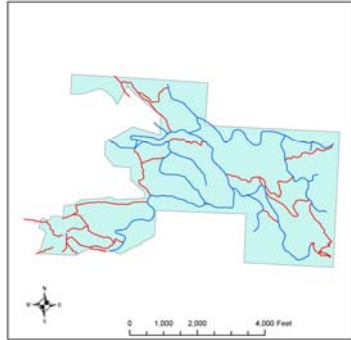


Arcata Community Forest

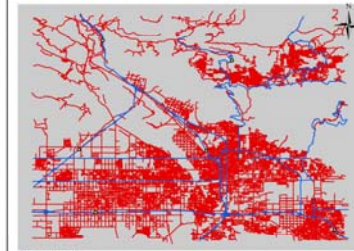


- Arcata Community Forest roads
- Arcata Community forest Trails
- Arcata Community Forest Boundary

MAP created by Melissa Rivera

Projected Coordinate System: NAD 1983 StatePlane California I FIPS 5401 Feet
 Projection: Lambert Conformal Conic
 Information found at <http://www.cityofarcata.org/departments/environmental-services/maps/gis>

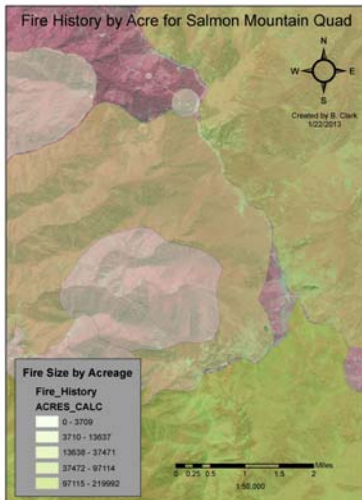
Sacramento county city roads and freeway



03 01 8 07 0 14 Decimal Degrees

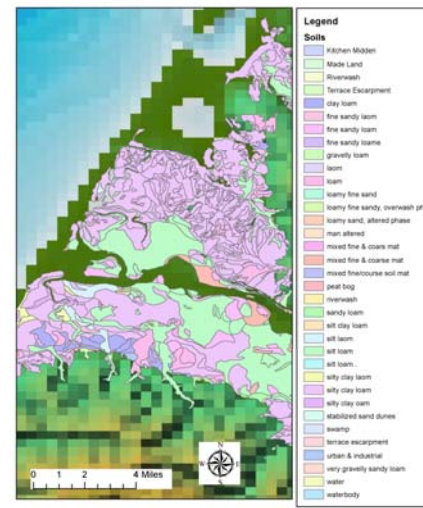
- Legend**
- ACC_FRWY
 - Major Roads
 - STREETS2
 - COUNTY

Fire History by Acre for Salmon Mountain Quad



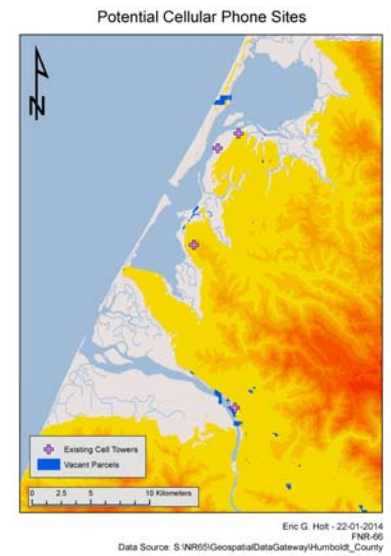
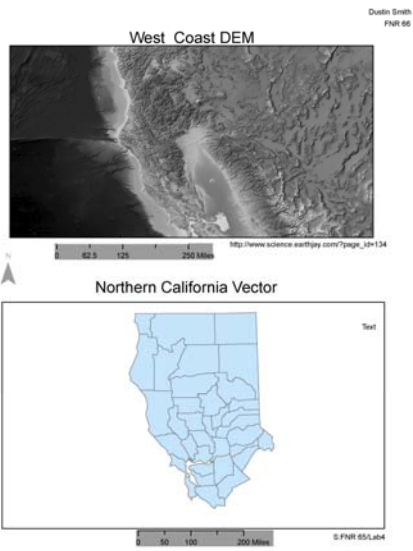
- Fire Size by Acreage**
- | Fire_History | ACRES_CALC |
|----------------|------------|
| 0 - 3709 | |
| 3710 - 13637 | |
| 13638 - 37471 | |
| 37472 - 97114 | |
| 97115 - 219992 | |

Humboldt County Agricultural Land Soils - Eel River Delta



- Legend**
- Soils**
- Kitchen Midden
 - Made Land
 - Riverwash
 - Terrace Escarpment
 - clay loam
 - fine sandy loam
 - fine sandy loam
 - fine sandy loam
 - gravelly loam
 - loam
 - loam
 - loamy fine sand
 - loamy fine sandy, overwash pha
 - loamy sand, altered phase
 - man altered
 - mixed fine & coarse mat
 - mixed fine & coarse mat
 - mixed finecourse soil mat
 - peat bog
 - riverwash
 - sandy loam
 - silt clay loam
 - silt loam
 - silt loam
 - silt loam
 - silty clay loam
 - silty clay loam
 - silty clay loam
 - stabilized sand dunes
 - swamp
 - terrace escarpment
 - urban & industrial
 - very gravelly sandy loam
 - water
 - waterbody

Soils Data: Humboldt County Community Development Services, 2001
 Raster: Bathymetric data 500m downloaded from: http://www.science.earth.gov/page_id=134
 Compiled by Todd Becker, January 22, 2014



FNR 66 Spatial Data Analysis in GIS Research Project

Requirements and Guideline for the GIS Spatial Analysis Project

The Research Project in this class is comprised of three parts: (1) the GIS Analysis, (2) the Oral Presentation, and (3) the Written Report. I suggest that you begin on this project as early as possible. You may be able to use the paper review assignments as you prepare your project. Assignment deadlines (e.g. the project proposal) are set to prompt you to work on this project throughout the semester. The project proposal is due in week 3. The final report, along with any other "deliverables," are due in digital format during finals week. Oral presentations will be during the last two weeks prior to finals week. This document includes information about the GIS Analysis part of this project.

GIS Analysis:

There are a few basic requirements (boundary conditions) that your analyses need to include. I encourage you to be creative and to not feel limited by these requirements.

Data Sources:

1. There must be a combination of raster and vector data sources. I require at least one raster data source and two vector (e.g. polygon, polyline, or point) data sources.
2. All data must have the basic associated metadata. You must restrict your existing data sources to sources that have existing metadata. Any data layers you create will need to have metadata created for them.
3. Data layer creation: You are required to create at least one new GIS data set. These data can either be newly digitized data (by you) or a derivative modeled from two or more previously existing data sets. The derivative data set cannot simply be a query of existing data, but needs to answer a question that cannot be answered with the existing data alone. Additional data layers can be created for your optional points (for up to 50 points).

Analysis:

You need to do some form of spatial temporal analysis in your project. As mentioned earlier, there needs to be a question that you can ask of the data in a way to combine multiple sources of data in order to conclude with an answer (or series of answers). You need to use at least 5 of the following tools:

- Select by attribute
- Select by location
- Statistics for selected features
- Summarize by an nominal (category) attribute field value
- Field Calculator
- Geometry Calculator
- Spatial Join (for vector data)
- Zonal statistics (for use with underlying raster data set)

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