Becca Heibler and Kyle Dash

Mentor: Professor Michelle Fame

Class: Introduction to GIS

"Locating a Possible Renewable Energy Plant Site in the State of Texas"

"Locating a Possible Renewable Energy Plant Site in the State of Texas" was created as part of a group project in the class to map out a possible location in a specific U.S. state of choice (Texas) of where to place a renewable energy plant. Group members chose to map solar, wind, and biomass/biomethane data among the different counties of the state of Texas to determine what county to place the plant. The group overall was looking for the best energy resource for the state of Texas that would determine the type of renewable plant that would be installed. In addition to finding data about different energy resources, the members mapped out overall land cover of where man-made structures were in the county, its overall population density, and the topography of the county as well.

The group determined that the overall best energy resource was biomass/biomethane as they could be used by all counties in Texas to some extent. Hartley County was deemed to be possible location for the renewable power plant as the county's biomass production lies within the top three categories of the biomass map. Man-made structures tended to be resided mostly in the northeastern/eastern side of the county with blotches in the west. In terms of population density, most people are living in the northern/northeaster side of the state with the rest scattered throughout the rest. In terms of elevation, the county is mostly flat in the northern part and hilly/mountainous in the southern region with three major roads going through the county all connecting in the middle north of the county itself.