

# Wishing Smokey The Bear Was More Effective: Using GIS To Map The Effects Of Wildfires

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## **Abstract:**

Wildfires are a major cause of destruction not only for people, but for the environment. Wildfires have become increasingly worse over the last thirty years posing a larger risk for devastation. For this paper, we will study the Wildcat Fire that burned throughout the month of April in 2011 just north of San Angelo, Texas and destroyed 159,308 acres of land (7). While this might seem like a rather consolidated event, it's not, since there were 30,896 wildfires in the state of Texas in the year 2011, which burned over 3-million acres of land (8). To show the effects on vegetation from this fire, we will use ArcGIS Pro to map the area of this fire and show the effects of vegetation cover before the fire, right after it, and then a few years into recovery. With these maps we will be able to discuss how the effects of wildfires in Texas are getting worse, and how the increase in frequency of forest fires affects ecosystem recovery.