

Exercise 6d: Clean up the map and geodatabase

Understanding GIS: An ArcGIS Project Workbook for ArcGIS 10 Lesson 6: Conduct the analysis Add metadata, remove extra layers from the map, and format table fields. Book Resources are located here.

<http://video.esri.com/watch/895/exercise-6d-clean-up-the-map-and-geodatabase>

Video Transcription

00:01 This is Lesson 6: Conduct the analysis...

00:03 ...Exercise 6d: Clean up the map and geodatabase.

00:07 In this exercise we have seven objectives.

00:10 First, we want to simplify (clean up) the map document.

00:13 Second, add descriptions to the layer properties.

00:16 Third, delete any unnecessary fields from the attribute table.

00:20 Fourth, add an identifier field to the attribute table.

00:24 Fifth, save the layer as a layer file.

00:26 Sixth, set up the map document properties.

00:29 And the seventh objective is to clean up the geodatabase.

00:34 This exercise begins where Exercise 6c ended.

00:37 In the Table of Contents, we will begin at the top...

00:39 ...and remove all layers except for the following...

00:42 ...RecommendedSites, LARiver, LARiverBuffer, and Basemap.

00:48 Next we will turn on the LARiver, LARiverBuffer, and Basemap layers.

00:53 Right-click LARiverBuffer and click Zoom To Layer.

00:56 To make the LARiver layer stand out more, open the Symbol Selector...

01:00 ...and change the color to Big Sky Blue, and change the width to 3.

01:05 Click OK.

01:06 Next, open the Symbol Selector for the RecommendedSites layer.

01:10 Click Fill Color, and then click No Color.

01:13 Change the outline color to Medium Apple, and the outline width to 2.

01:19 Open the Symbol Selector for the LARiverBuffer.

01:22 Click Fill Color and then click No Color.

01:24 Change the outline color to Medium Lilac, and the outline width to 1.5.

01:29 Our first objective, to simplify our map document, has been met.

01:33 Now let's move on to the second objective, to add descriptions to the layer properties.

01:37 Open the layer properties for RecommendedSites...

01:40 ...and click the General tab.

01:42 In the Description box, type...

01:44 ..."These are the five sites recommended for a new park near the Los Angeles River."

01:48 Then click OK.

01:50 Open the layer properties for LARiverBuffer.

01:53 In the Description box, type...

01:55 ..."This is a 3/4 mile buffer around the Los Angeles River."

01:59 Then click OK.

02:00 Now we need to delete all unnecessary fields and attributes...

02:03 ...from the RecommendedSites table. This is the third objective on this list.

02:08 Open the Attribute Table, right-click on the FID_fivesites_identity field heading...

02:14 ...and choose Delete Field.

02:15 Click Yes on the prompt to confirm the field deletion.

02:18 We also need to delete the following FID fields...

02:21 ...FID_FiveSites, NEAR_FID, FID_ParkAccessZones_SpatialJoin...

02:30 ...and FID_BlockGroups.

02:33 We are now going to move to the fourth objective...

02:35 ...which is to add an identifier field that can be managed.

02:38 Click the Table Options button and choose Add Field.

02:41 Name the field SiteID and accept the default Short Integer field data type, then click OK.

02:47 Next, scroll to the end of the table.

02:49 Right-click the SiteID field heading and choose Field Calculator.

02:52 Double-click OBJECTID, then click OK.

02:55 This is a simple expression that will assign the same values of 1 to 5 to the new field.

03:01 The difference is that the SiteID is a field we can manage, while OBJECTID is not.

03:06 Once the processing is complete, open the layer properties for RecommendedSites.

03:10 The following steps show a detailed example for formatting fields...

03:13 ...to make them more readable.

03:15 Click the Fields tab.

03:16 In the list of fields, uncheck Shape_Length and Shape_Area to hide them.

03:21 At the bottom of the list, click SiteID to highlight it.

03:24 In the row of tools at the top, click the little drop-down arrow...

03:27 ...next to the Move Up button, and choose Move To Top.

03:30 Click the Move Down button twice to move the field directly underneath Shape.

03:35 Moving this field affects the layer only. In the feature class, fields are stored in the order...

03:39 ...in which they're added, and this order can't be changed.

03:42 Click the PCT UNDER 18 field near the bottom of the list to highlight it.

03:46 In the box on the right, under Appearance, click the word Alias to highlight it.

03:49 Replace the current alias with Percent Under 18 Years.

03:54 Two lines down, click Number Format to highlight it.

03:57 Click the button that appears on the right to open the Number Format dialog box.

04:02 In the Number Format dialog box, click the Percentage category...

04:05 ...then click Numeric Options.

04:07 Change the number of decimal places to 0.

04:10 Click OK on the Numeric Options and Number Format dialog boxes.

04:15 Click Apply to apply your changes so far.

04:18 Now we need to do these same steps to the ACRES, NEAR_DIST, POP2000...

04:22 ...MEDIAN HH INCOME, and POP DENSITY fields.

04:25 Format the ACRES field. Change the alias to Acres...

04:31 ...and the number format to Numeric (one decimal place).

04:38 Format the NEAR_DIST field. Change the alias to Feet to LA River...

04:44 ...and the number format to Numeric...

04:46 ...(zero decimal places; show thousands separators).

04:50 Format the POP2000 field; change the alias to 1/4 Mile Population...

04:55 ...and the number format to Numeric (show thousands separators).

05:00 Format the MEDIAN HH INCOME field.

05:03 Change the alias to Median Household Income and the number format to Currency.

05:11 Format the POP DENSITY field.

05:13 Change the alias to People per Square Mile, and the number format to Numeric...

05:18 ...(zero decimal places; show thousands separators).

05:21 Click OK to close the layer properties.

05:23 In the attribute table, widen fields as needed by placing the mouse pointer...

05:27 ...between field headings and dragging in either direction.

05:30 Close the attribute table.

05:32 We can now move on to the fifth objective...

05:34 ...saving the RecommendedSites layer as a layer file...

05:37 ...so that these properties will be available for use in other map documents.

05:41 At this point, all of the format settings are layer properties...

05:45 ...within this map document only.

05:47 This is what was done to the city boundary of Los Angeles in Lesson 1.

05:51 In the Table of Contents, right-click RecommendedSites...

05:54 ...and choose Save As Layer File.

05:56 In the Save Layer dialog box, navigate if necessary to Home - ParkSite\MapsAndMore.

06:05 Accept the default name, RecommendedSites.lyr, and click Save.

06:11 Our sixth objective is to set the map document properties to create metadata...

06:15 ...(background information) about the map and to make it searchable.

06:19 From the main menu, choose File > Map Document Properties.

06:23 In the Map Document Properties dialog box, for the title, type...

06:27 ..."Los Angeles River Park Site Analysis."

06:29 For the summary, type...

06:30 ..."Map of recommended sites for park development near the Los Angeles River."

06:35 For the description, type...

06:36 ..."These are the five sites recommended for a new park near the Los Angeles River."

06:40 For the author, type your name.

06:43 For the credits, type "City of Los Angeles, Esri."

06:47 For the tags, type "parks, Los Angeles River, Los Angeles"...

06:51 ...and include the commas to separate the tags.

06:53 Near the bottom of the dialog box, check the box to store...

06:56 ...relative pathnames to data sources.

06:59 This setting allows you to move the map document...

07:01 ...and its data sources to different locations without disruption...

07:05 ...as long as the layer paths to source data maintain the same...

07:08 ...directory structure relationship.

07:09 Click Make Thumbnail, then click OK.

07:13 Save the map.

07:15 In the Catalog window, in the Home folder...

07:17 ...right-click Lesson6.mxd and choose Item Description.

07:21 The properties you set appear in the Item Description for the map document.

07:25 If you don't see the thumbnail graphic, right-click the Home folder...

07:27 ...in the Catalog window and choose Refresh.

07:30 Note that the Preview tab allows you to navigate the map.

07:34 When you have finished exploring the various tools in the Preview tab...

07:37 ...close the Item Description window.

07:40 We are now ready to move on to the final objective on our list...

07:43 ...cleaning up the geodatabase.

07:44 In the Catalog window, expand AnalysisOutputs.gdb and click on it.

07:49 Click the Show Next View button...

07:52 ...to split the Catalog window into a top and bottom pane.

07:55 The geodatabase should contain eleven feature classes and one table.

07:59 In the bottom pane of the Catalog window, hold the Control key and click each dataset...

08:03 ...in AnalysisOutputs to select it, except these two: LARiverBuffer and RecommendedSites.

08:09 Right-click any of the selected datasets and choose Delete.

08:12 Click Yes on the Confirm Delete dialog box.

08:16 Now we'll update the item descriptions for the two remaining feature classes.

08:19 In the Catalog window, right-click the LARiverBuffer feature class...

08:23 ...and choose Item Description.

08:24 In the Item Description window, click the Preview tab...

08:28 ...and click the Create Thumbnail button.

08:30 Click the Description tab. In the row of buttons at the top, click Edit.

08:37 In the Summary box, highlight and delete the existing text. Replace it with this...

08:41 ..."This dataset represents the area under consideration..."

08:44 ...for a new park near the Los Angeles River."

08:46 In the Item Description box, highlight and delete the existing text. Replace it with this...

08:51 ..."This dataset is a 3/4 mile buffer around the Los Angeles River."

08:55 In the Credits box, highlight and delete the existing text. Replace it with this...

09:00 ..."City of Los Angeles, Esri."

09:02 At the top of the window, click Save, and leave the Item Description window open.

09:07 In the Catalog window, click RecommendedSites.

09:10 Click the Preview tab and click the Create Thumbnail button.

09:14 Click the Description tab and click Edit.

09:17 In the Summary box, highlight and delete the existing text. Replace it with this...

09:21 ..."These are the five sites recommended for the new park near the Los Angeles River."

09:25 In the Description box, highlight and delete the existing text. Replace it with this...

09:29 ..."This dataset is a subset of vacant land parcels...

09:32 ...one acre or larger near the Los Angeles River."

09:35 In the Credits box, replace the existing text with this...

09:38 ..."City of Los Angeles, Esri."

09:40 Click Save and close the Item Description window.

09:42 Save the map.

09:44 This concludes Exercise 6d, Clean up the map and geodatabase.

09:47 In the next exercise, we will evaluate the results of our work...

09:51 ...by inspecting photographs of the sites.