

**GE-325: Cartography  
Map Design Project 2  
Summer 2018**

**Objectives**

1. Create a map for publication based on concepts and information found in descriptive text (as for a book, article, or webpage).
2. Choose map layers and data that appropriate to the map design, map topic, and needs of the user.
3. Practice good map design and mapping process techniques.

**Mission**

The McKnight Foundation has asked you to create a map, with all the necessary components and layers, to support the text at the end of this document. They want to publish the map on their website with the supporting text (<http://www.mcknight.org/grant-programs/mississippi-river>).

1. Design a map appropriate to its use and the text describing the map. You can use whatever software you want (ArcGIS, QGIS, Inkscape, etc) as long as it meets the requirements.
2. Make the map no larger than 8.5 x 11.
3. Write a caption and include it in your map design and output.
4. Write an explanation to the McKnight foundation explaining your design and layer choices.
5. Submit all of this in a report that has your explanation as well as your original design(s).

**Consider**

- You must select a projection that is *appropriate to your map*; there is a chapter on this in your book.
- In the write-up, you must explain the choices you made relative to the design of the map. If you make changes to your design in the implementation and creation of your map, you must explain why you diverted from the design.

**Mississippi River Text and Description to be used in Developing the Map**

**Mississippi River Overview**

The Mississippi River is one of the world's major river systems in size, habitat diversity and biological productivity. It is the third longest river in North America, flowing 2,350 miles from its source at Lake Itasca through the center of the continental United States to the Gulf of Mexico.

**Mississippi River Watershed**

The Mississippi River watershed is the fourth largest in the world, extending from the Allegheny Mountains in the east to the Rocky Mountains in the west. The watershed includes all or parts of 31 states

and 2 Canadian Provinces. The watershed measures approximately 1.2 million square miles, covering about 40% of the lower 48 states.

### **Water Supply**

Communities up and down the river use the Mississippi to obtain freshwater and to discharge their industrial and municipal waste. We don't have good figures on water use for the whole Mississippi River Basin, but we have some clues. A January 2000 study published by the Upper Mississippi River Conservation Committee states that close to 15 million people rely on the Mississippi River or its tributaries in just the upper half of the basin (from Cairo, IL to Minneapolis, MN). A frequently cited figure of 18 million people using the Mississippi River Watershed for water supply comes from a 1982 study by the Upper Mississippi River Basin Committee. The Environmental Protection Agency simply says that more than 50 cities rely on the Mississippi for daily water supply.

**Text Source:** NPS, 2014. *Mississippi River Facts*. US Department of Interior National Park Service website. <http://www.nps.gov/miss/riverfacts.htm>. Website Accessed May 20, 2018.