# Relationship between water quality and money in the US: A data analytical approach.

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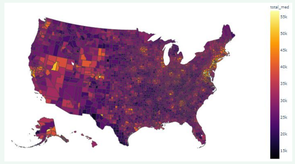
## Highlights

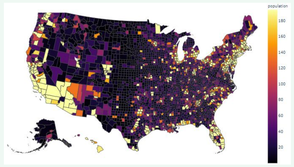
- We can see that there's no difference between the median of income within each chemical, through the years
- That's why we'll be making an average of the data trough the years of the study, to correct for missing values

## Question

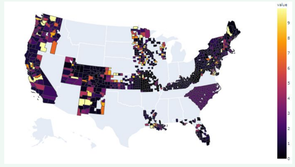
Water is the key to living. Most of our problems with politics and economics are small compared with a possible future without access to clean water. The issue of not being able to get a high-paying job can be negligible compared to the problem of not having clean water. However, some people think that water and environmental care produce a decrease in productivity, therefore, earnings and profitability of industries are decreased and people become consequently poorer (Clevenger, T., & Herbert, M., 2020). The aim of this project is to discover hidden patterns between water quality and money in order to get insights into whether environmental carelessness produces more money as many non-enviromentalists argue.



Earnings



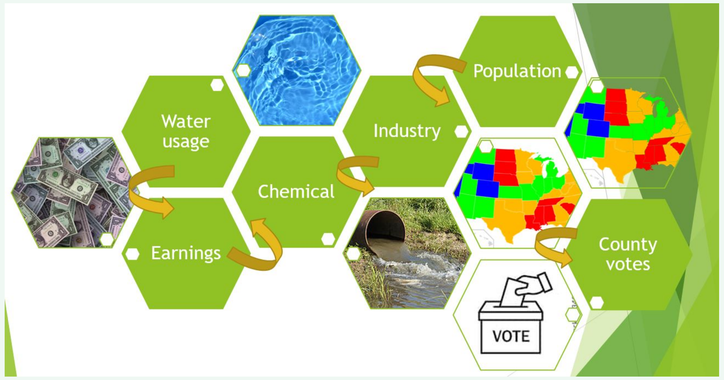
Population



Arsenics in water

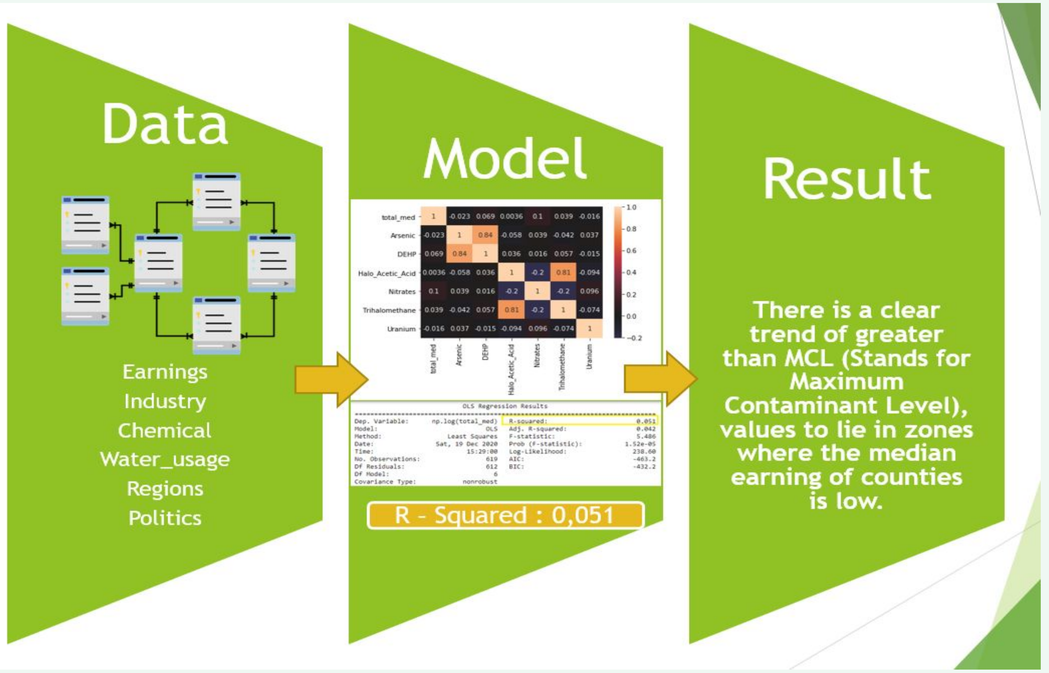
Polluting Industries

## How to respond our question?




We have a dataset with the county's water quality and another with its mean income, now we are going to relate them, this relationship is the basis of our model. Although we do not forget factors such as the political trend, the population and its industry, we will also analyze them in our model.

It seems that high values of pollutants presented in water resources are associated with low values of mean earnings. This is more evident in Arsenic, Halo-Acetic Acid and Trihalomethane pollutants




**There's sufficient statistical evidence to conclude that contamination of water sources in counties of the US has not a linear relationship with the median of income**

**The more traditional approaches to predict the median of income seem to be more suited for the task: Population, Industries and Region**