

Toolkit 5.0

GIS Training Supplement

Version 3.1 - LM 05/17/05



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Ecological Sciences Section
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Revision History

Version	Document Date	Change Summary
1.0	February 2005	Pilot release version.
2.0	March 2005	Added GIS Tips and training references
2.1	March 2005	Minor text changes (ex. 6, p.17)
3.0	March 2005	Removed GIS Tips. Added reference to Ft Collins manual – Scale bar interval adjustment
3.1	May 2005	Final edits

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FLORIDA TRAINING PLAN

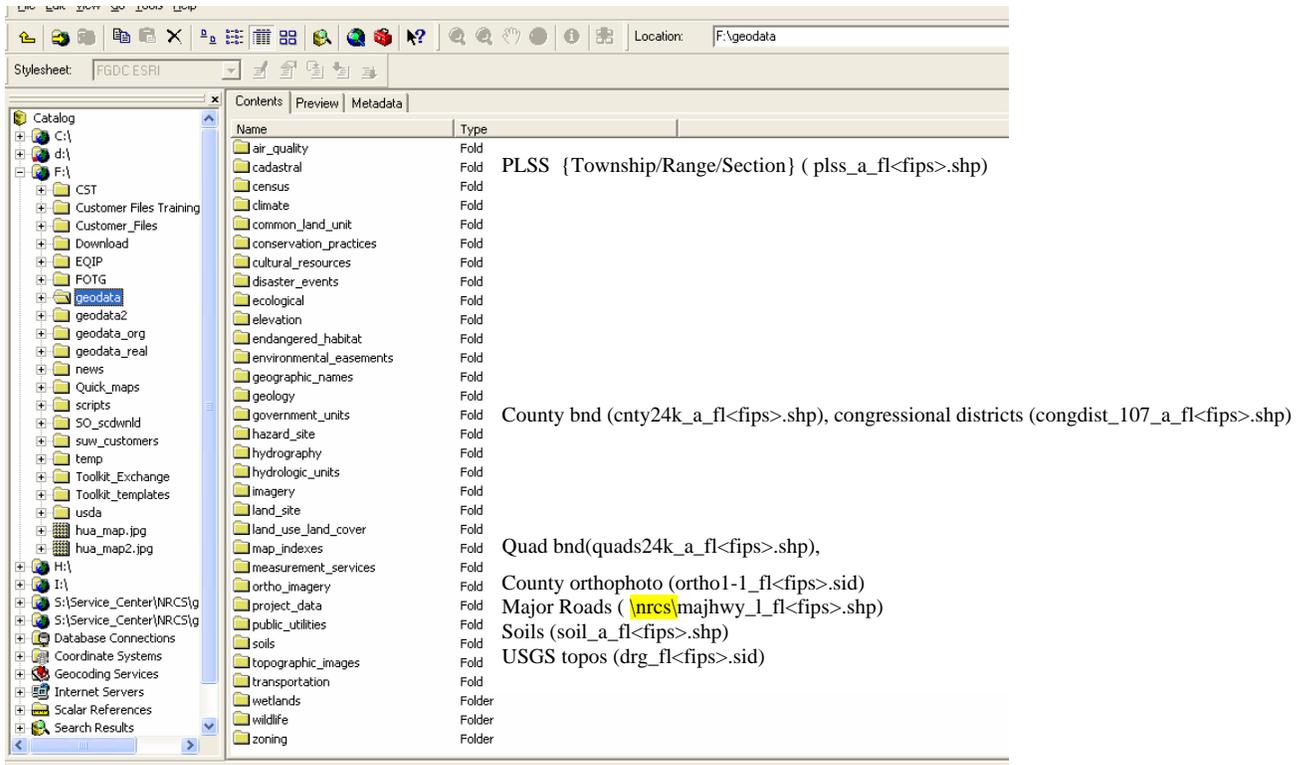
A. Learn Basic ArcGIS Skills

- Setting user preferences: Tools – Preferences – GIS Tools
 - User level = Basic
 - Default PLU Import = All PLU
 - Default Map Projection = NAD1983 UTM Zone 16 or 17 N

- Open ArcGIS template (ToolkitGIS_Template.mxd)
 - Checkout and Open customer folder
 - Open ArcGIS_Projects Folder (located under Customer Files tab)
 - Open MXD and rename: File – Save as: **demo.mxd**

- ArcGIS User Interface:
 - Title bar
 - Menu/Tool bars
 - Mouse-Over help
 - Scale window
 - Toolkit v5 button
 - Table of Contents (TOC): map legends
 - Data Frames
 - Display / Data Source
 - Graphic Window (GW)
 - Refresh
 - Data / Layout views
 - Horizontal & Vertical Scroll bars

- Understanding GEODATA structure:
 - Definition
 - Location on service center servers
 - Directory structure
 - File naming conventions



- Add Layers: Add button – Connect to Folder – *Select Layer*
- Exercise 1: Add the following layers to your view: Topography, Orthophoto, Soils, PLSS for Alachua County.**
- Basic Layer Management:
 - Turn layer on/off (checkbox)
 - Hide/Show legend (+/-)
 - Display order
 - Choice menu: Zoom to Layer – Remove - Properties
- Review ArcGIS tool bar
 - Zoom In/Out (fixed)
 - Zoom In/Out (user)
 - Full Extent
 - Previous Extent
 - Next Extent
 - Pointer
 - Pan
 - Select Features
 - Selectable Layers
 - Zoom to Selected Features
 - Clear Selected Features

- Measure
- Identify
- Find (Attribute – Layer – Field)
- Find: Select attribute - Choice button (right click) to access menu options!

Exercise 2: Find and Zoom to instructor-assigned Section
(T_R_S = T10S R20E S6)

Exercise 3: Find and Zoom to instructor-assigned Quad
(NAME = ORANGE HEIGHTS)

Legend Editing (Symbols & Labels)

- Layer Properties – **General** (name)- **Symbology** – **Features** – Symbol Selector
Options: change color & outline of a symbol
- Layer Properties – **General** (name)- **Symbology** – **Categories** (unique OR many fields) – **Value Field(s)** – **Add (all) Values**
- Select many or all symbol(s) and change symbols with Choice menu (**Properties for all**)
- Label editing: Text – Listing Order

Exercise 4: Remove Soils layer. Add Soils layer. Change Soils legend to show a) map unit symbols [MUSYM] and b) map unit symbols and names [MUNAME]

Transparency

- Layer Properties – Display - Transparency

Exercise 5: Set Scale to 1:10,000. Set Topographic map to 60% transparency over orthophoto. Set PLSS layer to 70% transparency over soils map.

Exercise 6: List at least three soil map units found within the Quad index named ORANGE HEIGHTS. _____

Resources:

- Learning ArcGIS 8 Part I
- Migrating from ArcView 3.x to ArcGIS
- Toolkit 2004 ArcGIS Extension v1.1

Layer Transparency



B. Manage Customer Plans

NOTE: For the following exercises, please check out customer folder assigned by your instructor!

- Planning Flowchart (*adapted from Kathleen Green's draft version 1.0*)

There are several ways to create planned land unit layers in Toolkit v 5.0. The process you use depends on what types of data you have available. The following “questions and answers” or the diagram on the next page will direct you to the appropriate section for the instructions to create the planned land units layer.

Question 1

Do you have existing land unit records (unmapped land units listed under the **Land Units** tab)?

- **Yes.** Continue with **Question 2.**
- **No.** Skip to **Question 4.**

Question 2

Do you have existing shapefiles that are linked to the tabular land units in **Toolkit 4.1**?

- **Yes.** Use the instructions in [Section 2](#), Linking existing land unit records to an existing shapefile.
- **No.** Continue with **Question 3.**

Question 3

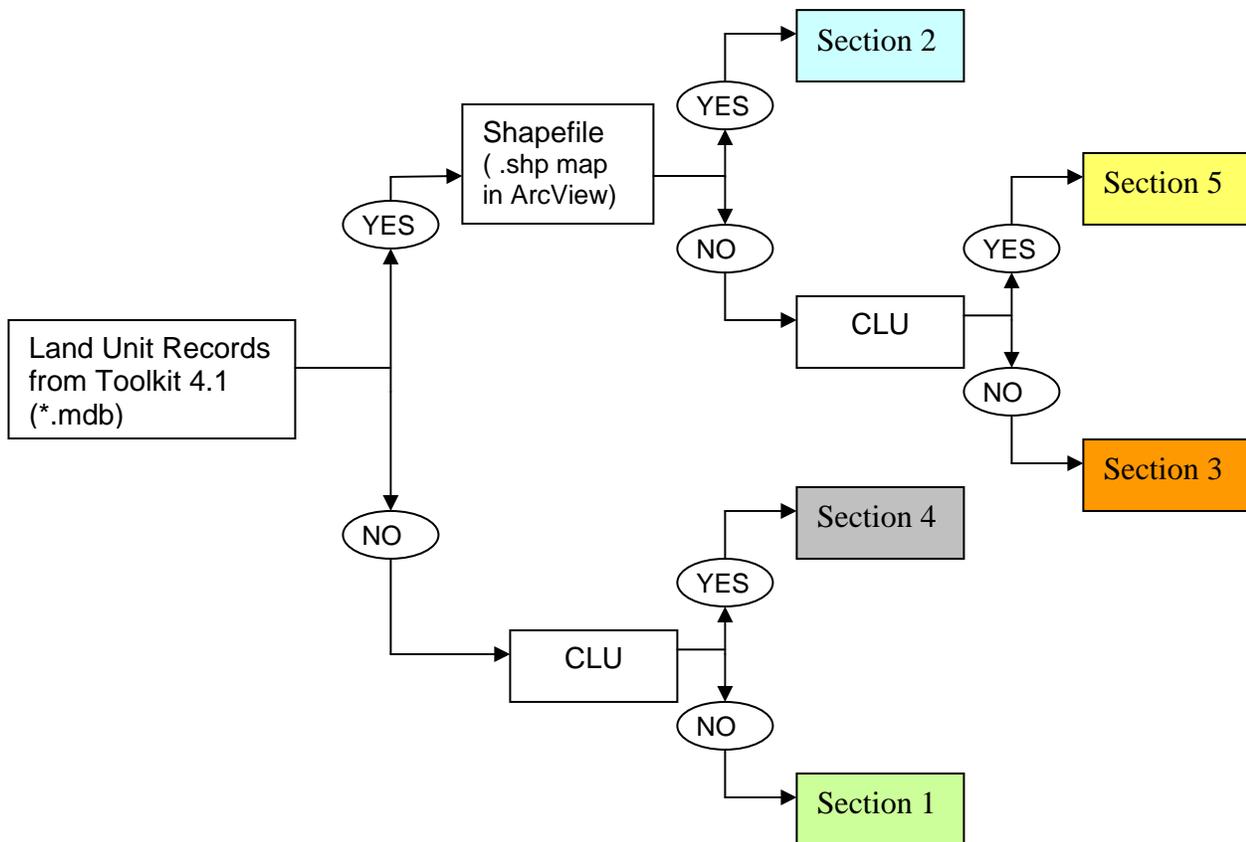
Do you have a CLU layer available to use as a source layer when creating the land units?

- **Yes.** Use the instructions in [Section 5](#), Create a PLU Layer, using a CLU, Layer and link features to existing land unit records.
- **No.** Use the instructions in [Section 3](#), Create a PLU Layer, without using a CLU Layer, and link features to existing land units records.

Question 4

Do you have a CLU layer available to use as a source layer when creating the land units?

- **Yes.** Use the instructions in [Section 4](#), Create a New PLU Layer, including the plan database, using the CLU Layer.
- **No.** Use the instructions in [Section 1](#), Create a New PLU Layer, including the plan database, without using a CLU Layer.



Section 1: Create a New PLU Layer including the Plan Database without a CLU Layer

These instructions walk you through creating a new PLU layer when no tabular data exists, no shapefiles are available for importing and there is no CLU layer available to use as a source layer.

1. Open an ArcGIS map document (.mxd file) for the customer (i.e. **ToolkitGIS_Template.mxd**).
2. Rename map document (File – Save as: **Tract1.mxd**).
3. Locate planning area: [**County = _BRADFORD_**; **T_R_S = _T7S R19E S10_**]
 - Add an image layer (county orthophoto or topography)
 - Add one or more reference layer(s) (PLSS, Quads, Major Roads, County boundary)
 - Use Zoom In/Out tools
 - Use Find tool with PLSS (T_R_S field) or Quads (Name field) and Zoom to Feature
4. Click on the **Create New Layer**  button.
5. Select the type of land units you want to create (**Planned, Alternative, or Benchmark**).
6. In the Create Plan section, choose the **Create a new plan database with a new land unit layer** option.

7. Type a **Layer Name** in the dialog box. Click **OK**.
8. When asked if you have an existing source layer, click **No**.
9. The planned land units layer will be added to the table of contents, and will be ready for digitizing.
10. Use the tools on the Land Unit Editor Toolbar to digitize the field boundaries. When all boundaries have been digitized, click on the **Editor** button on the Land Unit Editor toolbar, and choose **Stop Editing**.
11. When asked if you want to **Save Edits**, choose **Yes**. Close Land Unit Editor Toolbar.
12. Click on the Attribute Tool icon  to link the new features to the existing land unit records and to open the Attribute Tool dialog window.
13. Select the layer you wish to attribute from the drop-down list.
14. Select (highlight) a land unit in the view.
15. Complete the information in the Attribute Tool dialog window for the selected feature.
16. Once the attribute information has been entered for the selected land unit, click **Apply**.
17. Select another land unit in the view.
18. Complete the attribute information and click **Apply**.
19. Continue this process until all land units have been attributed.
20. When finished attributing all land units, click **OK** to dismiss the Attribute Tool dialog window.
21. Save and close map document.

Section 2: Linking Existing Land Unit Records to an Existing Shapefile

These instructions walk you through creating a new PLU layer, when the following conditions apply:

- An existing plan database exists (there are unmapped land unit records available in the Land Units tab).
- Existing shapefiles exist that corresponds to land unit records.
- The land unit records have not been linked to the shapefile in Toolkit 5.0

Creating New PLUs Layer from Existing Shapefiles

1. Open an ArcGIS map document (.mxd) file for the customer (i.e., **ToolkitGIS_Template.mxd**).
2. Rename map document (File – Save as: **Tract2.mxd**).
3. Add county ortho imagery : [County = **BRADFORD**]
4. Click on the **Select a Plan** icon .
5. Select the plan database you want to create Planned Land Units (PLUs) for.
6. Click the import shapefile icon . and import the corresponding shapefile.

- An information dialog box displays the records and shapefiles that will automatically be linked.
 - Items that are checked will be linked.
 - Unchecked items will not be linked.
 - If an item is not checked in the left window, that shape will be imported, but you must use the attribute tool to add it to the land units tab.
 - Any records that are not checked in the right window will be listed as unmapped under the Land Units Tab.
7. Click **OK** to dismiss the dialog window.
 - The planned land units are added to the view.
 8. If you wish to create geometry for the land unit, use the Digitizing Tool  to create the feature, and then use the **Link to Tabular** button in the **Attribute Tool**  to link it to the land unit record.
 9. If necessary, use the Digitizing toolbar to make edits to the PLU layer.
 10. When finished, click the **Editor** button and select **Stop Editing**.
 11. Save edits, and then close Editing Toolbar.
 12. Save and close map document.

Section 3: Create a PLU Layer w/o a CLU Linking Features to Existing LU Records.

These instructions walk you through creating a new PLU layer when the tabular data already exists, but no shapefiles are available for importing. In this example no CLU layer is available to use as a source layer for the new PLUs.

1. Open an ArcGIS map document (.mxd file) for the customer (i.e., **ToolkitGIS_Template.mxd**).
2. Rename map document (File – Save as: **Tract3.mxd**).
3. Locate planning area: [**County = _ BRADFORD; T_R_S = T5S R22E S11**]
4. Click on the **Select a Plan**  icon and choose the plan database you want to create the planned land units for.
 - The selected plan layer is added to the table of contents
 - No features are available to displayed in the view.
5. Click on the **Create New Layer** button .
6. Select the type of digitized land units you want to create (**Planned, Alternative, or Benchmark**).
7. In the Create Plan section, choose the **Link to existing plan database** option.
8. Select the appropriate plan database from the **Existing Plan** drop-down list.

9. When asked if you have an existing source layer, click **No**.
 - The planned land units layer will available in the Table of Contents and is ready for digitizing.
10. Use the tools on the **Land Unit Editor** Toolbar to digitize the field boundaries.
11. When all boundaries have been digitized, click on the **Editor** button on the **Land Unit Editor** Toolbar.
12. Select **Stop Editing**.
13. When asked if you want to **Save Edits**, choose **Yes**.
14. Close the **Land Unit Editor** toolbar.
15. Click on the **Attribute Tool** icon  to link the new features to the existing land unit records and to select the layer you wish to attribute from the drop-down list.
16. Select (highlight) a land unit in the view.
17. Click on the **Link to Tabular** button to display the unmapped land units records available for linking.
18. Highlight the corresponding land unit record in the right side of the Attribute Tool dialog window.
19. Click the Link button, then click Apply
20. Continue selecting land units in the view and linking them with the corresponding land unit records in the Attribute Tool dialog window.
21. When all land unit records have been linked, click the **Close** button in the Attribute Tool dialog window.
22. If you have additional land units in the view that did not have corresponding land unit records, you may use the **Attribute Tool** to attribute the additional features as necessary.
23. When finished, click **OK** to dismiss the Attribute Dialog Window.
24. Save and close map document

Section 4: Create a New PLU Layer, including the Plan Database with the CLU Layer.

These instructions walk you through creating a new PLU layer when no land unit records exist, no shapefiles are available for importing, but a CLU layer is available as a source layer for creating the PLU layer.

1. Open an ArcGIS map document (.mxd file) for the customer (i.e., **ToolkitGIS_Template.mxd**).
2. Rename map document (File – Save as: **Tract4.mxd**).
3. Add ortho imagery and the CLU layer to the view [**County = _____**].
4. When creating PLU from the CLU layer, you may select the CLU land units manually, or you may query for them using the tract or farm number.
5. If you wish to select the CLU land units manually, use the **Select Features**  to select land units from the CLU layer before proceeding.

6. Click on the **Create New Layer**  button.
7. Select the type of digitized land units you want to create (**Planned, Alternative, or Benchmark**).
8. In the Create Plan section, choose the **Create a new plan database with a new land unit layer** option.
9. Enter a **Layer Name** in the dialog box.
10. Click **OK**.
11. When asked if you have an existing source layer, click **Yes**.
12. Select the source layer you wish to use from the choice list.
13. If you have the land units pre-selected in the CLU layer, you may choose the **Use Selected Features** option.
14. If you wish to search by farm/tract number, choose **Select by**, and select either **tract number** or **farm number** from the choice list.
15. Highlight the tract/farm number(s) you wish to include in the new PLU layer, or enter the number in the dialog box.
16. Click **OK**.
17. The planned land units are added to the view, and available for additional editing.
18. Use the **Land Unit Editor** toolbar to edit the land units as needed.
19. Once you are finished editing or if no further editing is needed, click the **Editor** button on the **Land Unit** Toolbar.
20. Select **Stop Editing**.
21. When prompted to save edits, choose **Yes**.
22. Close the **Land Unit Editor** Toolbar.
23. Click on the Attribute Tool icon  to link the new features to the existing land unit records and to open the Attribute Tool Dialog Window.
24. Select the layer you wish to attribute from the drop-down list.
25. Select (highlight) a land unit in the view.
26. Complete the information in the Attribute Tool dialog window for the selected feature (the CLU attribute information is displayed on the right side of the window for reference purposes).
27. Once the attribute information has been entered for the selected land unit, click **Apply**.
28. Select another land unit in the view.
29. Complete the attribute information.
30. Click **Apply**.
31. Continue this process until all land units have been attributed.
32. When finished attributing all land units, click **OK** to dismiss the Attribute Tool dialog window.
33. Save and close map document

Section 5: Create a PLU Layer with a CLU Linking Features to Existing LU Records.

These instructions walk you through how to create a new PLU layer when the tabular data already exists, but no shapefiles are available for importing. The instructions describe how to use the CLU layer as a source layer for the new features.

1. Open an ArcGIS map document (.mxd file) for the customer (i.e., **ToolkitGIS_Template.mxd**).
2. Rename map document (File – Save as: **Tract5.mxd**).
3. Add the CLU layer and ortho imagery to the view [County = _____].
4. Click on the **Select a Plan** icon  and load the plan database you want to create spatial features for.
5. When creating PLUs from the CLU layer, you may select the CLU land units manually, or you may query for them using the tract or farm number.
6. If you wish to select the CLU land units manually, use the **Select Features** button  to select land units from the CLU layer before proceeding.
7. Click on the **Create New Layer** button .
8. Select the type of Digitized Land Units you want to create (**Planned, Alternative, or Benchmark**).
9. In the Create Plan section, choose the **Link to existing plan database** option.
10. Select the appropriate plan database from the drop-down list.
11. When asked if you have an existing source layer, click **yes**.
12. If you have the land units pre-selected in the CLU layer, choose may choose the Use **Selected Features** option.
13. If you wish to search by farm/tract number, choose **Select by:**
 - then select either **tract number** or **farm number** from the choice list.
 - Highlight the tract/farm number(s) you wish to include in the new PLU layer, or enter the number in the dialog box.
14. Click **OK**.
 - The planned land units will be added to the View, ready for further editing.
15. If no further editing is needed, click the **Editor** button on the Land Unit Editor Toolbar, and choose **Stop Editing**.
16. When prompted to Save Edits, choose **Yes**. Close the Land Unit Editor Toolbar.
17. Click on the **Attribute Tool** icon  to link the new features to the existing land unit records and select the layer you wish to attribute from the drop-down list.
18. Click on the **Link to Tabular** button to display the unmapped land units records available for linking.
19. Highlight a land unit in the view, and then highlight the corresponding land unit record in the right side of the Attribute Tool dialog window.
20. Click the **Link** button, then click **Apply**

21. Continue selecting land units in the view and linking them with the corresponding land unit records in the Attribute Tool dialog window.
22. When all land unit records have been linked, click the **Close** button in the Attribute Tool dialog window.
23. If you have additional land units in the view that did not have corresponding land unit records, you may use the **Attribute Tool** to enter the attribute data for the additional land units.
24. When finished, click **OK** to dismiss the Attribute Tool dialog window.
25. Save and close map document

C. Editing Features

Before editing a PLU layer, you must have that plan selected and the Land Unit Editor toolbar active, as explained below:

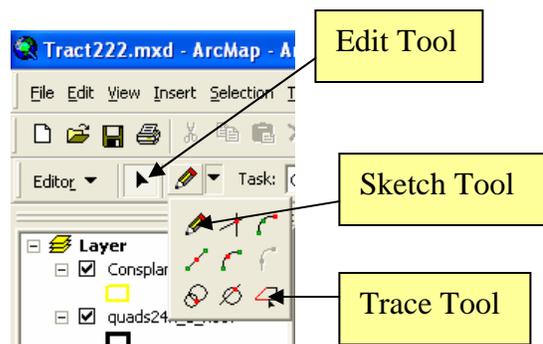
- Open an ArcGIS map document (.mxd file) for assigned customer (i.e., **Tract1.mxd**).
- **Select a Plan** icon  and load the plan database to be edited.
- Use the Digitizing Tool  or the Digitizing button  to open the Land Unit Editor toolbar.
 - Split Polygons
 - use the **Select Features** button  to select field
 - use the **Split Field** button to cut a polygon in two pieces
 - Inclusion
 - Use the **Add Field** button  to draw inclusion (“island”) polygon
 - Merge
 - use the **Select Features** button  to select two or more fields
 - Use the **Merge Fields** button  to merge selected polygons
 - Reshape
 - Use the Topology Edit tool  to select segment
 - Use the **Reshape Field** button  to draw new shape by starting and ending on same side of segment
 - Vertex
 - Use the Topology Edit tool  to select segment
 - Use the **Edit Vertices** button  to click and drag a vertex to new position
 - Move cursor away from vertex and double click.
 - Node
 - Use the Topology Edit tool  and hold **N** key (on keyboard) to select node (end of segment)
 - Drag selected node to new position

□ Append (Snapping)

- Open ArcGIS Editor: Tools – Editor Toolbar
- Set Snapping Properties (from ArcGIS menu): Editor – Snapping – Check Vertex, Edge, and End for layer being edited
- Set Snapping Tolerance (from ArcGIS menu): Editor – Options – General – Snapping Tolerance = **30 map units** (approx. 100ft)
- Use the **Add Field** button  to draw new polygon. Make sure to add same number of vertices along common boundary (cursor will snap to vertex as you move along)

□ Append (Tracing)

- Open User Preferences dialog box (Tools – Preferences)
- GIS Tools Tab: set User Level = Advanced
- Save and Exit Preferences dialog box
- Open customer ArcGIS map document (*.mxd)
- **Select a Plan** icon  and load the plan database to be edited
- Open ArcGIS Editor: Tools – Editor Toolbar
- Click drop-down arrow of Editor button and select **Start Editing**
- Choose Personal Geodatabase with Source = C:\Documents and Settings.... in **Start Editing** dialog box
- Click OK
- Choose plan database loaded and click Start Editing
- Use Edit tool to select common border. Use shift key and Edit tool to select multiple borders
- Use Trace Tool from the Sketch tool drop-down box and trace from one end of the common border to the other. At that point, click one time, then return to the Sketch tool drop-down box and select the Sketch tool (pencil) to complete the remainder of the polygon
- Double-click when finished.



D. Develop Resource Overlays

Tract Boundary

- Click on the **Select a Plan** icon  and load the plan database for which you want to create a Tract Boundary
- Click on the **Create New Layer**  button Editor
- Select Tract Boundaries
- Enter layer name (or accept default)
- Enter file name (or accept default)
- Click OK button
- Change Fill pattern and Outline color/size so you can see layers below

Map Labels

- Click on the **Map Label**  icon
- Select layer for which you want to create labels
- Check "*Create Annotation Layer*"
- Select Label Style
- Check "*Scale Labels*"
- In the Label Properties area, select field(s) to be used as labels and put a check mark by field name
- Enter Text, select Units and Decimals as appropriate
- Click OK
- Enter name for annotation layer
- Click OK
- To edit labels, use pointer to select one label or Edit – Select All Elements to select all labels, and change font, size, color on the Drawing toolbar
- To turn Annotation layer on/off, go to Data Frame – Properties – Annotation Groups and toggle check mark by Annotation group name

Soils Layer & Report

- Add county soils layer to Table of Contents
- Click on the **Soils Map and Inventory**  icon
- Select PLU layer
- Select soils layer (Input)
- Enter Soils Map Layer Name (Output)
- Check Inventory Report Options needed (MU Symbol/ Name/ Acres/ Percent etc.)
- Click OK
- Set Legend to multiple categories [MUSYM, MUNAME]
- Change Fill pattern and Outline color/size so you can see layers below
- Use Map Labels instructions to develop soils labels

□ Practice/ Resource Inventory/ Build Your Own layer

- Click on the **Create New Layer**  button Editor
- Select layer category: Practice – Resource Inventory – Build Your Own
- Select feature type (Point, line or polygon)
- Click OK
- If needed set snapping properties as described in the *Editing Features- Append* section
- Use the tools on the Land Unit Editor Toolbar to digitize features. When all features have been digitized, click on the **Editor** button on the Land Unit Editor toolbar, and choose **Stop Editing**.
- When asked if you want to **Save Edits**, choose **Yes**. Close Land Unit Editor Toolbar.
- Click on the Attribute Tool icon  to select layer and features to be attributed. Enter Codes for Existing (1) and Planned (3) in Notes section.
- Complete the attribute information and click **Apply**.
- Continue this process until all features have been attributed.
- When finished attributing all Practice features, click **OK** to dismiss the Attribute Tool dialog window.
- Edit Legend and symbols as needed using NRCS Planning symbols
- Connection with Practice Scheduler

E. Produce Maps

Creating Layout

- Review list of layer in Table of Content and turn off those you don't need
- Make sure layer names and legends are as you want to have them printed on the map



- Click on the **Map Products** button
- Heading Tab: Enter map header details (Title, customer name, office, agency, planner, etc)
- Layout & Scale Tab: Enter paper size, scale, logo
- Click Apply
- Click OK

Review Layout Tools to change layout display (Zoom in/out)

Editing Map Heading Text:

- Use ArcGIS pointer tool to select a text (box with dashed lines will appear around selected text)
- Edit text/Change symbol: Text Properties – Text tab

Editing legend

- Resize legend with pointer tool
- Copy legend: Select – Copy – Paste
- Remove Item: Legend Properties – Items – Select Legend item – Left arrow key
- Edit label: Layer Properties in Table of Contents
- Scale bar divisions: Properties – **Scale & Units Tab**: Set *When resizing...* to Adjust width - Enter new scale interval in *division value* – Click Apply – Click OK

Exporting



- Click on the **Map Products** button
- Review information in Heading and Layout & Scale tabs and make edits if needed
- Click Export to PDF...
- Enter file name
- Click Save

Printing

- ArcGIS menu: File – Print – Setup (to select printer/plotter parameters)
- Click OK

F. Miscellaneous

- APR vs MXD file
 - Number of APR Views/Layouts vs MXD Data Frames/Layout
 - Naming conventions
 - Saving PLU & Practice layers

- APR Utility
 - ArcGIS menu: File – Import from ArcView Project
 - Select *.apr file
 - Select View
 - Select Layout (both View and layout are added to the MXD)

- DNR Garmin 4.4.2
 - Review

G. Appendix

County FIPS Codes

<u>FIPS</u>	<u>COUNTY NAME</u>	<u>FIPS</u>	<u>COUNTY NAME</u>
001	ALACHUA		
003	BAKER	083	MARION
005	BAY	085	MARTIN
007	BRADFORD	087	MONROE
009	BREVARD	089	NASSAU
011	BROWARD	091	OKALOOSA
013	CALHOUN	093	OKEECHOBEE
015	CHARLOTTE	095	ORANGE
017	CITRUS	097	OSCEOLA
019	CLAY	099	PALM BEACH
021	COLLIER	101	PASCO
023	COLUMBIA	103	PINELLAS
025	DADE	105	POLK
027	DESOTO	107	PUTNAM
029	DIXIE	109	ST. JOHNS
031	DUVAL	111	ST. LUCIE
033	ESCAMBIA	113	SANTA ROSA
035	FLAGLER	115	SARASOTA
037	FRANKLIN	117	SEMINOLE
03	GADSDEN	119	SUMTER
041	GILCHRIST	121	SUWANNEE
043	GLADES	123	TAYLOR
045	GULF	125	UNION
047	HAMILTON	127	VOLUSIA
049	HARDEE	129	WAKULLA
051	HENDRY	131	WALTON
053	HERNANDO	133	WASHINGTON
055	HIGHLANDS		
057	HILLSBOROUGH		
059	HOLMES		
061	INDIAN RIVER		
063	JACKSON		
065	JEFFERSON		
067	LAFAYETTE		
069	LAKE		
071	LEE		
073	LEON		
075	LEVY		
077	LIBERTY		
079	MADISON		
081	MANATEE		

Service Center Geographic Databases - Florida

<u>Dataset</u>	<u>Path</u>	<u>Filename</u>
Public Land Survey System (Township/Range/Section)	F:\geodata\cadastral\	plss_a_fl<fips>.shp
Cultural Resources	F:\geodata\cultural_resources\	cultres_a_fl<fips>.shp
Strategic Habitat (WHIP)	F:\geodata\endangered_habitat\	habitat_a_fl<fips>.shp
Congressional District	F:\geodata\government_units\	congdist_107_a_fl<fips>.shp
County Boundary	F:\geodata\government_units\	cnty24k_a_fl<fips>.shp
USGS Quad Index	F:\geodata\map_indexes\	quads24k_a_fl<fips>.shp
OrthoPhotography	F:\geodata\ortho_imagery\	ortho1-[1/2]_fl<fips>.sid
Major Roads	F:\geodata\project_data\nrcs\	majhwy_1_fl<fips>.shp
Soils	F:\geodata\soils\	soil_a_<stssaid>.shp
USGS Topos	F:\geodata\topographic_images\	drg_fl<fips>.sid
National Wetland Inventory	F:\geodata\wetlands\	nwi_a_fl<fips>.shp

Online Resources

** Free sign up until June 30, 2005 **

Catalog

Migrating from ArcView 3.x to ArcGIS

 Authored by [ESRI](#)

Required Software

▶ ArcView 8.1-8.3, ArcEditor 8.1-8.3, or ArcInfo 8.1-8.3

Overview

This six-module course introduces ArcView 3.x users to the features and architecture of ArcView 8. Students learn how the new ArcView 8 terminology and features compare with ArcView 3.x, how to use the new Windows-based applications: ArcMap, ArcCatalog, and ArcToolbox, and how these applications work together. Students also learn how to create, edit, and georeference spatial data, as well as manipulate tabular data, query a GIS database, perform spatial analysis, and present their data clearly and efficiently using maps and charts.

Many of the topics covered in this course are similar to those in *Learning ArcGIS 8, Part I* so students who complete this course should not enroll in *Learning ArcGIS 8, Part I*.

Audience

This course is designed for ArcView 3.x users who want to learn ArcView 8.

Goals

After completing this course, you will be able to use ArcView 8 to:

▶ display feature and tabular data

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- ▶ georeference spatial data
- ▶ query features using logical expressions
- ▶ find features using spatial relationships
- ▶ edit spatial data
- ▶ import features into a geodatabase
- ▶ create new feature classes
- ▶ create maps, reports, and graphs

Modules ([Click for more detail](#))

- ▶ Basics of ArcView 8
- ▶ Displaying data in ArcView 8
- ▶ Working with spatial data in ArcView 8
- ▶ Working with attributes in ArcView 8
- ▶ Querying your database in ArcView 8
- ▶ Presenting data in ArcView 8

Prerequisites and Recommendations

Knowledge of ArcView 3.x

Catalog

Learning ArcGIS 8, Part I

 Authored by [ESRI](#)

Required Software

▶ ArcView 8.1-8.3, ArcEditor 8.1-8.3, or ArcInfo 8.1-8.3

Overview

This new six-module course introduces ArcGIS and provides the foundation for becoming a successful ArcView, ArcEditor, or ArcInfo user. Students learn how to use ArcMap, ArcCatalog, and ArcToolbox and see how they work together to provide a complete GIS software solution. The course covers fundamental GIS concepts, as well as how to create and edit spatial data. Students also learn how to work with tables, query a GIS database, and present data clearly and efficiently using maps and charts.

Many of the topics covered in this course are similar to the Migrating from ArcView GIS 3.x to ArcGIS. Students who complete this course should not enroll in the Migrating from ArcView GIS 3.x to ArcGIS course.

Audience

This course is for those who are new to ArcGIS and to geographic information systems in general.

Goals

After completing this course, you will be able to:

- ▶ display feature and tabular data
- ▶ query features using logical expressions
- ▶ find features using spatial relationships

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1-800-447-9778.

“ Thank you for making this available via the internet. I have been learning bits and pieces for two years without having time to be taught the basics. This has been a tremendous help to me. ”

Becky Fowler, Wyoming

- ▶ edit spatial data
- ▶ import features into a geodatabase
- ▶ create new feature classes
- ▶ create maps, reports, and graphs

Modules ([Click for more detail](#))

- ▶ Basics of ArcGIS
- ▶ Displaying and Georeferencing Data in ArcGIS
- ▶ Working with Spatial Data in ArcGIS
- ▶ Working with Attributes in ArcGIS
- ▶ Querying Your Database in ArcGIS
- ▶ Presenting Data in ArcGIS

Prerequisites and Recommendations

None