

Climate Change in the San Juan Mountains Post-Assessment: Climate change impacts report to a specific town in western Colorado

In this assignment you will pick a town on the western slope of Colorado and use the information you have gained about climate changes in the San Juan region to create a report synthesizing one specific impact of climate change in your region. In the report you should include the following items:

- A weather station graph of your town, or the closest weather station.
- A brief analysis of climate trends, identifying gaps in data, approximate year to year variability between temperatures, and any other observations you may have. Pick out any anomalies in the weather data and explain how this contributes to the weather and climate of the region.
- Calculate the mean (or average) temperatures for two different decades from temperatures in your graph. Show your work and add in your final report.
 - For climate graphs, navigate to either the NASA temperature analysis site:
http://data.giss.nasa.gov/cgi-bin/gistemp/find_station.cgi?dt=1&ds=14&name=&world_map.x=153&world_map.y=130
OR the Colorado State University website (station map tab):
<http://climatetrends.colostate.edu/>
- After you have interpreted the weather station data, research a specific impact that climate change is currently having on your area (i.e. species extinction, pine beetle infestations, dust-on-snow). Identify specific feedback loops that are involved with the impact and explain them.
- Next, do some research and identify major economies in the area that are being affected by climate change and explain how they are affected. The economy does not have to be recreational; it could be energy development, agriculture, ranches, forests, wildlife, etc. Create and synthesize ways that the economy can adapt to a changing climate in a manner that is both cost-effective and good for the environment.

Your final report should be 2-5 pages that covers the specific impacts in your area as well as any adaptations to climate changes that are presently being implemented or that could be. You must include your temperature graph as well as any other relevant pictures, graphs, or visuals.