Final Project Proposal

Gwynnie and Aria

1. Website(s) you plan to scrape or data sets you plan to merge We are planning on scraping from this wikipedia page: https://en.wikipedia.org/wiki/Wildfires_in_the_United_States_during_2024

Then we also found a dataset from Fish and Wildlife that is an excel file that we converted into a csv file. https://www.fws.gov/sites/default/files/documents/2024-08/percent-forest-cover-by-county-update-2024.xlsx

Finally we found a data set from ESRI that contains the states and counties, square miles and population of each county, that we could download as a csv file. https://www.arcgis.com/home/item.html?id=14

2. Variables you plan to acquire, including variables you plan to generate from your raw data

From the data set we scraped we got variables that were: - name of fire - state of fire - county of fire - size of fire - start date of fire - containment date of fire - notes on the fire

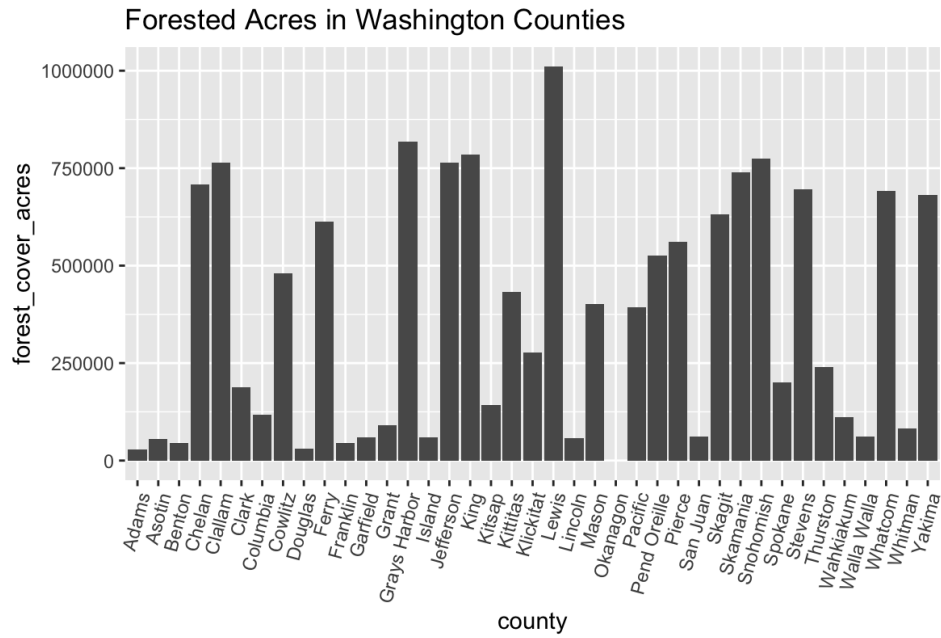We want to obtain: - county size - forest coverage - population of county

for mapping: - need county polygons - state polygons

Variables we plan to generate: - the forest coverage is in percent coverage so we plan to find the number of acres that is forested in each county

3. Questions you plan to address

- How much of each state got burned?
- How much of each county got burned?
- States with most wildfire activity?
- What fires had the longest duration?

4. Visualizations you envision (include photos of plot sketches!) We want to include interactive maps for each state that within the shinyapp can choose a state and have the visuals for each of the individual states. Then an overview of the entire US.

Forested Acres in Washington Counties

Example of a bar chart we created that could be made for each of the states.

5. Whether you plan to build an interactive shiny app We are planning on doing a flexdashboard