

Pools of the Mississippi River

Final Project

EVS/BIO 295 Sophomore Seminar

The Upper Mississippi River have been converted into a staircase for the purposes of navigation. Behind each of the dams created is a reservoir referred to as a *Pool*, numbered by the dam. A variety of data is available for each pool. You will be assigned in class a pair of adjacent pools to compare. Your tasks are the following:

1. Where are you pools located? What major streams enter each pool? What is the surrounding landscape? What is of particular interest about the pools?
2. Prepare a map of your pools using the information from (1). Include (1) and (2) in the *Introduction* section of your report.
3. Chemical data available for your pools originally came from the website http://www.umesc.usgs.gov/data_library/sediment_contaminants/sediment_contaminant_page.html. I havreduced the dataset to include a handful of metals, now in metals.xls
4. Identify two chemicals in each pool that have sufficient numbers of observations for you to successfully
 - compare using a t-test of means, and
 - determine if the chemicals are correlated.
 - Include the results of these tests in the *Results* section of your report.
5. Determine from online resources the standard methods for performing analysis of the chemicals. Include this in the *Methods* section of your report.
6. Discuss the significance of your findings and how you could use these finding for future research.

Submit a pdf file in IMRAD format. Make sure all figures are labelled.