

**Lesson Title:** Landfill Controversy - An Internet WebQuest on Landfills!  
**Curriculum:** English/Language Arts Science Social Studies Technology  
**Grade-Level Span:** Grade: 3-5 6-8

**Prerequisites**

Basic Internet and word-processing skills

**Washington State EALR Correlation**

Reading – 1.5, 3.1

Writing – 3.1, 3.5

Social Studies/History – 2.1, 3.3

Science – 2.2

**National Educational Technology Standards for Students – Performance Indicators**

Grades 3 – 5: 1, 4, 5, 6, 7, 9, 10

Grades 6 – 8: 4, 5, 6, 7, 8, 9,10

**Purpose**

To learn about a major problem facing communities around the United States: What do we do when a local landfill is filled to capacity?

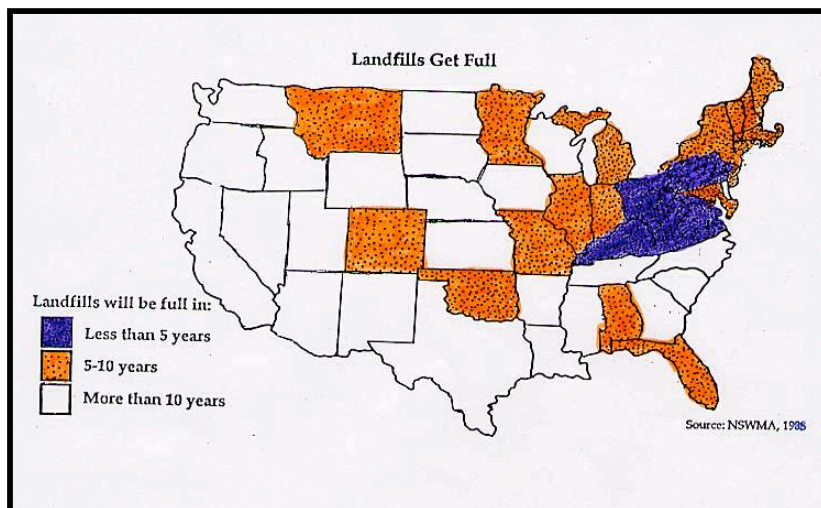
**Description**

A community is faced with the issue of allowing bordering states access to their landfill.

**Activities**

Introduction

The proper disposal of solid waste is a concern worldwide. Efforts have been made to encourage everyone to reduce, reuse, recycle and rethink the products they are consuming. Annually we celebrate Earth Day in recognition of these efforts. Although many areas of the United States have actively engaged in recycling efforts, more needs to be done. As you can see by the following statistics and the map below, the rate at which landfills are filling up is startling.



*• More than half the cities in America will use up their current landfills by 1990. Already, rising mountains of trash overwhelm town dumps, and thousands of dumps have been closed for pollution problems. - State of the States, 1987 Renew America*

*• America has for a long time taken the cheapest option in waste disposal: 90% of its rubbish is simply dumped in landfill sites and buried. But landfill sites are filling up; a third have closed since 1980. More than half the cities on the east coast will run out of room by 1990. In New York, 14 sites have closed in the past ten years. All of Seattle's sites will soon be full. - **The Economist***

### The Task

You live within a community that has a sanitary landfill with a current life span of 50+ years. Bordering states whose landfills are quickly reaching their capacity are looking to your landfill for disposal of their waste. This issue has divided your community and it is causing great stress among your community leaders. The following questions are raised:

- If we allow communities outside our state to use our landfill what do we do with our waste once the landfill reaches capacity?
- What kind of fee do we impose on these other communities for the disposal of their waste?
- If we do not allow for outside communities to dispose of their waste where will it end up?
- Do we have a long range plan for disposal of our own community's waste once the landfill is closed?
- How can we economically reduce the amount of waste dumped in our landfill?

Your task will be to work in teams of four and assume the identity of one of the following:

- Concerned Citizen Against Sharing Landfill
- Village President Against Sharing Landfill
- Solid Waste Manager In Favor of Sharing Landfill
- Representative from Bordering States In Favor of Sharing Landfill

Each group member will need to access the web sites provided to gain more information about landfills and to answer the specific questions assigned to your role. You may refer back to any notes taken in class or from our field trip to the local landfill. You will then complete the following:

- Write a short summary of how your character interprets the information
- Debate your side of the landfill issue
- Produce a newspaper with three articles that express the different viewpoints of the village president, solid waste manager, and the representative with the concerned citizen writing a letter to the editor using Microsoft Word

### The Process

1. In your assigned groups of four decide who will take on each role. It may be necessary for you to take on a role you may not agree with. Remember that you are just pretending in order to see this issue from a different viewpoint. It is very important that you take your role seriously.

2. In order to prepare all team members for this quest, you will all need to visit and explore the web sites located in the Resources section and use the magazine, "Kids

Discover:Garbage". You may also find the book, 50 Simple Things You Can Do To Save The Earth by The Earth Works Group helpful. Everyone in your group will get some background information about landfills before dividing into the roles where each team member will then approach the issue from his/her viewpoint.

3. Explore the information and reread it carefully, keeping your eyes peeled for information you might find useful later so that you can present your summary accurately during the debate. Brainstorm other possible resources that might help you as well.

4. You may need additional time outside of class to complete this project. If you work at home, you must bring any information and materials you find to school to share with your group.

5. Read the following questions assigned to your role. Answer all the questions using the resources provided. Take notes on the information you gain.

#### Concerned Citizen

- What do you expect is the biggest problem should other states be allowed access to your community's landfill?
- What would you rather see the bordering states do with their solid waste?
- It is estimated that you landfill will be filled to capacity within 50 years.
- What do you think will be done with your trash when this happens?
- What solutions can you give to your local government concerning this problem?

#### Village President

- What do you see as the disadvantages to allowing other states access to your landfill?
- What, if any, advantages might there be for your community?
- What have other communities done when faced with a similar problem?
- Eventually your local landfill will be filled, what steps will be taken when that happens?

#### Solid Waste Manager

- What do you see as a major advantage in allowing bordering states access to the landfill?
- What, if any, problems do you foresee should this be approved?
- What can the citizens of this community do to increase the "life expectancy" of their landfill? What is the biggest problem facing solid waste disposal today and in the future?

#### Representative

- Why should another state allow access to their landfill?
- How will the other states compensate for access to the landfill?
- What steps will you take to see that this plan works properly?
- Who will be responsible for paying for the extra workers needed for this to succeed?

6. Once all your team members have completed their questions and taken notes to write a summary, it is time to share your information with each other. One at a time, each person in your group should share what he/she learned from the viewpoint of his/her role. All other members need to save any questions or comments until the person sharing is completely finished.
7. Your group will then be assigned a day of the week and time to present your debate to a 3rd or 5th grade classroom.
8. The final task in your quest will be the completion of a [newspaper](#).(You will need Acrobat Reader to view this.)

### Resources

[EPA for Kids](#)

[Student Dictionary](#)

[Landfill Pictures](#)

[Article on Residents Against Landfill](#)

[Landfill Facts](#)

[How Landfills Work](#)

[Recycle City](#)

[More Facts About Landfills](#)

### Evaluation

You will be evaluated on a number of categories as can be seen in the [rubric on the following page](#). You will be assessed you on how accurately you answer the questions assigned to your individual role, whether or not you worked cooperatively with your group members, how you managed class time, how effectively you support your side of the issue in the debate, whether or not your summary for your newspaper article or letter to the editor is clear and accurate, and if the overall appearance of the newspaper is accurate.

### Conclusion

Congratulations! You have just learned about a major problem facing communities around the United States. What do we do when a local landfill is filled to capacity? Some people suggest we ship trash to other states. Others believe recycling programs should be made mandatory to reduce the amount of solid waste dumped in landfills. There are those who believe opening new landfills is the answer. Still others believe educating people to make less trash is the solution and finally some believe burning trash will help solve the problem. How do you think your community could best solve this problem?

### **Tools and Resources**

- 1 computer per student
- Internet connection
- 1 copy of this document saved on a server or on each computer

### **Assessment**

See the included rubric for assessment

**Credits**

Created by Mary Benesh-Zoeller, ©2001

The original WebQuest can be found at:

<http://www.snc.edu/educ/mse/courses/summerIT/students/benesh-zoeller/>

**Comments**