

Name: _____

Date: _____

Lab–Natural Disasters - Disaster Risk at Home

Purpose: Hazard prevention and mitigation

Natural disasters are naturally occurring processes that may be dangerous to human life and structures. We have reviewed most types of common natural disasters: volcanic eruption, earthquakes, floods, hurricanes, droughts, etc. As we have learned, there are surprisingly few places on earth that are unaffected by these planetary tantrums, even here in El Paso, Texas.

For this take-home assignment, I would like you to assess the threat to where you live. In **no less than one but no more than two pages**, tell me:

- 1) What type of disasters could affect your home?
- 2) What specifically would be their cause? (i.e. which fault, what type of fault, why is it there, how big an EQ might you expect, how close is it, monsoon season, etc.)
- 3) Why is your home specifically at risk? (i.e. type of structure, location with respect to topography, etc.)
- 4) What steps have been taken to minimize damage for these disasters? (i.e. insurance, brush clearing, architectural design, warning systems, etc.)
- 5) Are there steps you think could be taken to prevent/mitigate damage in your home or surrounding region? What are the easy/cheap solutions? What are the expensive/difficult solutions? Do you think any of these are worth doing?
- 6) If you are lucky enough to have been raised in an area without any threat of disaster, then I would like the following:
 - a. Describe why no disasters can affect your area
 - b. Theorize how people in your hometown would cope if a natural disaster affected a major resource supply point for your area (i.e. dam failure of a major water reservoir, oil pipeline burst, port destruction, power plant failure, highway destruction, etc.). Pick one of these types of events and describe what the short and long term affects would be.

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Potential resources that you can use (besides your textbook and class notes of course)

TEXAS

- Active Faults - <http://earthquake.usgs.gov/hazards/qfaults/map/>
- Earthquake Information -
<http://earthquake.usgs.gov/earthquakes/states/?region=Texas>
- Flooding -
<http://www.arcgis.com/apps/PublicInformation/index.html?appid=542e7fa7eadd49deb780648daf487e76>
- <http://water.weather.gov/ahps2/index.php?wfo=epz>
- Fire Hazard - <http://www.firedetect.noaa.gov/viewer.htm>
-

NATIONWIDE

FEMA Flood maps and weather hazard maps (handy web site for all kinds of hazards)

- <http://hazards.fema.gov/mapviewer/>

USGS active fault maps (check out the cool interactive map as well linked on this site!)

- <http://earthquakes.usgs.gov/qfaults/usmap.html>

USGS volcanic hazard maps (follow the links on this site to get maps of your local volcano)

- <http://volcanoes.usgs.gov/Hazards/Where/WhereHaz.html#USHazards>

Local city/county web page