

Eco-Choices: Ecosystem Consequences of Town Decisions

In order to help students understand the connections between water and air pollution through the concept of watersheds and airsheds, as well as understand the impacts of their decisions on human health and biodiversity, we have developed a game that allows middle and high school students to become decision makers in a hypothetical county.



The county is divided into five towns, each of which maintains different land use patterns, population, and priorities. Students first learn about their town and think about the types of things their citizens would support, such as changing farming regulations or building a bottled water factory. Students are confronted with choices they have to make with regards to the land, water, and air in their town. Each choice has consequences, not only for the ecosystem but also in terms of cost, voter support, and human health. Students weigh the benefits and drawbacks of the different choices, and then come together as a county to see the impacts of their choices on the other towns. We hope to help students understand the concept of connections within a watershed, and the often difficult nature of making environmentally sound choices.

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Visit: www.ecostudies.org for this lesson plan as well as additional resources.

Materials for this lesson:

1. Student Instructions
2. Graph paper – you can color code the graphs to correspond with each part of the game
3. Icons & money
4. Town Descriptions
5. Town Choices
6. Thinking Chart
7. Decision Chart
8. Large watershed map
9. County Decisions
10. Reflection