

# CASE TEACHING NOTES

for

## “But It’s Just a Bottle of Water...”

by  
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### INTRODUCTION / BACKGROUND

The purpose of this multi-part case is to tie together many principles of an introductory non-majors Environmental Science course. Issues affecting the environment are not isolated; therefore it is critical that we connect the “dots” so students can see that for every action in the environment there is a reaction.

The initial version of the case was written by two students, Lindsey May, and Jessica Kotke, in my course, Bio 111, Science Society and the Environment. In that course I use the case for class discussion during the lectures on the impact of groundwater, but it could also be easily introduced during resource management (recycling).

I believe that the case could also be used in a 100- or 200-level introductory level biology or ecology course.

### *Objectives*

Upon completing the case, students will:

- Identify the complexities associated with the production, consumption, and recycling of bottled water.
- Identify state and federal regulations (FDA, EPA) associated with the extraction of ground water and the potential impacts it has on the environment.
- Identify potential safety hazards with drinking water, both chemical and biological.
- Become aware of the mosaic of state recycling laws that exist and how states circumvent the recycling process.
- Understand the different categories of water, and where water comes from.
- Utilize critical thinking skills to examine the economic and ecological costs of drinking bottled water.

### CLASSROOM MANAGEMENT

The case, which consists of two parts, was developed for a 55-minute class period. I allow students a few minutes to individually read Part I, which consists of a dialogue, then we spend about 10–15 minutes discussing the conversation and everything else we want to know about bottled water. I then give the students 5 minutes to read Part II individually, and then put them in their groups to deal with the questions. They are given 15–20 minutes to answer the questions. The remainder of the class is spent reporting out from their groups to the rest of the class.

**Table 1.** Suggested Case Study Breakdown (55–65 mins without extension exercises)

Step	Task	Time (min.)
1	Read Part I of the case.	5
2	Discuss Sally’s mother’s dilemma, using it as a tool to direct class discussion to the background information in Part II.	10–15
3	Read Part II of the case.	5
4	Groups discuss the questions at the end of Part II—have them prepare answers to turn in.	15–20
5	Class discussion—emphasize the interrelatedness of the issues.	20
6	Extension exercises—either utilize in-class time or assign as homework.	10

As an extension, or follow-up, exercise, students can be asked to write a one-paragraph press release that details the problems of recycling water bottles or to identify and describe another environmental issue (other than the groundwater, recycling, and safety issues explored in the case) associated with bottled water.

## ANSWER KEY

Answers to the questions posed in the case study are provided in a separate answer key to the case. Those answers are password-protected. To access the answers for this case, go to [the key](#). You will be prompted for a username and password. If you have not yet registered with us, you can see whether you are eligible for an account by reviewing our [password policy](#) and then [apply online](#) or write to [answerkey@sciencecases.org](mailto:answerkey@sciencecases.org).

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## FURTHER READING

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