



FORESTS ON THE EDGE

IN-CLASS ACTIVITY

OUTCOMES:

1. Reinforce the fact that increased population growth places increased demands on forests and other greenspaces near cities.
2. Introduce students to different ways that forested land can be used.
3. Emphasize multiple use of forests, especially forests on the edge of urban areas.
4. Emphasize compatibility and trade-off issues for forests on the edge.
5. Increase understanding of conservation and sustainability of forestlands.

GRADE LEVEL: 5th-8th

TIME: 50-60 minutes

MATERIALS:

- Overhead projector

ITEMS PROVIDED BY GREENWAY TRUST:

- Satellite maps of King County in 1970 and 1990, Forest photo overhead, Benefits and Trade-offs overhead, Overhead of Forest Land Use Goal Compatibility Matrix, Greenway Trust overheads, Transparency of Group Roles

- 6 Land Use Goal Kits, contents:

AIR QUALITY KIT

Plastic sheet

Land Use Goal Worksheet

"Air Quality" title card

Air filter mask, toy car, American

Lung Assoc. brochure on air pollution, picture of a human lung with spots from air pollution, comparison photos of Mt. Rainier on a clear day and smoggy day, newspaper clipping of a weather forecast, 3 air pollution sampling filters (white, gray, and black)

DEVELOPMENT KIT

Plastic sheet

Land Use Goal Worksheet

"Development" title card

Visual aids: *Look Inside a House* book, Real Estate booklet, newspaper clipping of a real estate development ad, map of a new housing development, play money, photo of forestland about to be developed, photo of a new housing development

RECREATION KIT

Plastic sheet

Land Use Goal Worksheet

"Recreation" title card

Visual aids: toy camera, toy compass/binoculars set, American Hiking Society brochure, Mt. Rainier Natl. Park map, Greenway Adventures brochure, Northwestern AAA CampBook, Mountaineers brochure

Photos: scenic view of a forest, scenic view of a waterfall, hikers on a trail

TIMBER HARVESTING KIT

Plastic sheet

Land Use Goal Worksheet

"Timber Harvesting" title card

Visual aids: paper lunch bag, deck of cards, pencil, piece of toilet paper, newspaper comics, play money, small bottle of shampoo, toothpaste sample, Weyerhaeuser brochure, photo of logger cutting slash from tree

WATER QUALITY KIT

Plastic sheet

Land Use Goal Worksheet

"Water Quality" title card

Visual aids: bottle of "polluted water" (non-toxic mix of water, soy sauce, food coloring, vegetable oil), empty motor oil bottle, toy truck, salmon tubes, water quality monitoring kit

WILDLIFE PROTECTION KIT

Plastic sheet

Land Use Goal Worksheet

"Wildlife Protection" title card

Visual aids: coyote skull, 1 pair of deer tracks, bear scat, coyote scat, deer scat, rubber salamander, cougar photo, bear photo, Tiger Mt. map

PROCEDURE: (*Adapt language and questions up or down depending on grade level.*)

1 INTRODUCTION

Introduce yourself. Review population growth: As human population in King County increases, what happens to forestlands on the edges of cities and suburban areas? (Pass out satellite maps and ask what they notice.)

Explain: Washington State gains 1 new person every 5 minutes; population will double in 50 years! Where will all these people live, work, and recreate? Where will they get water, fresh air, wood products and other forest products from?

Summary of next hour: You've already seen some different ways people value and use forests and other greenspaces. Today you will explore more deeply the way in which people make decisions about how to use greenspaces.

2 FOREST FOR SALE

Place the forest photo transparency on the overhead. Explain the following information to the students about the piece of land:

This is a forested piece of land at the edge of our city. The land is home to trees, other plants, and wildlife. There are no roads, trails, or buildings on this land. Assume that the owners of this piece of forestland are selling it. One of their children has become quite ill and they need money to pay for her care. Many different people are eager to buy the land because it is close to the city. But they all have different goals for what they want to do with the forest.

Place Benefits and Tradeoffs transparency on overhead.

Some people want to buy this land and leave it as it is, in its natural state.

What could they do with the land? What are the "benefits" (or positive things) about this option for people and for wildlife? (Write answers on overhead.)

Ask students if they know what the word "tradeoff" means? Use the following example to illustrate: Let's say you have ten dollars. What can you do with ten dollars? (Ask for suggestions. E.g. buy seven candy bars or put it in the bank and save up for rollerblades later.) You can only have one choice. If you choose to save up for rollerblades, then you can't buy candy bars now. Not being able to get candy bars now is called a "tradeoff."

What would be the tradeoffs of leaving the forestland as is (in a natural state) for people and wildlife? (Write answers on overhead.)

Some people want to buy the forest to change it in one of several ways.

What are some land uses that would require making changes to the forest?

What are the "benefits" (what's good) about making changes to the forest (e.g. logging, building roads, trails, and houses)? What are the "tradeoffs" (what's negative) about making changes to the forest (e.g. logging, building roads, trails, and houses)? (Write answers on overhead.)

3 LAND USE GOAL ACTIVITY

Show the forest photo transparency again. Explain that the students now get to represent different groups of prospective buyers and that they will be divided into six groups. Each group will represent one of the six following "Land Use Goals." Show students a list (on overhead) of six land use goals: 1) wildlife protection, 2) recreation, 3) harvesting, 4) development, 5) water quality, 6) air quality.

Tell class that each group will receive one Land Use Goal packet. Show contents of one packet as an example and explain that students will:

1. Look through items in packet.
2. Unfold plastic bag and make a display of items as if they were at a science fair.
3. Fill out the Land Use Goal worksheet.

Divide the class into six small groups, pass out Group Member Roles sheet and Land Use Goal packets.

When groups appear to be done (after about 15 minutes) ask them to go around the room and visit other groups' displays.

When everyone is back in their seats, ask one person from each group to stand up and give a one-minute presentation to the class listing: their land use goal, one benefit of this goal, and one tradeoff of this goal.

4 LAND USE COMPATIBILITY: MULTIPLE USE

Explain that I, as the owner, feel that all of the land use goals presented have strong benefits, so I want to see if perhaps some of the land use goals can be combined and occur at the same time.

Place the Land Use Goal Compatibility Matrix transparency on the overhead, and ask if students know what "compatible" means (two things that can go together). Choose at least one land use goal as an example, e.g. wildlife protection, and go across the chart asking if this goal is compatible with each of the others. Place a "Y" for yes, an "N" for no, or an "M" for maybe in the boxes as students decide upon their answers as a class. Explain that students will be repeating this activity in a real forest during their field trip to Tiger Mountain State Forest.

5 CONCLUSION

End by telling students that people in King County are actually doing what they just did all the time.

Describe the Greenway Trust briefly. The Greenway Trust attempts to sustain forestland by identifying available land which could have multiple uses to address both the long term needs of the environment and serve the needs of a growing population. (Use photo transparencies to illustrate where the greenway is.) You will be learning more about the Greenway later.

GROUP ROLES

Please have each member of your group volunteer for at least one role below. If there are too many roles, combine some of them. If there are too few, assign group members to share roles.



PROJECT FACILITATOR (1 PERSON)

Make sure everyone signs up for at least one group member role and carries out assigned duties of chosen role. Help others as needed.



DISPLAY COORDINATOR(S) (1 OR 2 PEOPLE)

In charge of organizing the materials in the kit into a science fair-type display, and reading the tags and labels on the materials to the rest of the group.



GROUP READER/RECORDER (1 PERSON)

In charge of reading questions on the worksheet out loud to the rest of the group and writing the answers.



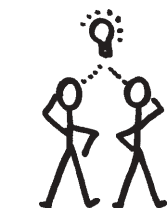
GROUP DISPLAY SPOKESPERSON (1 PERSON)

Stay with your group's display at the end of the activity while other groups come to visit; be able to answer questions about your group's display.



CLASS PRESENTER (1 PERSON)

Prepare and give a one-minute presentation to the rest of the class that lists: 1) your group's land use goal, 2) one benefit of your land use goal, and 3) one tradeoff of your land use goal.



GROUP THINKERS (ALL GROUP MEMBERS)

Provide Reader/Recorder with answers to the worksheet questions.

LAND USE GOAL WORKSHEET

NAMES:

YOUR LAND USE GOAL: _____

TO REACH THIS GOAL, THE FOREST SHOULD BE:

_____ LEFT AS IS

_____ CHANGED

BENEFITS ⊕ (POSITIVE)	TRADE-OFFS ⊖ (NEGATIVE)