

## Making Maps II: Map Layout & Design

These exercises will require you to use the skills and information you learned in Chapter 3, Tutorial 3, and the associated lectures.

This exercise will further your understanding of good map design practices and principles to follow when designing a map.

Items to keep in mind:

- 1) Create a new project before beginning the exercise.
- 2) General location of data files will be provided (see below). You will have to determine exactly which file to use, but the folders you should be working with are identified.
- 3) Any questions requiring the acquisition of data online will be your responsibility to find the data and download it.
- 4) Any new tasks required will be described. Otherwise, the tools and techniques required to answer the questions will have been introduced in the tutorials for this lab and any prior labs.

To answer the questions, you will need to use the following data:

**The map you created for the tutorial.**

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**Question 1:** Save the Hazards map you created from the tutorial under a new name, and then edit it to produce the version shown below (High resolution map on Canvas – Volcano.pdf).

This will include editing the following:

- features, labels, symbology, legend, location map and also neatlines so your map looks similar to the example.
- Display only the features on the example map.
- Do not worry if symbology color is exactly the same, but it should be similar (color, line weights, etc.).
- Categories, labels and layout of legend should be the same as the example.
- After you finish, add the *Terrain with Labels* basemap from ArcPro to the main map frame to provide context (but **turn off its reference layer** so the names of features and locations are not displayed).
- Make the counties about 30% transparent so that the basemap shows through slightly. Save the completed map as a PDF and upload it to Canvas.

**\*\*\*NOTE: To save a map in a different format:**

Follow these steps to save your map in a different format (ie. gif, PDF, etc.).

- a. Open the map in Layout view.
- b. On the top ribbon click Share > Export > Layout
- c. The Layout pane will open.

- d. Select the desired format and save location.

**Question 2:** Design and create an attractive map layout for your birth state (If you were not born in the US then pick a state). The map should have a focus/theme that it communicates clearly. (Title should reflect your map theme). Do not worry about data that extends beyond the borders of your state. (You have not learned how to edit that information to remove it from the map yet). Be sure to include all relevant descriptive features (ie. legend, title, etc.). Save the map as a PDF and upload it to Canvas.

- a. Your map must include the following:
  - a. At least 4 feature classes (not counting a state outline).
  - b. Title, legend, north arrow, scale bar, author, source, neatlines.
  - c. Main map, locator map (locator map should not have any features except for state outlines to show location of your home state in the US).
  - d. Appropriate symbolization, classification, projection.

**Deliverables:**

- PDF of Refined map from Tutorial 3
- PDF of your home state map.