

## Environmental Decision Making: Groundwater or Surface Water?

What are potential solutions to the saltwater encroachment problem in Baton Rouge? There is not an easy answer. One suggestion is to withdraw less groundwater and use more surface water. Who is to switch and at what cost? Who would decide? What steps would need to be taken to make the change?

Environmental decision making is a balancing or trading-off process in which human needs and desires are examined with practices that achieve environmental sustainability.

To evaluate the pros and cons of a potential solution, environmental decision makers consider the following:

- Human health: Will human health be benefited or at risk?
- Natural Resources: Will natural resources be protected (both short and long term)?
- Economics: Who will gain or lose money or jobs?

1. Examine the information provided which compare groundwater use (GW) and surface water use (SW) in East Baton Rouge Parish.
2. For the purpose of practicing environmental decision making -- choose one user of groundwater that your group decides should be mandated to switch partially or totally to using surface water.
3. Make a list of pros and cons of the switch to surface water, including costs and feasibility.
4. How would this change affect 1) human health 2) natural resources 3) economics?
5. How did your group decide which water user would switch to surface water, and why?
6. What additional information or data would be helpful to a group making water use decisions?
7. Describe difficulties that are likely to arise in supporting decisions that affect long-term sustainability of natural resources.

Your group is not expected to reach a consensus. Your objective is to examine the multitude of issues that policy makers consider when solutions to environmental problems are evaluated. Use the performance scoring rubric provided for self-evaluation before turning in your work to your teacher.

### Performance Scoring Rubric

Performance Criteria	Points Possible	Student Score	Teacher Score
Participation: student followed established rules and procedures for class behavior, contributed relevant information to discussion, and respected the opinions of others.			
Student followed assignment instructions.			
Student used available data appropriately.			
Pros and cons are expressed clearly and in a logical manner.			
Decision making effects on human health, natural resources and economics, are addressed.			
Student lists several types of information that would be relevant to this problem.			
Student response demonstrates an understanding of environmental sustainability.			