

GIS: Constructing Sensible Bioregions

Summary

In this activity, learners will use different criteria to define "sensible" regions that more closely align with the underlying topography and natural boundaries of bioregions.

Group Size

Small Groups

Materials

- Transparency maps of United States by state
- Transparency maps of United States by major watershed
- PowerPoint presentation: Five Themes of Geography
- PowerPoint Presentation: Defining a Bioregion
- Background materials on bioregions and political regions

Background for Teachers

The United States can be divided into regions based on any number of criteria. Political regions, as defined by state boundaries for example, are human/cultural constructs that often have little to do with the natural characteristics and inhabitants of the place. The purpose of this project is to provide learners with opportunity to (a) explore the concept of region, (b) consider how perception affects the designation of regions, (c) define the concepts of bioregions (natural) and political regions (cultural), and (d) identify major bioregions in the U.S. using watersheds as the defining criteria.

Intended Learning Outcomes

1. Describe the concept of a region.
2. Identify major regions in the U.S. and explain why they exist.
3. Compare and contrast bioregions with political regions.
4. Identify U.S. bioregions using watersheds as the defining criteria.

Instructional Procedures

Review the five themes of geography and extensions (see Five Themes of Geography PowerPoint presentation) with a special emphasis on Regions, Perception, and Patterns. Provide each team of students a transparency map of the United States showing the state outlines.

Ask each team to divide the country into larger regions. Use colored markers to indicate the regional boundaries.

Ask each group to present the map to the class and explain the rationale for their regional classifications.

Overlay the various maps and compare and contrast the differences in regional boundaries. Next provide each group with a transparency map of the United States displaying the major rivers.

Repeat steps 3 -- 4. *Alternatively: Provide half the teams with the state outline map and half with the river map and complete steps 3 -- 4.*

Discuss the differences in perception that resulted in regional differences using the two maps. Discuss the concepts of political regions and bioregions (see Defining a Bioregion PowerPoint presentation as well as the included background materials).

Extensions

Assessment Plan

Authors

[Utah LessonPlans](#)