

In lab 6, a series of attribute selection methods were used in order to find specific parcels associated with land which fit the criteria for a music festival in Humboldt County. Such methods included downloading various shape file data sets for the county, wetlands, roads, parcels, cell towers, zones, and a raster image of Humboldt County. The "Batch Project" tool was used on the zones, wetlands, parcels, and roads shape files first in order use the NAD83 UTM Zone 10 North spatial reference system, while the raster image by used the "Project Raster" tool. In order to add the cell tower data as XY data and define its projection, the cell tower text file was added to the map. A menu could be opened that allowed the XY data to be displayed as well as define it as the WGS 1984 geographic coordinate system, where from there the data gets exported to a temporary shape file layer. A new, blank map is created with the parcels shape file added onto it, which then a new layer is created from the selected parcels, Rural Residential, from the attribute table allowing the initial parcels shape file to be deleted. For the Zone shape file added to the map, an intersect overlay operation is preformed to produce a new shape file, "RuralU", which has only polygons with the all the unclassified ("U") and the Rural Residential attributes. By reversing the selected features in the wetlands data attribute table, a new shape file layer can be created that doesn't overlap with the wetlands data, as the final parcels can't intersect with any river or water body. Because the wetlands data is for all of California, the clip tool with the county shape file is used to trim off the excess data outside of Humboldt County. Now, in order to make sure the festival is located 600 meters away from any wetlands, the buffer tool is used by adjusting the "Linear unit" to 600 meters. This creates the "wetlands buffer" layer, where now the erase feature is opened to erase any area covered by the wetlands buffer from the original wetlands data within the county. To locate an area within the size criteria for the festival, the geometry of the "area" attribute is calculated. Then, select attributes greater than 70,000 square meters and export to a new shape file layer, "erase section". To make sure the festival is located near a cell tower, the field calculator will be used in the cell tower attribute table to create buffers of specified ranges in the "select by attributes" pop up. Those features will then be cleared to create a new shape file that will be intersected with the "erase section" shape file to create a shape file now being the final candidates layer, and all other layers are deleted except for the raster image.

The final result was a set of specific parcels that matched all the criteria needed in order to allow a music festival to take place in their location. By combining all the spatial data with several procedures to narrow down these sites, the created parcels now lay on top of the raster image of a portion of Humboldt County.

Final Parcels



Colony

0 1.75 3.5 7 10.5 14 Miles

