

Planning Land Use



Target Audience: 5-8

**Subjects: Science, Language Arts,
Social Studies**

Time: 1 ½ hours

H2O University Issues Addressed:

- Watersheds
- Workings of a Water system
- Resources for life: Historical Population Patterns
- Human Impact

Materials

- ◆ Paper
- ◆ Pencils
- ◆ Textbook or magazine pictures
- ◆ Crayons or colored pencils
- ◆ Posterboard
- ◆ Butcher paper or other large paper (for making rough copies)
- ◆ Rulers
- ◆ Student sheet (included)
- ◆ Local land use planning

(Information used permission by The Water Sourcebook, Education Research and Inservice Center, University of North Alabama, Florence, Alabama).

Educational Goals

Students will be able to:

- ◆ Write about feelings experienced in a wilderness setting.
- ◆ Identify the land use zones on a planning map.
- ◆ Identify land use patterns having possible negative effects on water quality.
- ◆ Redraw existing land use maps for better environmental quality.

Advanced Preparation

◆ Gather the materials for the activity, including textbooks or magazine pictures of dense urban areas, natural or wilderness areas, and urban areas that include trees, parks, streams and so forth.

◆ Photocopy the student sheet land use map of our county for each student.

Procedure

- ◆ Have the students complete a sensory writing exercise.
 1. Lead the students in a visualization of what it is like to have a wilderness experience. Suggest one involving water, e.g. sitting by a mountain stream hearing the water gurgle and splash over stones (use a CD or tape of “nature” sounds as background if one is available). Ask the students to use all their senses. Ask questions such as, “How does the light glisten on the water and move through the forest?” Prompt them with statements such as: Listen to the sounds and recall what the water sounds like and its soothing effect; Smell the forest and feel the cleanness and coolness of the air; Place your hand in the water and feel that it is cold; When you cup it to your nose, it has no smell.
 2. Ask the students to then write about their experience and recall their favorite and most vivid images.

- ◆ Discuss with the students the desirability of natural areas-forests, grasslands, streams and ponds-even in developed or urban settings.
 1. Show the students the two contrasting pictures: one of a densely developed urban areas that has no open space, natural areas, or water bodies; and one of an urban area including a park or other area having trees, grass, and water (if possible).
 - a. Ask the students which picture they think represents the best place to live. Discuss their reasons for their choices. (They will probably prefer the area with the natural areas. Lead them to identify the natural areas and water bodies as desirable.)
 - b. Discuss with the students the picture of the heavily developed city scene again. Ask them what could be done to make this setting more desirable. (parks, trees, ponds, etc.)
 2. Discuss with the students that people can plan ahead as they build their communities so that they can include natural areas (including water). If there are good local examples (parks, greenbelts, etc.) with which the students would be familiar, discuss these.

- ◆ Introduce the students to the concept of responsible land management.

◆ Give each student a copy of the student sheet “Land Use Map.” Explain that a land use map is a map that shows how we can use land, i.e., for what purposes local government has designated certain areas. Using the term definitions and the student sheet, explain the land use areas on the map. Discuss with them how the land use patterns may be detrimental to environmental quality. Note that:

1. Residential areas have no open spaces planned.
2. No open space is planned along creeks.
3. Commercial areas and industrial areas have limited open space planned.
4. There are industries located on streams.

◆ Stress to the students that water is an important component of environmental quality. That is, wherever there is a “clean” environment, there is good water quality and vice versa.

◆ Have the students complete the following planning activities.

1. Reemphasize the importance of clean water. Remind the students that we are stewards. Stewardship means taking care of our world and its resources. We must take care of our water and land.
2. Direct the students’ attention to the land use maps.
 - a. Group the students in teams and have them look at their planning maps. Tell them that the purpose of this activity is to look at the ways people use the land.
 - b. Tell the students that they will first analyze the map, looking for potential environmental problems. Have them look for possible sources of pollution or other things that affect water quality. Have them think about what they would like to have where they live. (For example, would they want to live right next door to a factory? Would they like to have a forest near where they live?)
 - c. Ask what activities fit or do not fit into the zones.
 - d. Allow the students do discuss their observations for five minutes, then ask the teams to list a proper and an improper use for each zone. Write their responses on the board.

LAND USE MAP OF OUR COUNTY



MAKE YOUR OWN LAND USE PLAN

