**Geologic Characterization of Your Property**

**Instructions**

Your assignment is to create a geologic characterization of a specific property. The geologic characterization may include information about the local bedrock, groundwater, and real or potential environmental hazards that may be associated with the property. You will create this characterization for an audience who is considering the property for relocation as they consider the substantial investment associated with purchasing a new home. You will work to evaluate your assigned property and to provide a commercially viable report. While I recognize that you are not professionally trained geologists, I expect a professional quality natural hazard analysis report that includes as much information as you are able to identify.

**You will have 4 weeks to work on this project.** You must turn in the completed Site Report including a summary and evaluation of the site with your expert opinion based on the information you have gathered. Use the Site Report Template as a guide to write your site report.

Remember that this report is intended for an audience who probably has less knowledge of geologic issues than you do. Be careful to frame the report in such a way that provides clear and concise information in a manner that is understandable for a general audience.

Environmental hazards you should investigate include (but are not limited to):

* Earthquake occurrence and hazard
* Flood risk and recurrence
* Volcanic eruptions and specific impact
* Mass wasting
* Groundwater issues (aquifers, water availability, subsidence issues, quality, sinkhole potential, karst topography)
* Coastal hazards
* Severe weather potential
* Bedrock geology, soils, radon potential, subsidence, sinkholes
* Economic resources and land use (mineral and energy resources and agriculture)
* Toxic hazards (superfund sites, toxic waste concentration, landfills)

**Some hints for researching your property / area:**

1. Begin by putting your property address into Google Maps or Google Earth and finding its location. Look at both map view, satellite view and street view and enlarge and reduce your viewing area to get a general feel for the location and the types of hazards that may be a problem.
2. Type your property address into <http://www.homefacts.com/> to get general information about the property.
3. Type your property address into Google and investigate any information that may be available from realty websites. Many sites will have photos of the exterior of the home or of the views from the home that may help to illustrate the hazards associated with the property.
4. Use the keywords “hazard”, “geologic hazards” or “environmental hazards” along with the city or county where your property is located in your search engine to discover additional information about your property and the surrounding area.
5. Use specific hazard keywords along with your city, county or state name to find potential information (EX: Tampa sinkholes, Lake Jackson groundwater contamination, etc.)
6. Use keywords associated with specific hazards for your area and do an image search for any pictures or maps that might provide potential information or add clarity to your report. (EX: Seattle fault map, Gulf Coast hurricane map, San Francisco landfill map, etc.)
7. You should then use the websites provided online to do in-depth analysis about the relevant geologic information at your property. (*For example, you do not need to investigate volcanic hazards in Florida.*)
8. Remember that you are NOT a realtor trying to “sell” this property. Limit the information on your site report to that information which is related to the hazard potential of the site.
9. Be specific about the distance of the property from any potential hazard area – the words “close” or “near” mean nothing to the client. You should use distance designations such as feet or miles to help client assess the relative hazard risk associated with the property. These can be determined using Google Maps scales.