

# GEOLOGIC INFLUENCES ON PEOPLE LIVING ON THE SURFACE OF THE EARTH

or

*How the pattern of human activity (cultural, economic, political) is related to the lithosphere (land surface): LAND USE ANALYSIS*

**I. WHY** should we study geologic influences when we consider how an area was, is being, or can be used?

- A. Conservation/preservation
- B. Economic
  - 1. Agriculture
  - 2. Forestry
  - 3. Mining
  - 4. Manufacturing
  - 5. Recreation
- C. Transportation
- D. Construction
- E. Waste Disposal
- F. Natural Hazards (see III.A2 and III.B below)
- G. Prediction/prevention of natural hazards

**II. HOW** do we study the interrelationship between people and the land surface?

- A. Role of geographer: measuring, monitoring, mapping, analyzing
- B. Tools
  - 1. Library research
  - 2. Aerial photography/remote sensing
  - 3. Topographic maps
  - 4. Field work
  - 5. Quantitative methods/GIS/GPS

**III. WHAT** components of the geologic environment should we study to make a land use analysis?

- A. Crust and interior of the Earth; geologic cycle
  - 1. Rock types (igneous, sedimentary, metamorphic)
  - 2. Forces shaping the surface features
    - a) tectonic (internal or building)
    - b) gradational (external or eroding)
- B. Topography
  - 1. Characteristics
    - a) elevation
    - b) relief
    - c) slope angle
    - d) valley shapes
    - e) vertical zonation of climate
  - 2. Terrain - natural landscape
    - a) mountains
    - b) plains
    - c) hills
    - d) plateaus
    - e) coastlines
- C. Resources
  - 1. Mineral and energy resources
  - 2. Soil
  - 3. Groundwater
  - 4. Scenery

## **IV. LANDFORMS and PEOPLE.**

A. How do these geologic influences **interrelate** with other aspects of the physical environment, such as those of the atmosphere, hydrosphere and biosphere.

B. How do people **perceive and interact** with the physical environment, thus creating a *cultural environment*? See environment maps in atlas.