Lab 06 Part II

1. the map topic and/or geographic phenomena your map will explore.

   I will be mapping Federal Owned lands of the American West (Washington, Oregon, California, Idaho, Nevada, Utah, Arizona, New Mexico, Colorado, Wyoming, and Montana).

   The present working title is, “Federal Owned Lands of the American West: Wow that’s a lot”.

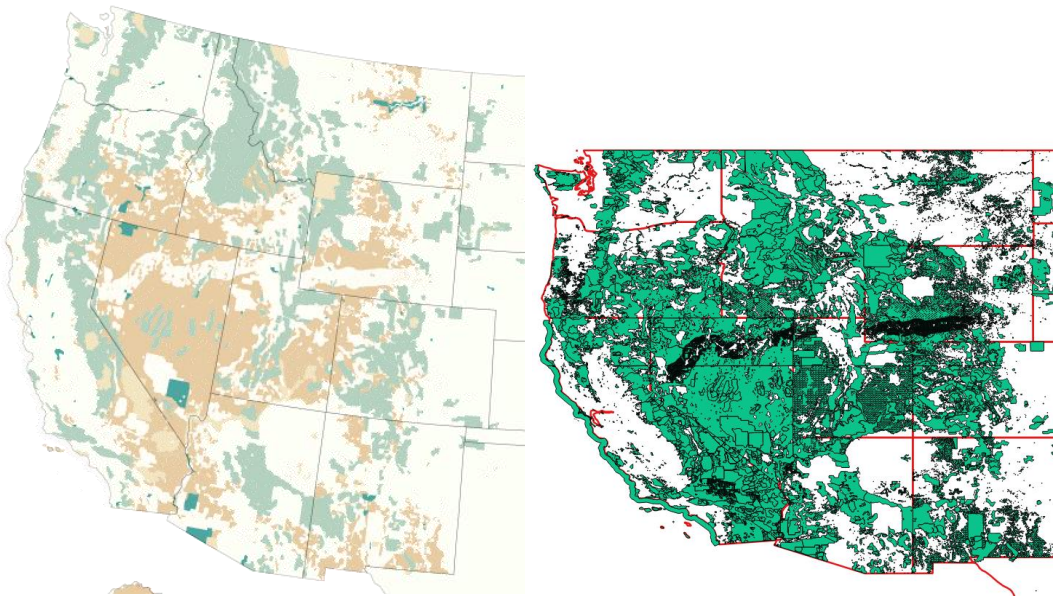
2. an articulation of the map's objectives and user needs.

   I chose the topic out of personal interest. I read an article in my DuckDuckGo feed entitled the Disappearing West (https://www.disappearingwest.org/map/) and was curious about the topic. I found the map and overall site to be light on definitions (‘human development’ and ‘natural areas’) and believed it used and unduly alarmist tone. I also followed the Oregon occupation story from January 2016 about the ranchers who occupied a National Wildlife Refuge facility. The rancher articles about the occupation provided detail of the large number of acres owned by the Federal government across the West. The Disappearing West site/map and the rancher articles made me wonder about the story in between these dramas in regards to land owned by the Federal government.

   I found the Disappearing West map could have been made better by showing Federally owned land and how the private development will reach a stopping point due to geography (mountain terrain) and Federal ownership. Finally, I saw the Disappearing West project is from the Center for American Progress and understand better why it was presented with an alarmist tone.

   The user persona is to create a map showing the volume of Federally owned land across the west to accompany a media article (such as one like https://mises.org/blog/how-feds-got-all-western-land-and-why-its-problem or http://www.nytimes.com/2016/01/06/upshot/why-the-government-owns-so-much-land-in-the-west.html?_r=0). Readers will use the map to get an overall impression of ownership and then explore ownership by all and specific Federal Agencies/Cabinets.

The topic has been mapped before (see below from http://www.nytimes.com/2016/01/06/upshot/why-the-government-owns-so-much-land-in-the-west.html?_r=0), but my intent is to use layers and add US military property which are significant (excluded from the map below—map on right includes DoD owned land—see much more of Nevada is shown as Federally owned).



I plan for the map to be used by a 'regular user'. The user will view two themes using radio buttons. The first is a choropleth map of the % of each states Federal lands. The second theme will show the user all Federal tracts across the 11 western states and will feature a slider allowing the user to view tracts by 'owner' (Federal Agency--NPS, BLM, DoD, FWS, etc).

3. your data source and (at least a sample of) the data required to meet the map's objectives.

My data sources are Natural Earth for the state borders and USGS National Map (ftp://rockyftp.cr.usgs.gov/vdelivery/Datasets/Staged/SmallScale/Data/Boundaries/fedlanp010g.shp_nt00966.tar.gz) for the federally own lands. I also plan to use data from the Congressional Research Service (https://www.fas.org/sgp/crs/misc/R42346.pdf) for the percentages per state (it is a little ugly, but should work since I am only mapping 11 states). I will exclude National Cemeteries, National Battlefields, Indian Reservations, and the one GSA facility, since I assume they are either small and/or unlikely to ever be converted to private use. I may combine NASA with DOD since they are co-located for the most part.

Samples:

Congressional Research Service

Table 1. Total Federal Land Administered by Five Agencies, by State, 2013

	Total Federal Acreage	Total Acreage in State	% of State
Alabama	844,026	32,678,400	2.6%
Alaska	223,803,098	365,481,600	61.2%
Arizona	28,064,307	72,688,000	38.6%
Arkansas	3,151,685	33,599,360	9.4%
California	45,864,800	100,206,720	45.8%
Colorado	23,870,652	66,485,760	35.9%
Connecticut	8,752	3,135,360	0.3%
Delaware	29,864	1,265,920	2.4%
District of Columbia	8,182	39,040	21.0%

The draft_fedlands and eleven_states GeoJSONs are located in my Module-10 folder in my MAP673 GitHub repository.

- Provide me with 1. your anticipated data source (URL, etc) and 2. a small sample of the data (e.g., CSV, GeoJSON, Shapefile, or within a database)

Part III. Anticipating your technology stack

- Use QGIS and http://geojson.io/ for my data and information processing tools.
- I plan to use GeoJSON and CSV formatted files within the web environment—I may end up joining the CSVs in QGIS, but do not see a benefit to doing so at this time.
- I intend to use the following JS libraries:
  - Mabbox.js
  - Leaflet.js
  - jQuery
  - Simple Statistics
  - Google fonts stylesheet

- I will use HTML and CSS to format the map, legend, informational sidebar, and pop ups.
- I plan to host the map on my GitHub pages profile.