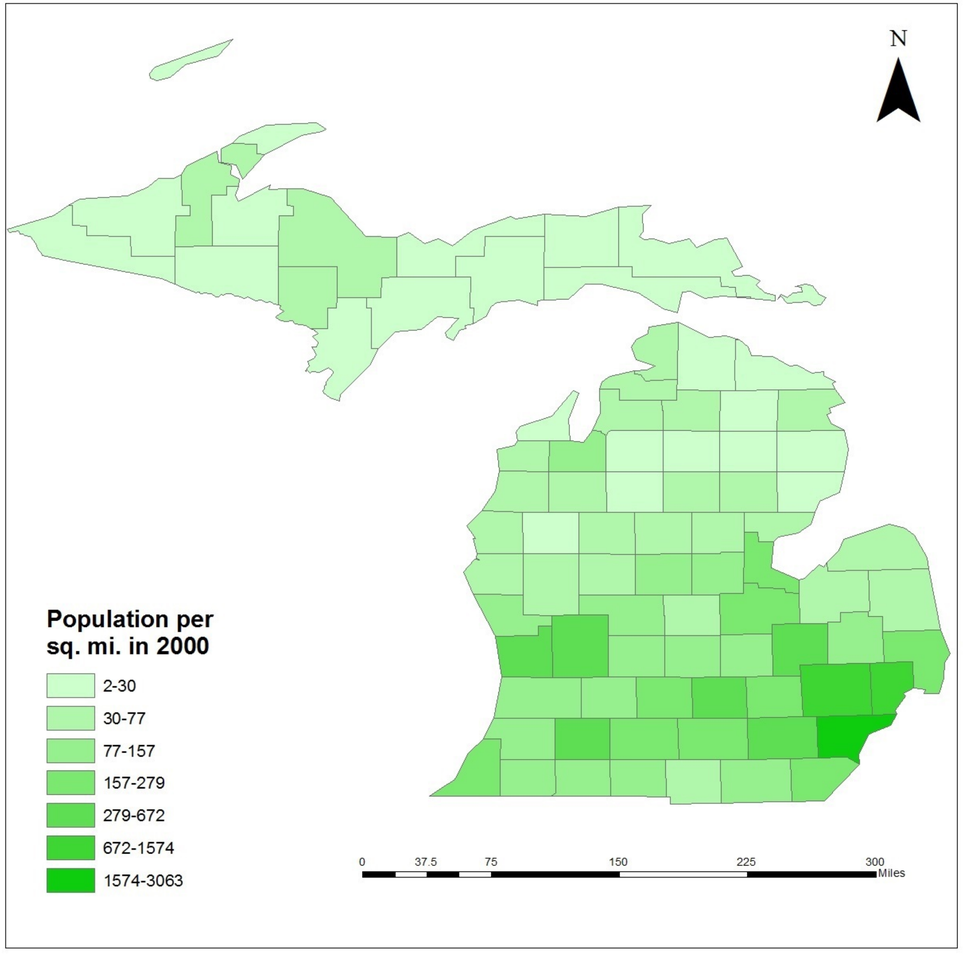
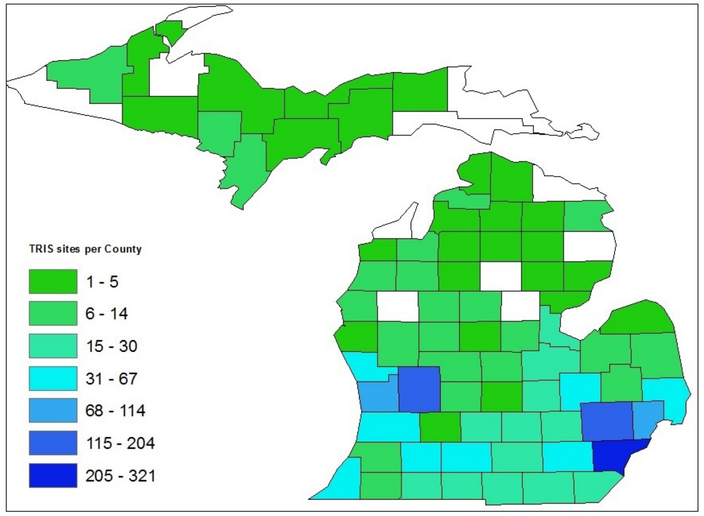
Michigan Pollution in Context (as Defined by EPA Data)



The above map is chloropeth map showing the various counties in the state of Michigan. The data is normalized by population per square mile. The reason for this being that the population per square mile shows where cocentrations of people are.

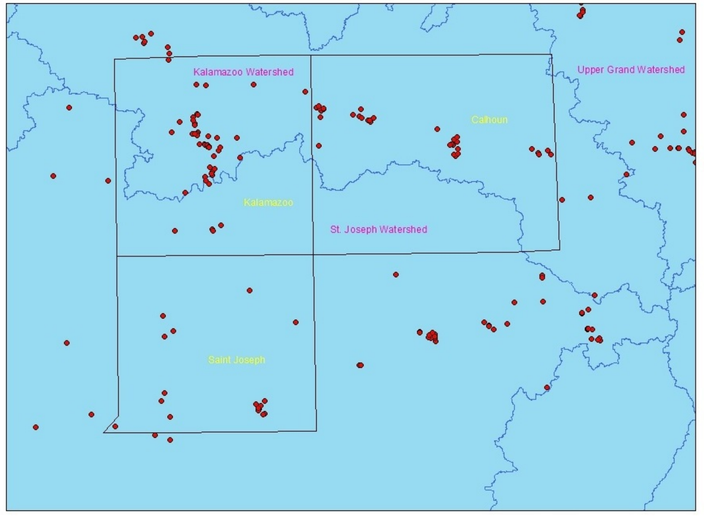
This project was formed to investigate the ever-growing issue of pollution. It is shown in the news all the time that pollution is ever growing issue. The purpose of this project was to see where TRIS sites (where toxic waste dumping permits have been allowed by the EPA) are in Michigan. In addition it was another priority to show many many of these sites fall within an area close to Western Michigan University and to analyze any trends in the data.

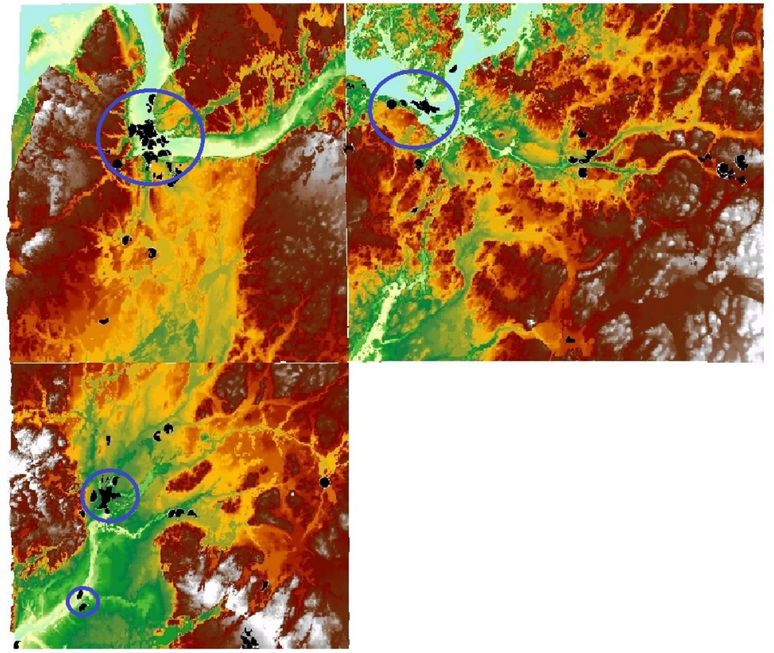
The visible trend in the data is that areas with a higher population per square mile, also have higher TRIS sites. The link shows that higher populations tend to have more industry, which often have toxic wastes that need to be disposed of.



The map above is a map displaying the TRIS site per county, for the state of Michigan.
TRIS sites are sites that have a permit from the EPA to release Toxic Wastes.
These sites, while having permission from the EPA, are still damaging to the environment and are a concern to the ecological status of Michigan.

The map below shows the correlation of TRIS sites per the counties of Calhoun, Kalamazoo, and Saint Joseph
The watersheds affected are Kalamazoo, Saint Joseph, and the Upper Grand.





The above map is a representation of the topography of the counties of Kalmazoo, Calhoun and Saint Joseph. This map was created in ArcScene using data from the Michigan Geospatial Data Library. The reason why this data was portrayed in a topographic map is because it allows the viewer to easily see how topography affects the location of TRIS sites. Since TRIS sites are businesses that have a permit to dump toxic waste, it is only natural that these areas need somewhere to store the toxic waste. Having underground containers would be very costly. Therefore, being near a water source makes it easier for the business to dispose of toxic waste. The circled areas on the map above indicate the waterways that have a majority of TRIS sites located on that waterway.

The map above displays a cross section of the topographical map. The dark brown colors with the white peaks display the highest points of elevation. The green areas mark the "main land" areas, the areas that are at sea level or slightly above sea level. The areas below sea level that represent bodies of water, such as rivers and lakes, are a light blue or "teal" color.