



## Picking a Park Site

Peter is a Civil Engineer working for Park Planners, Inc. Generally, he plans, designs, and develops park improvement plans and proposes new park sites. He often completes environmental impact studies and makes recommendations on how to best accommodate new property development. Part of his responsibility is to make presentations before governing bodies and neighborhood community groups, on behalf of a client.

### Scenario

The State of Florida hired Pete to help determine a new state park site. His first order of business is to create a true-to-life map of a Florida that shows the existing state parks. This map should also include all counties and navigable waterways.

### Files Used in this Exercise

Park.zip (Win)

Park.sit (Mac)

**Objectives** After this exercise you will be able to:

- Open multiple SHP files
- Set up the initial properties of SHP objects
- Change the units of measurement in a GIS document
- Add labels to SHP objects
- Rename layers
- Adjust the opacity of objects
- Create a graticule

### Required knowledge to perform this exercise

- Select and Open multiple files
- Change file types
- Use the Undo command
- Save a file
- Move an object
- Understand SHP files
- Recognize the horizontal scroll bar
- Zoom in and out
- Understand layers
- Understand a graticule

*If at any time your document is not in the middle of the window, press SHIFT+F3 (Windows) or CMD+F3 (Mac).*

### Narrative of this exercise

For this exercise, use the files found in the **Park** file (**Mac**). Begin by launching Canvas; notice that the Startup dialog appears by default. Choose three SHP files to open: county.shp, nav\_wat.shp, and park.shp. Affect the properties of the SHP objects as follows: use an array of colors to indicate the county objects and remove any outline; use green to indicate the parks and assign a red outline; change the nav\_water objects to be blue. Change the unit of measurement for the GIS document to miles; this reflects the true-to-life mileage of the map. Select all the county objects and change opacity to 25%. Label the each set of SHP objects by the DESCRIPT property. Put each set of labels on a new layer. Use Collision Detection so the labels do not overlap. Make the county labels black, the waterway labels blue, and the park labels red. Name these layers: county names, waterway names, and park names, respectively. Applying a graticule that reflects latitudinal and longitudinal coordinates at 14 point font. Save the document as **florida.cvx**.

## Files used in this exercise

Park\county.shp

Park\nav\_wat.shp

Park\park.shp

A sample end result to this exercise can be found in the Park file. answer\_ florida.cvx.

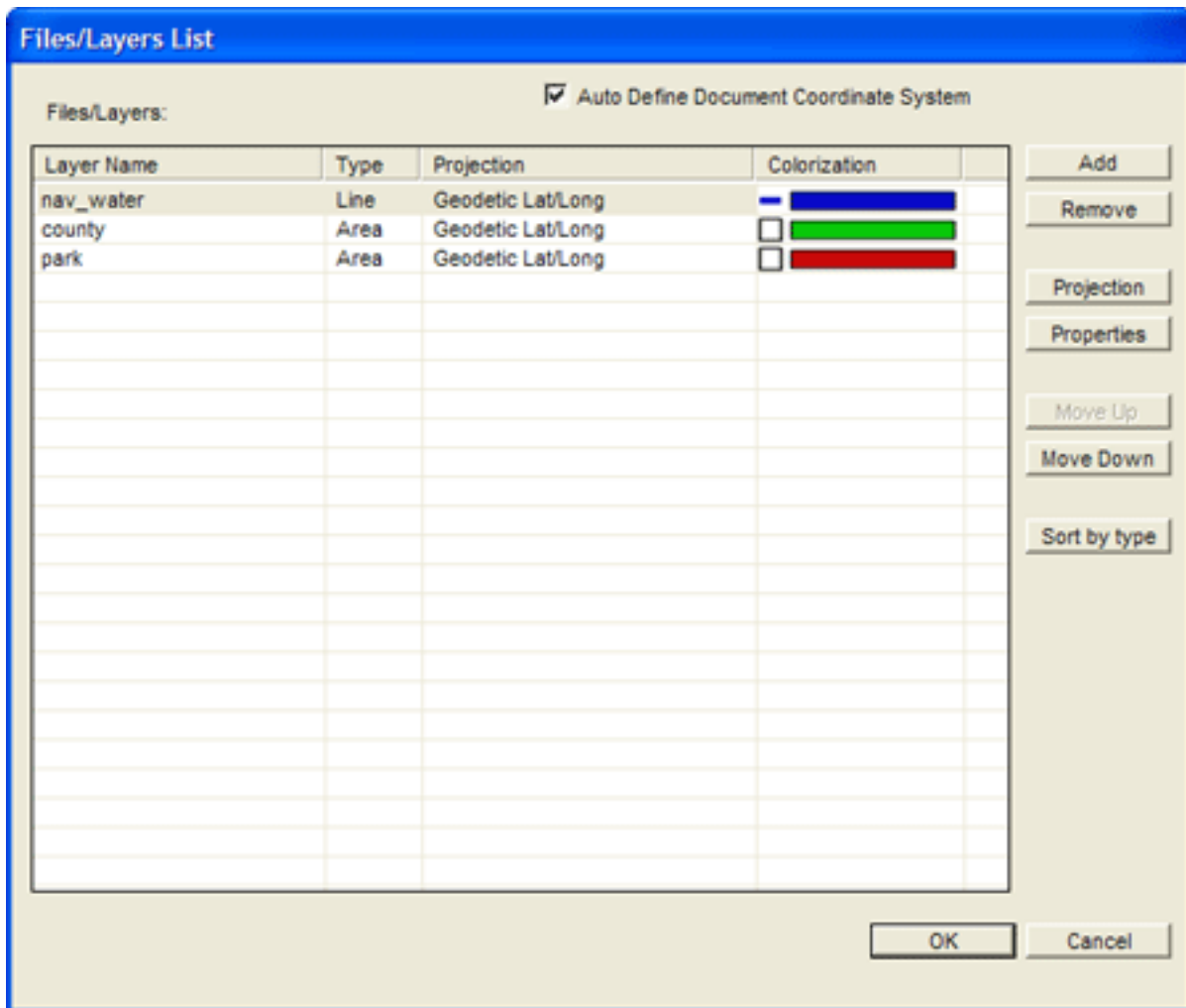
## TASK 1: Select and open respective SHP files as Layers

1. Launch Canvas. Select an illustration document (8.5 X 11).



Open (Ctrl+O)

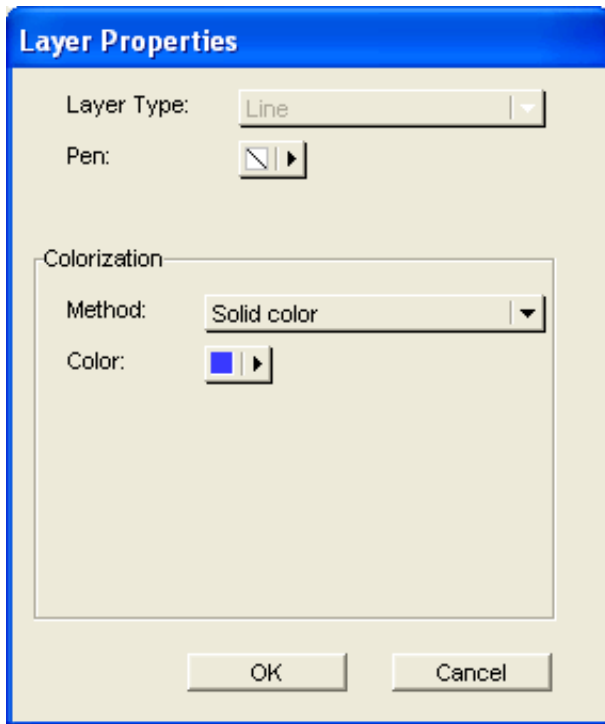
2. Click **Open (Ctrl+O)**. The **Open** dialog box appears.
3. Change **Files of Type** to SHP.
4. Navigate to **Park** and Ctrl-click (Windows) or Command-click (Mac) three files: county.shp; nav\_water.shp; park.shp.
5. Click **Open**. The **Files/Layers List** appears:



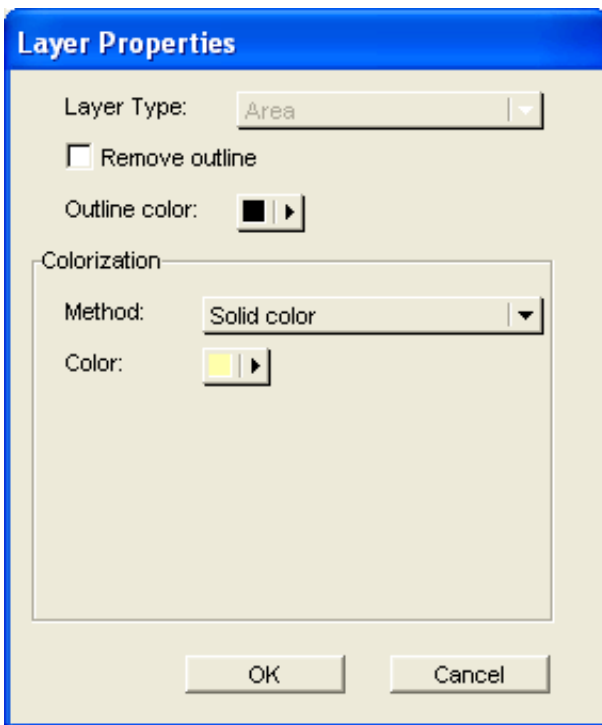
Select the park layer in the list and click the Move Up button.

## TASK 2: Set Object Properties

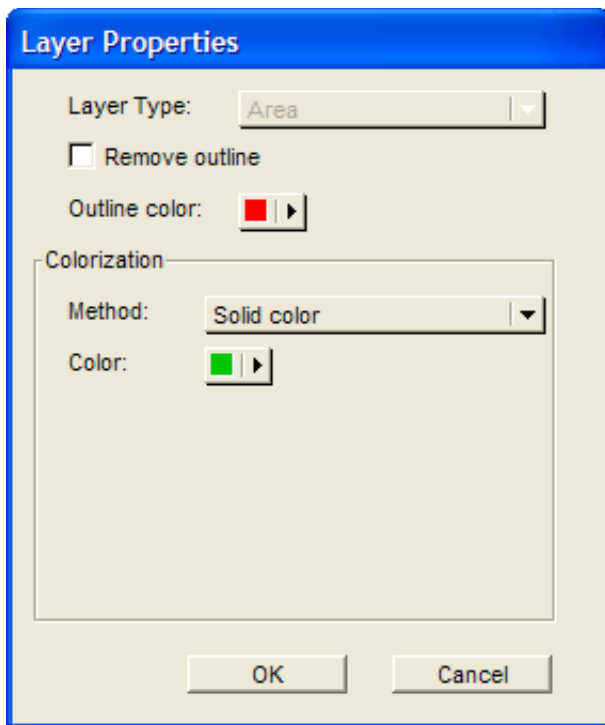
6. Select the nav\_wat layer and click Properties. The Layer Properties dialog box appears:



7. Change **Colorization** Method to **Solid color**.
8. Change **Colorization** Color to your choice of blue.
9. Click **OK**.
10. Select the **county** layer and click **Properties**. The **Layer Properties** dialog box appears:



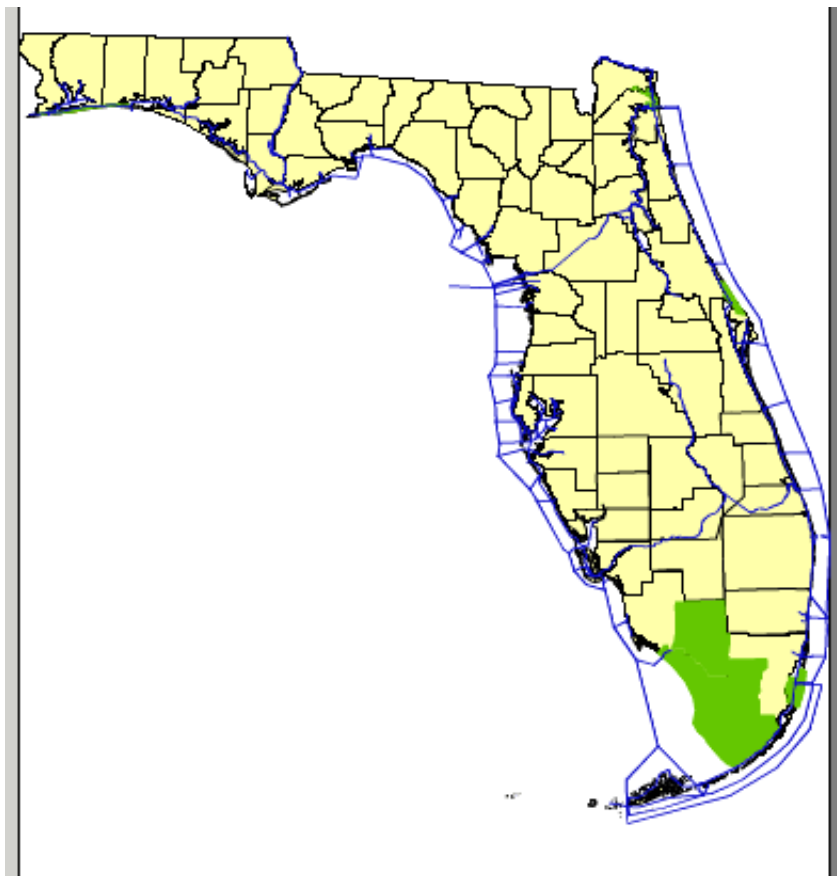
11. Leave the **Outline color** as black.
12. Change **Colorization** Method to **Solid color**.
13. Change **Colorization** Color to your choice of light yellow.
14. Click **OK**.
15. Select the **park** layer and click **Properties**. The **Layer Properties** dialog box appears:



16. Change **Outline color** to your choice of red.
17. Change **Colorization Color** to your choice of green.
18. Click **OK**. The **Files/Layers List** resumes.

### TASK 3: Change units of measurement

18. Click **OK**. A three-layered GIS illustration document appears with identifying information. Here is what your project looks like so far:



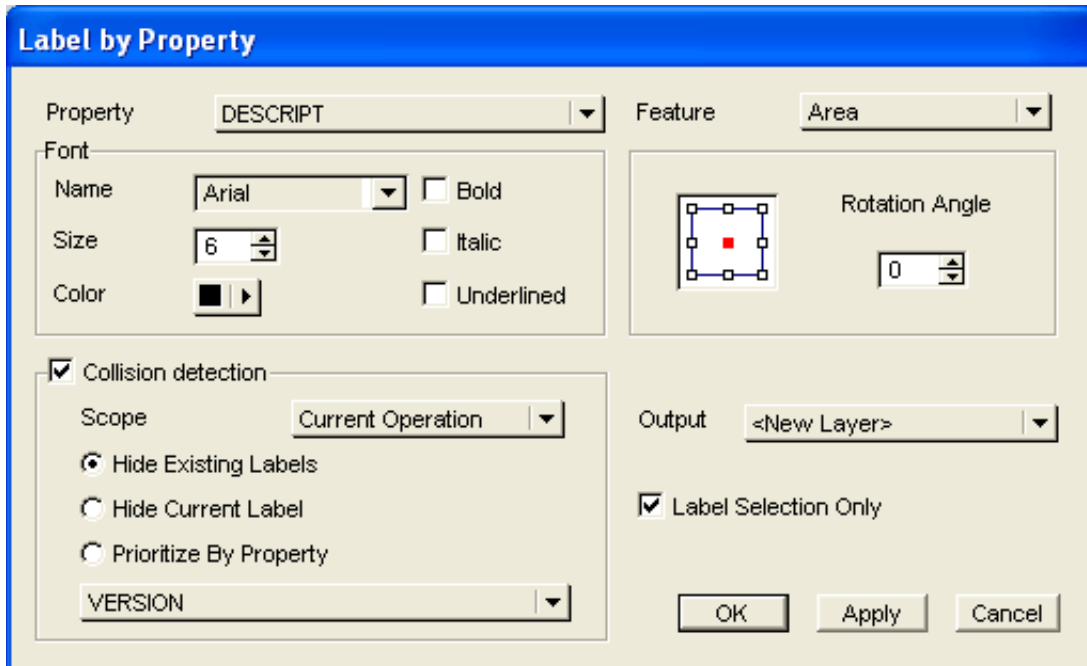
19. Change the Units to miles. Canvas reflects the precise, true-to-life mileage.

#### TASK 4: Change object's opacity

20. Choose the county layer and press Ctrl+A (Windows) or Command+A (Mac). All the objects on the layer are selected.
21. Slide the Opacity to read 25%. The county objects lighten in color.

#### TASK 5: Label objects; Rename layers

22. Choose the **county** layer and press Ctrl+A (Windows) or Command+A (Mac). All objects on the layer are selected.
23. Choose **GIS > Label by Property**. The **Label by Property** dialog box appears:



24. Change the **Property** to DESCRIPT.
25. Change **Size** to 6.
26. Change **Font** color to black.
27. Select the **Collision detection** checkbox.
28. Change **Output** to **New Layer**.
29. Click **OK**. Labels for each county appear on Layer #4.
30. Double-click the **Layer #4** tab, type county names and press Enter.

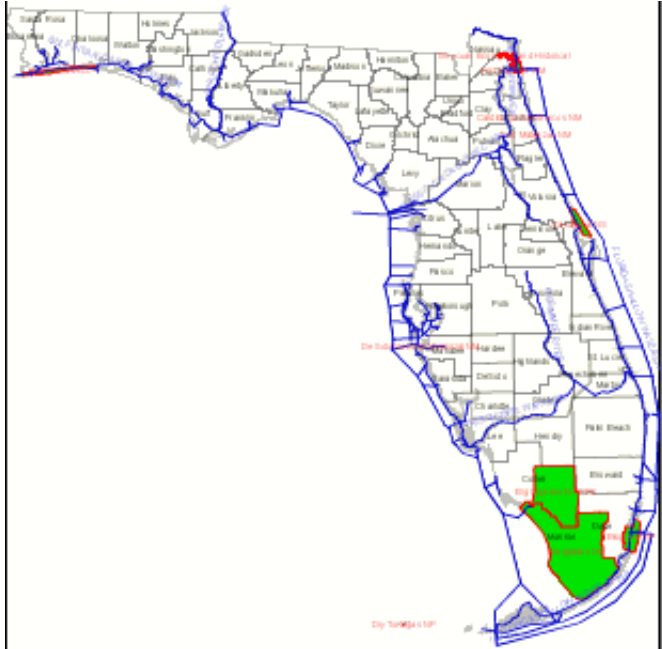
#### TASK 6: Label objects; Rename layers

31. Choose the **park** layer and press Ctrl+A (Windows) or Command+A (Mac). All the objects on the layer are selected.
32. Choose **GIS > Label by Property**. The **Label by Property** dialog box appears.
33. Change the Property to DESCRIPT.
34. Change **Size** to 6.
35. Change **Font** color to your choice of red.
36. Check the **Collision detection** checkbox.
37. Change **Output** to New Layer.
38. Click **OK**. Labels for each park appear on Layer #5.
39. Double-click the **Layer #5** tab, type park names and press Enter.

#### TASK 7: Label objects; Rename layers

40. Choose the nav\_wat layer and press Ctrl+A (Windows) or Command+A (Mac). All the objects on the layer are selected.

41. Choose GIS > Label by Property. The Label by Property dialog box appears.
42. Change the Property to DESCRIPT.
43. Change Size to 6.
44. Change the Font color to your choice of blue.
45. Check the Collision detection checkbox.
46. Change Output to New Layer.
47. Click OK. Labels for each navigable waterway appear on Layer #6.
48. Double-click the Layer #6 tab, type waterway names and press Enter. Here is what your project looks like so far:



### TASK 8: Apply a graticule

49. Choose GIS > Create Graticule. The Graticule Settings dialog box appears:

#### Graticule settings

Use Document Bounds ▼

Unit: degree ▼

Precision: N.xx3 ▼

Longitude

Start: -87.686 °

End: -79.678 °

Spacing: .602 °

Divisions: 5 ▼

Latitude

Start: 23.269 °

End: 32.085 °

Spacing: 1.763 °

Divisions: 5 ▼

Labels

Arial ▼ 14 ▼

Latitude: Rotate 90 deg

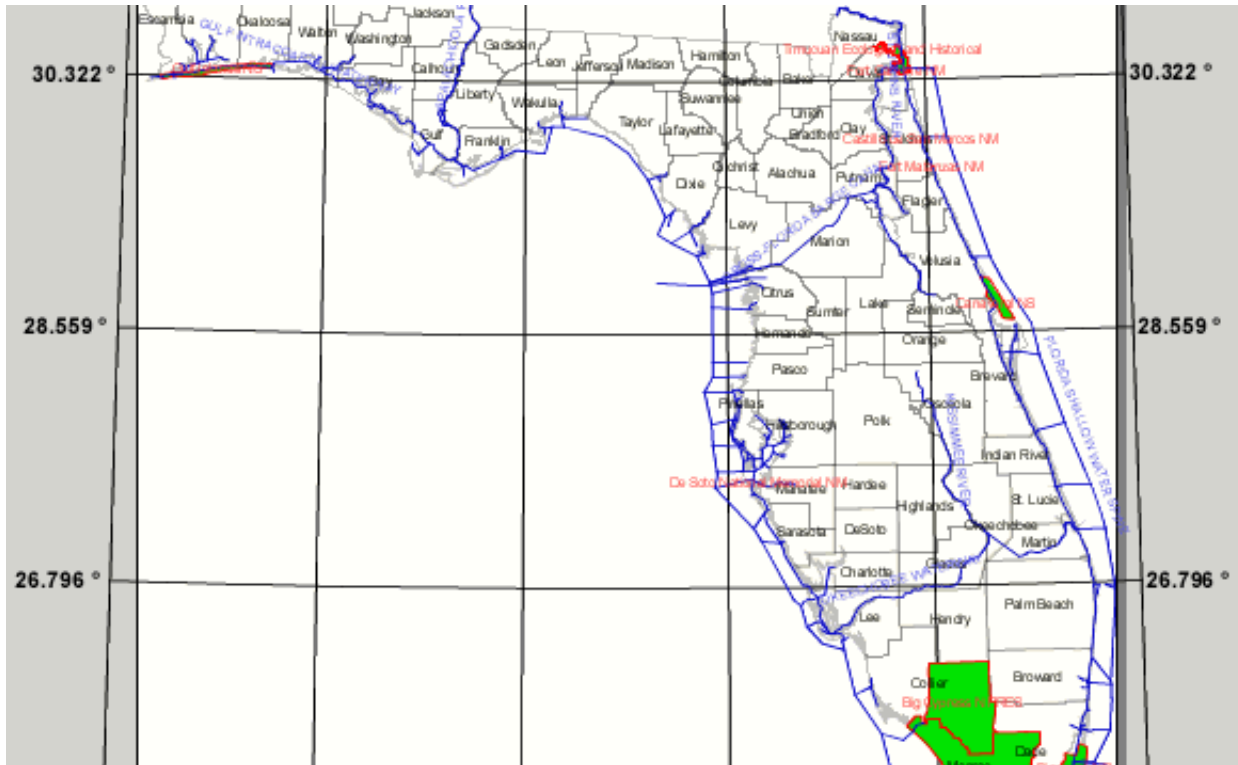
Frame With Ticks

Horizontal Offset: 0 ▲ pt

Vertical Offset: 0 ▲ pt

Apply OK Cancel

1. Change the **Labels** font to 14.
2. Click **OK**. A graticule appears.
3. Zoom in to view your work. Here is what your project looks like so far:



1. Save the document as **florida.cvx**.