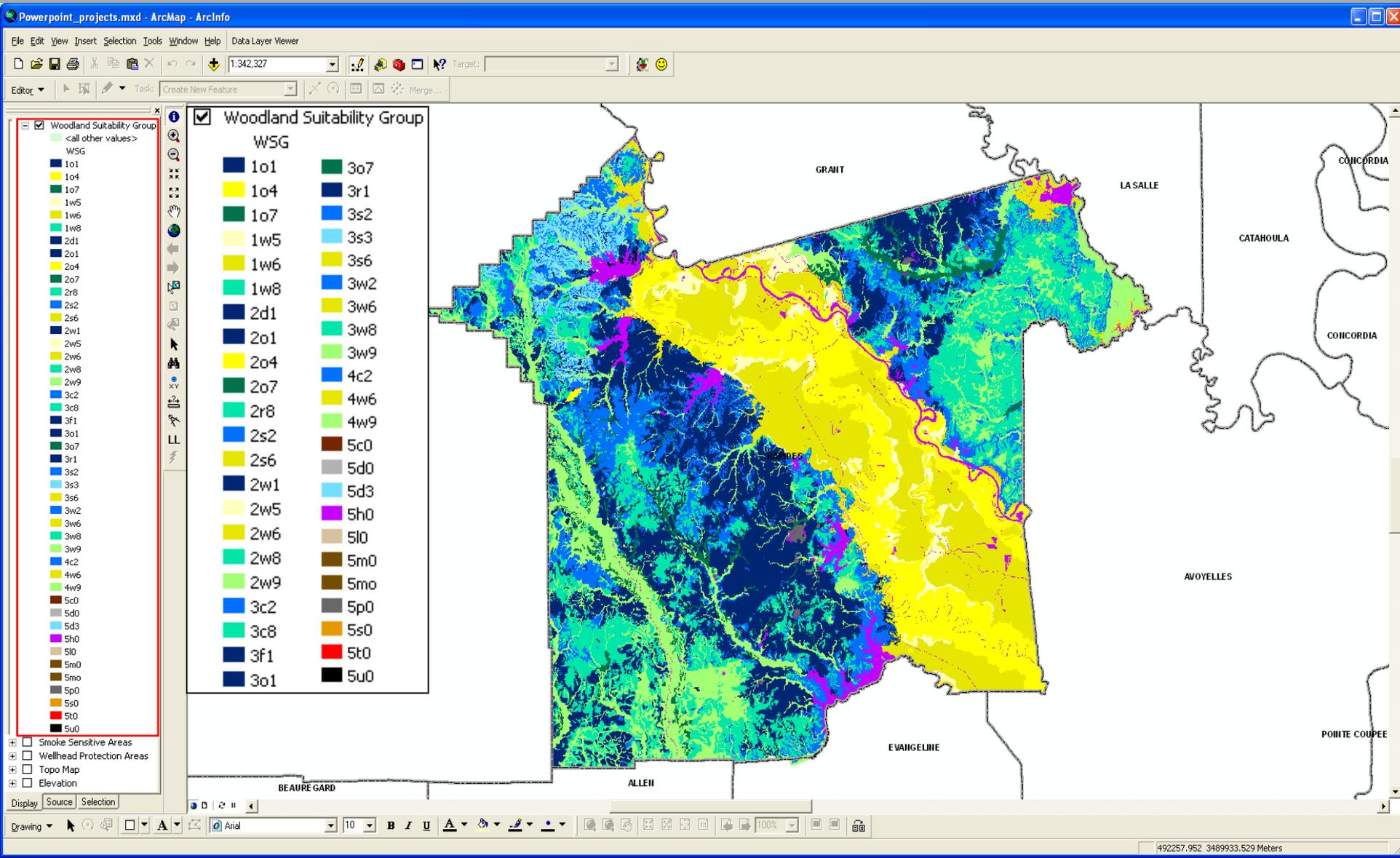
Forest Regions: Louisiana forest habitat regions.



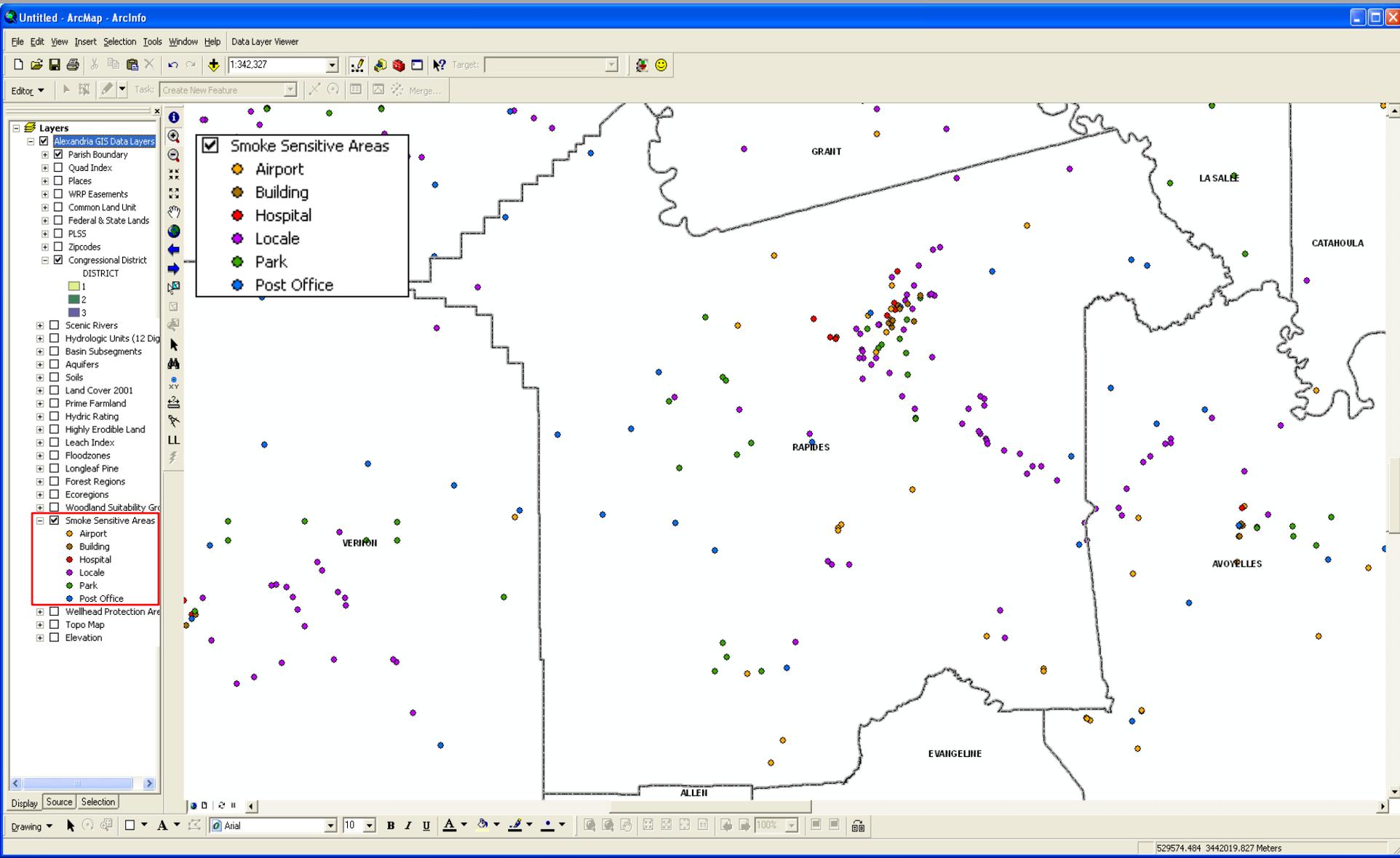
Ecoregions: Areas of general similarity in ecosystems and in the type, quality, and quantity of Louisiana's environmental resources.



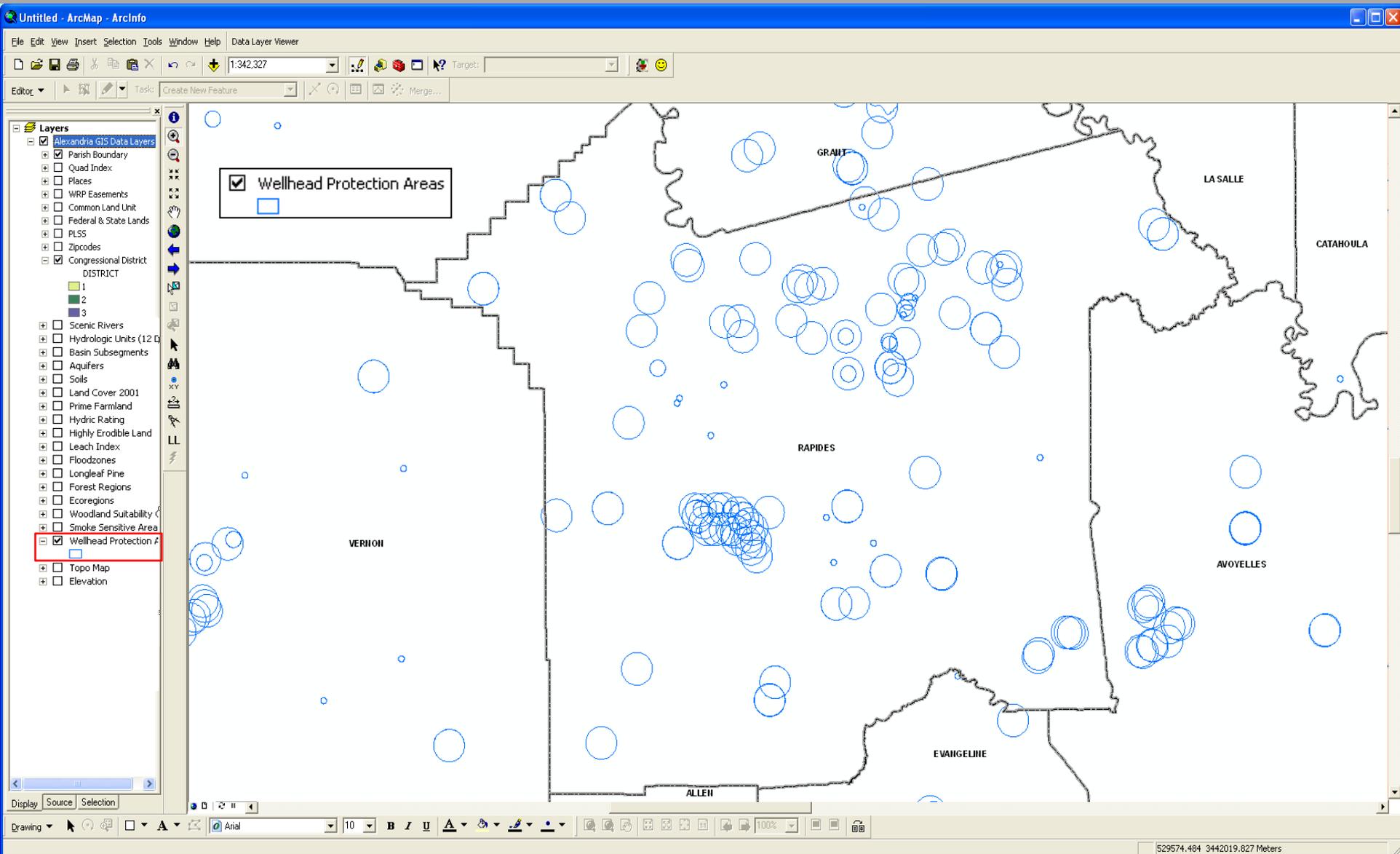
Woodland Suitability Group: Soils that have comparable potential productivity and similar wood crops, and that require about the same kind of management.



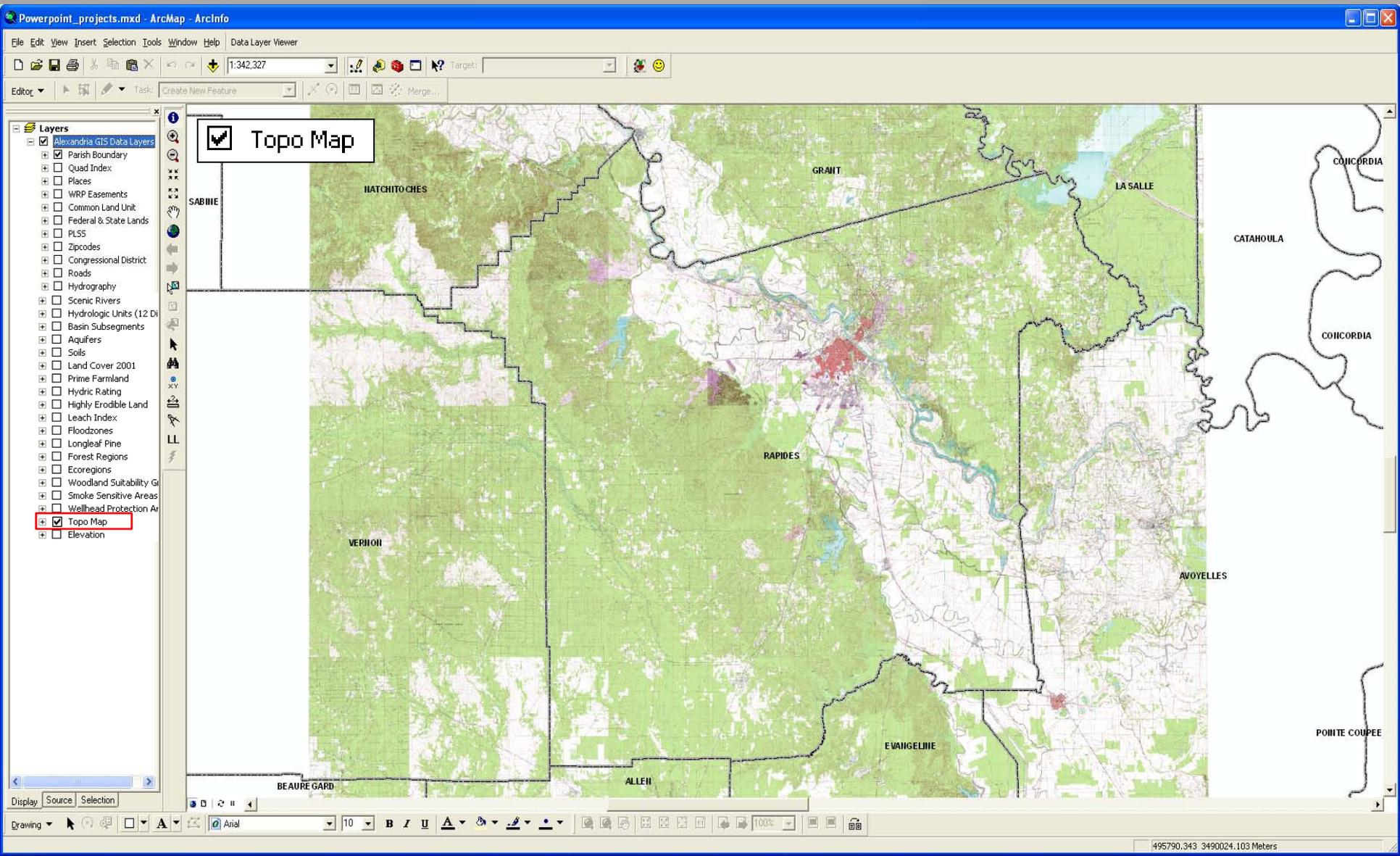
Smoke Sensitive Areas: Places or areas, such as hospitals or airports, that are especially susceptible to smoke-induced hazards.



Wellhead Protection Areas: An area, designated by the Louisiana Department of Natural Resources, surrounding drinking water wells of municipalities that delineates the sensitive 'recharge area'.



Topo Map: Digital 1:24,000 scale USGS topographic map by parish.

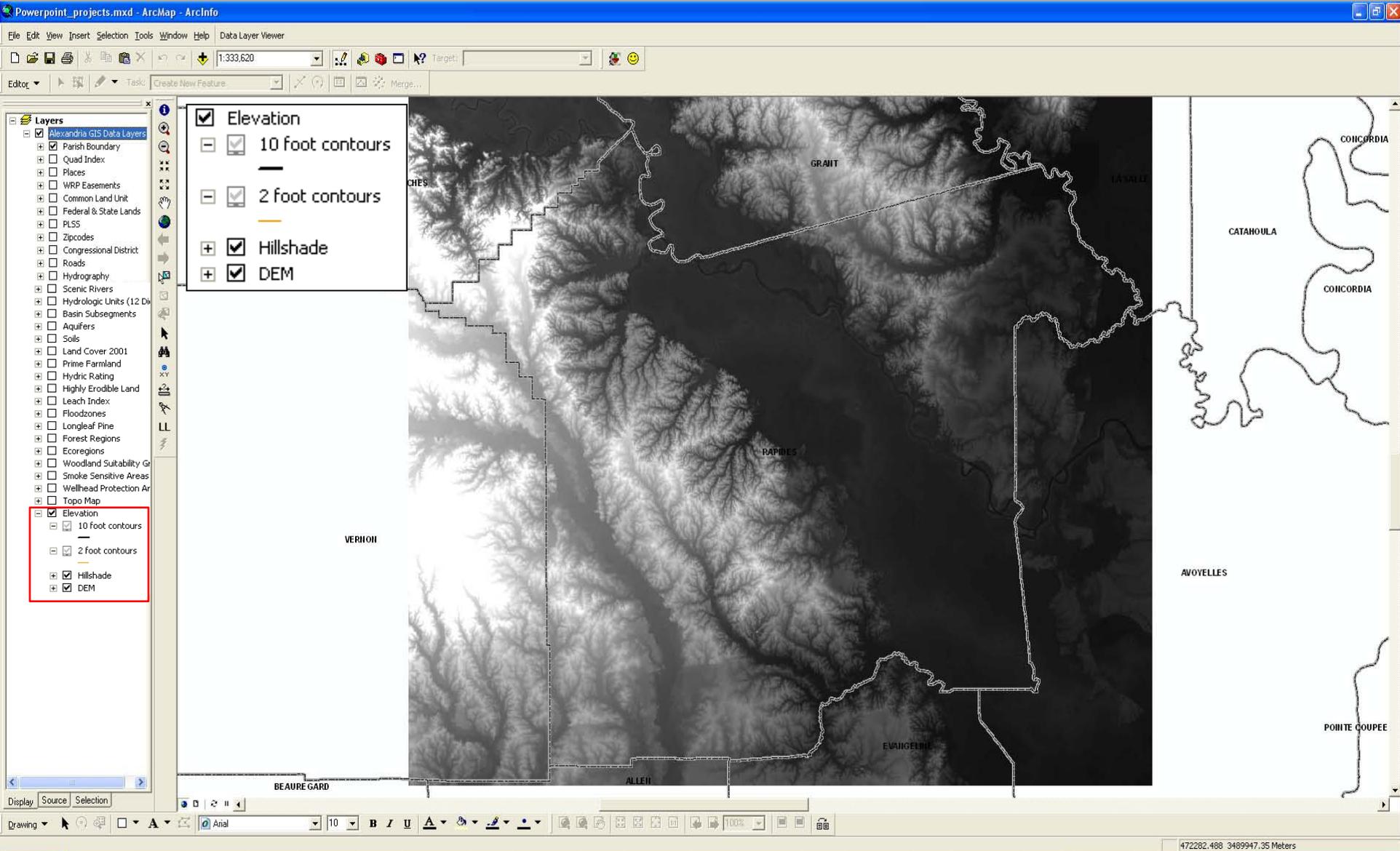


Elevation: LIDAR data categorized into 3 groups:

Contour lines - (10 & 2 ft. intervals).

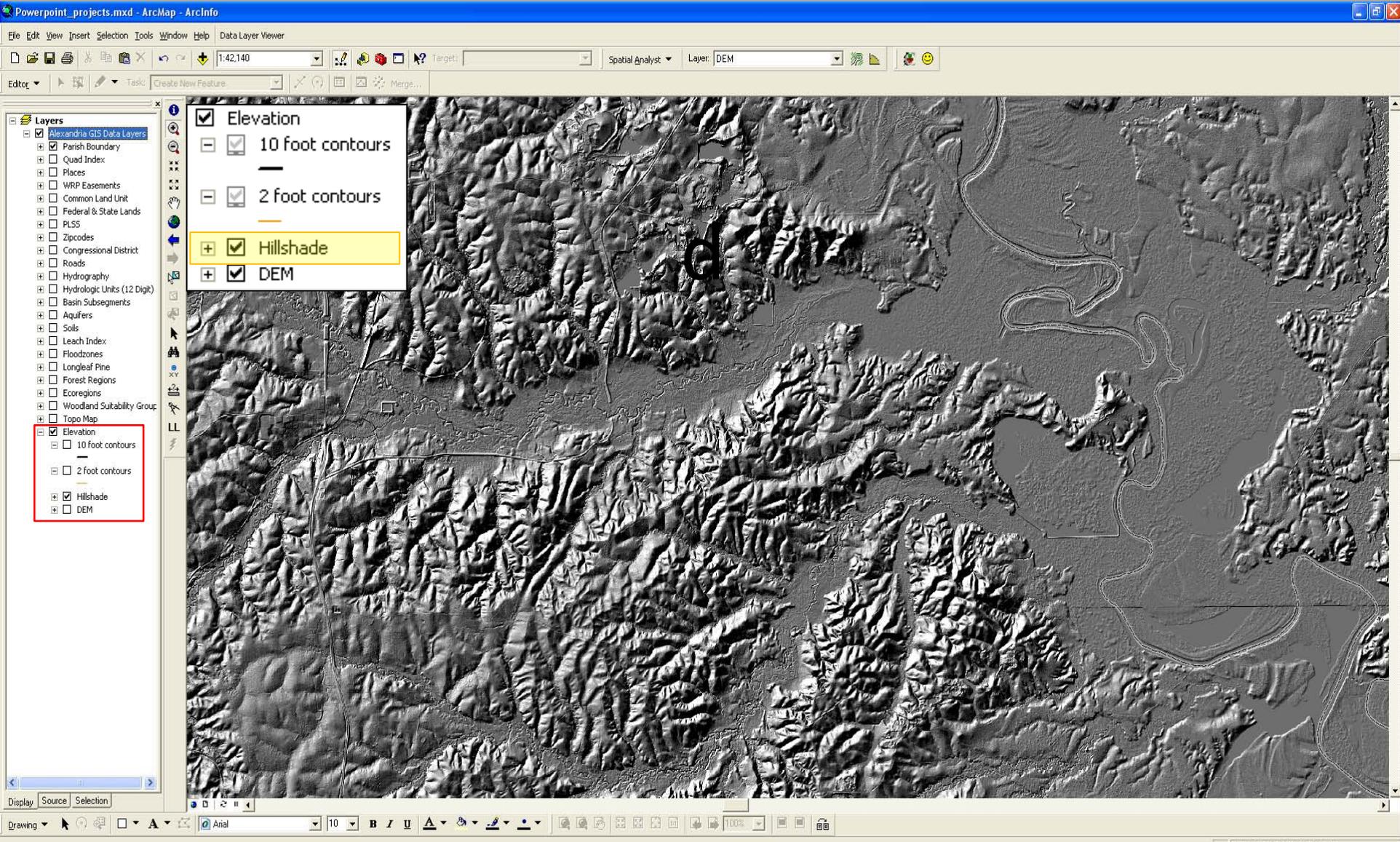
DEM (Digital Elevation Model) - 5m raster grid representing elevation (ft.) for each cell.

Hillshade – raster layer that provides a sense of visual relief for cartography.



Elevation: (Cont.)

Hillshade provides 3D type visualization for various landscapes.



Elevation: (Cont.)

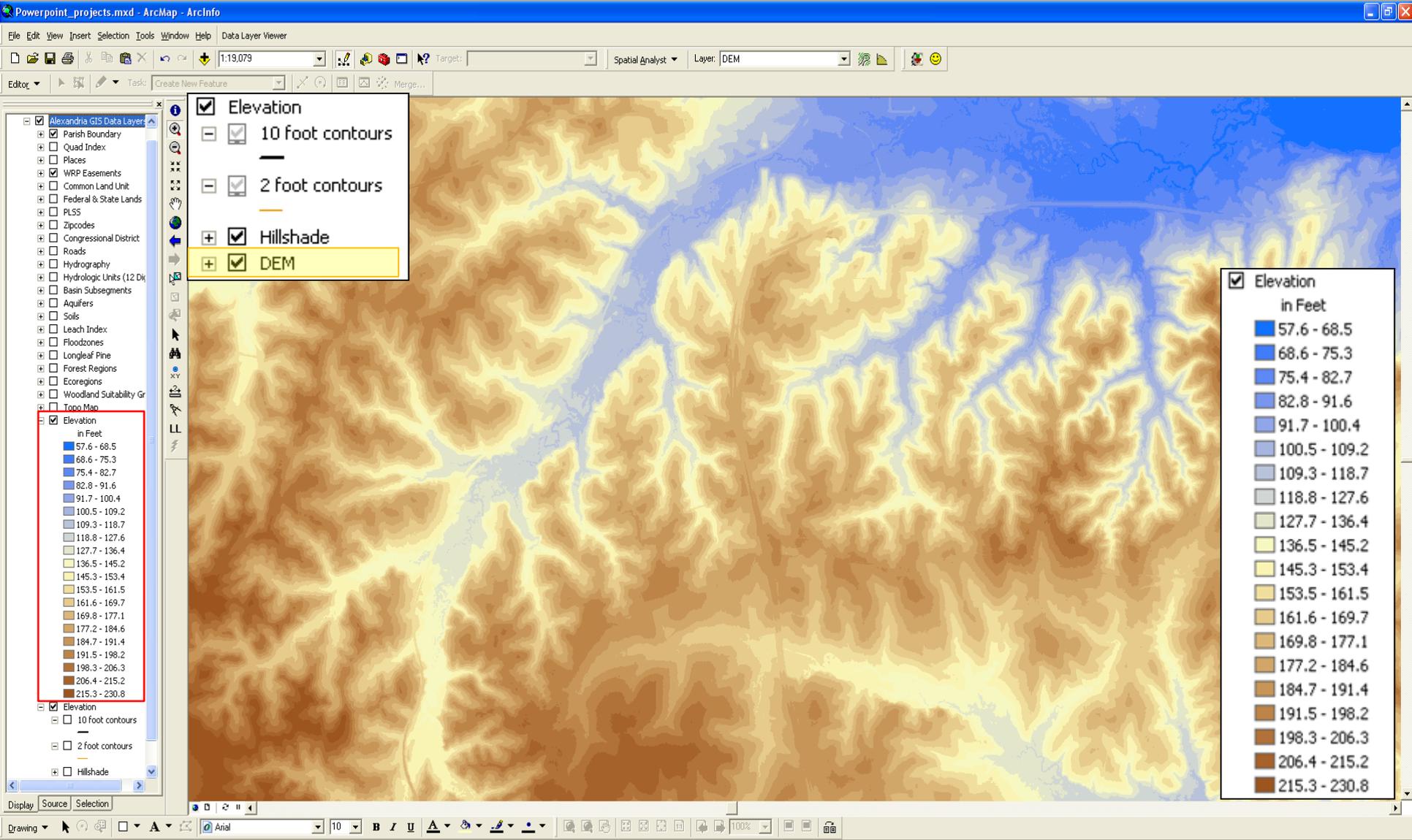
Hillshade can be overlaid on top of an ortho mosaic image by adjusting the “Transparency” within the ‘Display’ tab (Right-click ‘Hillshade’ select ‘Properties’, choose ‘Display’, then enter **50** for Transparency. Press ‘OK’).

The screenshot displays the ArcMap interface with the following elements:

- Layers Panel (Left):** A list of layers including 'Elevation', '10 foot contours', '2 foot contours', 'Hillshade', 'DEM', and two ortho mosaic layers. The 'Hillshade' layer is highlighted with a blue selection bar.
- Main Viewport:** A topographic map showing terrain relief with a hillshade overlay. A large black letter 'd' is centered on the map.
- Layer Properties Dialog (Right):** The 'Display' tab is active. The 'Transparency' property is set to 50%. Other settings include 'Contrast: 0%', 'Brightness: 0%', and 'Resample during display using: Nearest Neighbor'. The 'Orthorectification using elevation' section is also visible.
- Status Bar (Bottom):** Shows the current drawing tool as 'Ani' and the scale as 10.

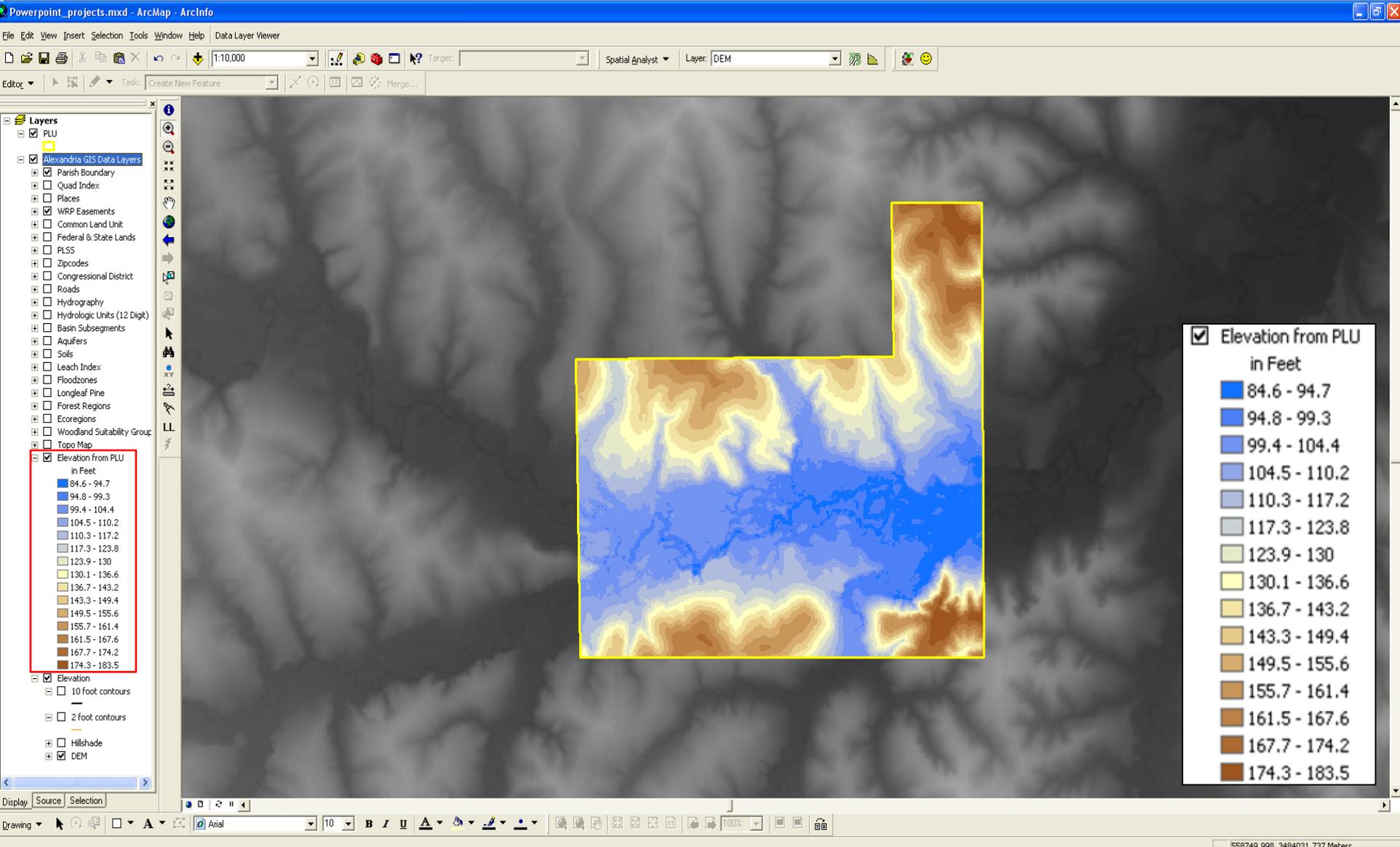
Elevation: (Cont.)

DEMs can be classified into multiple elevation categories using color for a *particular map extent*.



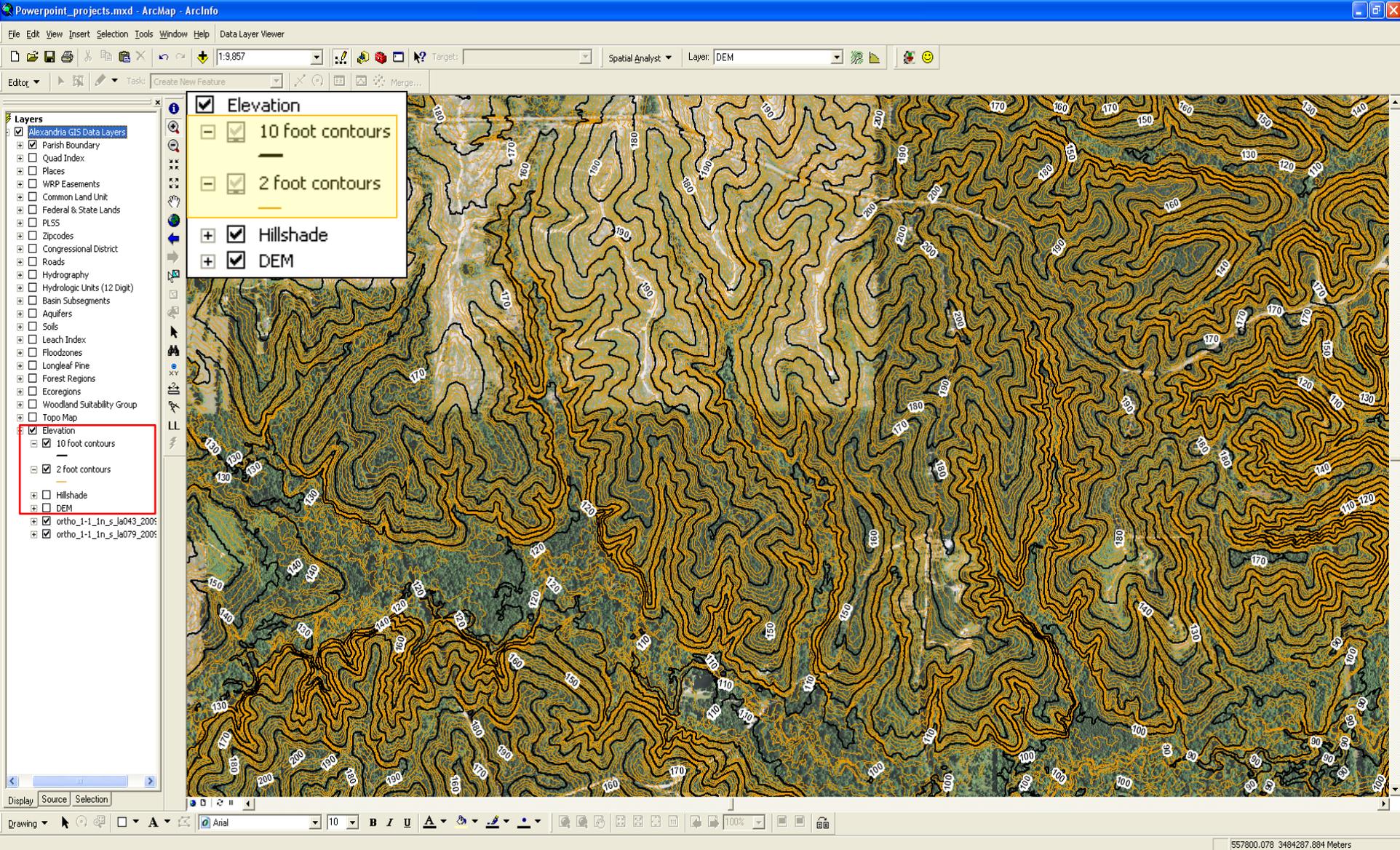
Elevation: (Cont.)

DEMs can also be classified into multiple elevation categories for a *particular polygon or easement boundary*.



Elevation: (Cont.)

Contours - are lines categorized by **2** and **10** ft. intervals (10 ft. labels are the default). Contour lines will only appear on the map when zoomed in within 1:50,000 scale.



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Next Generation

To change the layer's label properties, right-click a layer in the table of contents, then click "Properties...", then choose the 'Labels' tab in the Layer Properties box.

The screenshot displays the ArcMap interface with the 'Layer Properties' dialog box open. The 'Labels' tab is highlighted with a red box. The dialog box contains the following elements:

- General** | Source | Selection | Display | Symbology | Fields | Definition Query | **Labels** | Joins & Relates
- Label features in this layer
- Method: Label all the features the same way.
- All features will be labeled using the options specified.
- Text String: Label Field: FIPS55_NAM (with Expression... button)
- Text Symbol: Arial, size 8, with bold, italic, and underline buttons, and a Symbol... button.
- Other Options: Placement Properties..., Scale Range..., Pre-defined Label Style, Label Styles...
- Buttons: OK, Cancel, Apply

The background map shows a grid of sections (e.g., Section 28, Section 33, Section 34, Section 40, Section 48, Section 50, Section 51, Section 52, Section 53, Section 54, Section 58, Section 63, Section 68, Section 70, Section 75, Section 76, Section 77, Section 78, Section 80) and various geographical features like 'Turtle Bayou', 'Bayou Boeuf', 'Bayou Clear', and 'Indian Creek Reservoir'.

Toolkit

Next Generation

To change the layer's symbology (color, line thickness), right-click a layer in the table of contents, then click "Properties...", then choose the "Symbology" tab in the Layer Properties box.

The screenshot displays the ArcMap interface with the 'Layer Properties' dialog box open. The 'Symbology' tab is highlighted with a red box. The dialog box shows the following options:

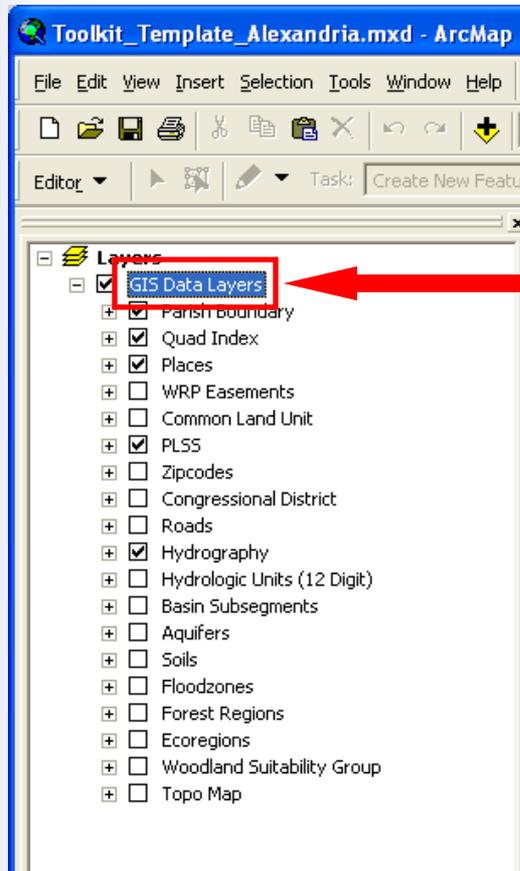
- Show:** Features, Categories, Quantities, Charts, Multiple Attributes
- Draw all features using the same symbol.** (with an 'Import...' button)
- Symbol:** A blue line symbol is shown in a preview box, with an 'Advanced' dropdown menu.
- Legend:** A text box for 'Label appearing next to the symbol in table of contents:' and a 'Description...' button.
- Additional description appearing next to the symbol in your map's legend:** A text box for additional legend text.

The background shows a map of a region with various sections and features, including 'Section 28', 'Section 58', 'Section 63', 'Section 69', 'Section 33', 'Section 34', 'Section 70', 'Section 3', 'Section 48', 'Section 4', 'Section 50', 'Section 51', 'Section 9', 'Section 52', 'Section 53', 'Section 16', 'Section 68', 'Section 75', 'Section 76', 'Section 77', 'Section 78', 'Section 21', and 'Section 68'. The map also shows 'Township 3', 'Township 2', 'Section 2', and 'Section 21'. The 'Layers' panel on the left lists various GIS Data Layers such as 'Parish Boundary', 'Quad Index', 'Places', 'WRP Easements', 'Common Land Unit', 'PLSS', 'Zipcodes', 'Congressional District', 'Roads', 'Hydrography', 'Hydrologic Units (12 Digit)', 'Basin Subsegments', 'Aquifers', 'Soils', 'Floodzones', 'Forest Regions', 'Ecoregions', 'Woodland Suitability Group', and 'Topo Map'.

Toolkit

Next Generation

Any layer customization or changes can be saved by right-clicking the “GIS Data Layers” from the table of contents, then “Save as Layer File...”



Right-click...."Save as Layer File..."

Save in S:\ (shared) drive since the F:\geodata may be write protected.

The new ".lyr" file now contains the updated changes and can be retrieved from the S:\ drive.

Toolkit

Next Generation



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