Untitled

Dykens-Hodapp

10/9/2018

## Header

Null Hypothesis 1: Prescribed burns and fuel management have no effect on amount of acres burned. Null Hypothesis 2: The number of fires is correlated with the self-reported amount of prescribed burning and fuel management. Null Hypothesis 3: The amount of data on fuel management/ prescribed burning, in each counties strategic fire plan has no effect on the amount of acres burned.

Definitions: “Fuel” - Buildup of underbrush, that is highly flammable, and allows wildfires to spread and increase in intensity. “Prescribed burns” - the controlled and monitored burning of certain areas to reduce fuel loads, and prevent susceptibility to larger wildfires. A tactic of fuel management.

Introduction: Fuel management techniques, and prescribed burns, are being looked at as possible solutions to increasingly intense wildfires in many counties in California. Recent fires, such as the Mendocino Complex fire, or the Santa Barbara wildfire have set new records in duration, intensity, and destruction. These catastrophic fires have lead to calls for new plans of action beyond containment and suppression. This study began by looking at each county in California, and the number of fires, and acres burned, across each. We then looked at the California Strategic Wildfire Plans for each individual county, checking for a correlation between comprehensive fire plan (or lack thereof), and duration, strength, and intensity of wildfires in the region. We proposed that through fuel management techniques, and prescribed burns, a given county would be less likely to experience large fires.Through returning to natural fire regiments, utilizing prescribed burns and the clearing of fuel, we could help return to the ecology of the forest to resilience and resistance.

Problems we ran into: Throughout our research process, we found that the data recorded on each county’s Strategic Wildfire Plan was inconsistent throughout each county. Certain counties had extensive reports about the acreage of fuel treated lands, prescribed fires, as well as acreage of each wildfire reported. Other counties merely had a description of the requirements of fuel management or prescribed fire (ex: laws or permits needed for prescribed burns). We also found that the lack of detail on fuel management sections in the wildfire plans may indicate that the county doesn’t prioritize fuel management compared to suppression. It may also imply that their data collection methods are either nonexistent or disorganized. It could also be possible that data from these counties may be published on websites we couldn’t find. It would be helpful if each county were required to follow a template when filling out their yearly Strategic Wildfire Plans. This would be a good way to hold countries accountable for giving the public accurate and thorough information that can be easily compared to neighboring areas.