

# Resource Management Role Play

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Grade levels: 5-12

## **In a Nutshell**

Students will assume roles as resource managers in a land use planning simulation activity. In this simulation, a section of land requires management for water, timber, wildlife, and recreation resources. Teams of students will problem solve and compromise with other teams to meet their needs and those of other managers.

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**Central Wisconsin Environmental Station**

University of Wisconsin - Stevens Point  
10186 County Road MM ~ Amherst Junction, WI 54407

# Resource Management Role Play Pre-visit Activities

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*The following materials are aids to help prepare your students for their visit to the Central Wisconsin Environmental Station. The vocabulary list contains terms and concepts your students will encounter in their visit. Please modify the definitions as needed. The activities listed below are merely options – it is not necessary to do them all or follow any particular order. Keep in mind that your students' learning experiences at CWES will be enhanced if they are familiar with these concepts and terms prior to the on-site activities.*

## Vocabulary

**Land use planning:** the process of determining how a plot of land will be used. It includes identification of possible alternatives, evaluation of these alternatives, resolving value conflicts associated with the choices, and implementing the selected alternatives.

**Value:** a guiding force that determines the choices we make in living our lives.

**Resource management:** a decision making process in which decisions are made about how to manage for a specific resource (i.e. recreation, wildlife, etc).

## Activity #1

Take the students to a natural area or, as an in-class option, choose an area which all the students are familiar with. Assign each student or group of students to represent the viewpoint of different resources (the water, the timber, the animals, humans, etc). Have the students examine and evaluate the area from that perspective – are there any constraints on their resource (i.e. is there a fence to prevent humans from entering the area)? How might these constraints benefit other resources? Are any aspects of the area favorable to a particular resource (i.e. plenty of cover available for small animals)?

Discuss student results. Does the role they assume affect how they view the area? Discuss differences between each viewpoint. Do these viewpoints conflict?

## Activity #2

Locate a map of your town that depicts areas such as roads, housing developments, parks or forests, etc. Discuss with the students the abundance of various resources within it. These could include forests, areas of water, animal habitat (fields, forest, etc), human recreation areas, etc. Have the students discuss the presence of each of these in relation to the others. What do they notice about their placement? How do they think decisions were made about where each is located? If possible, invite a member of the town zoning committee to visit your classroom and talk to the students about how they make their decisions.

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## Activity #3

Begin a discussion of the complexity of environmental issues. Point out that major roadblocks in the issue resolving process occur when the people involved don't know all possible uses of a resource and are unsure about their own values concerning the issue. (Different people see the issue differently). Explain that this activity will help the students clarify their own thoughts and feelings about the value-laden issue of resource management.

Have each student write the word "resource" in the center of a large piece of paper. Tell them that for this activity, and the lesson at CWES, we will be focusing on four resources in particular – timber, wildlife, recreation, and water. Ask them to brainstorm ideas related to these resources, placing any thoughts, feelings, characteristics or consideration on lines radiating out from the center. Responses might include how the resources interact with one another, considerations needed to maintain a resource, possible uses for each resource, their own thoughts about the relative importance of each, etc. Emphasize that there are no right and wrong answers.

After they have completed their sheets, have them share with another student or in small groups of students. Have them compare any similarities or differences, again stressing that there are no right or wrong answers. Note any similarities and differences. Discuss the diversity of values that exist and how these might affect resource management.

# Resource Management Role Play Post-visit Activities

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*A visit to the Central Wisconsin Environmental Station can be a school-year highlight for both students and their educators. We feel the knowledge and concepts gained during a Station visit apply outside the Station as well. The following activities will allow students to expand their knowledge and help them incorporate those lessons into their everyday life. Feel free to pick from and modify the activities as best suits your group.*

## Activity #1

Brainstorm a list of outdoor areas in your town or county that are used in a particular way (i.e. a park, a forest, a school yard, a town common, a nearby river or lake, etc). Break students into small groups and have each group pick one that they wish to focus on. Within each group, have them brainstorm a list of resources within the area that are managed for, or areas that could be managed differently. Have them research the history of the area and how it has changed over the years (i.e. did it used to be a farm field and how now grown into a forest).

Each group should then prepare a short presentation about their area to give to the class. This presentation should include current use of the area, resources that are managed within it, how it has been used in the past, and other potential uses for the area. Visuals should be encouraged, such as then/now maps or diagrams similar to the ones they used at the Station.

After each presentation, have the class discuss the various uses that have been proposed and how they would change the area. Differences due to different values should be mentioned and it should be stressed that no value is the “right” value. Do the students feel these are the only possibilities for each area? What groups or individuals might view them differently than the students (a land developer, a wildlife manager, etc.)?

## Activity #2

Locate an article in a magazine or newspaper that focuses on management of a particular resource. This could be a law passed creating a preserve or refuge, the removal of a dam, logging of a forest, a new park or playground, etc. Discuss the possible reasons for the decision that was made. What resources are being focused on? What might some advantages be to using the land in this manner? What might be some disadvantages?

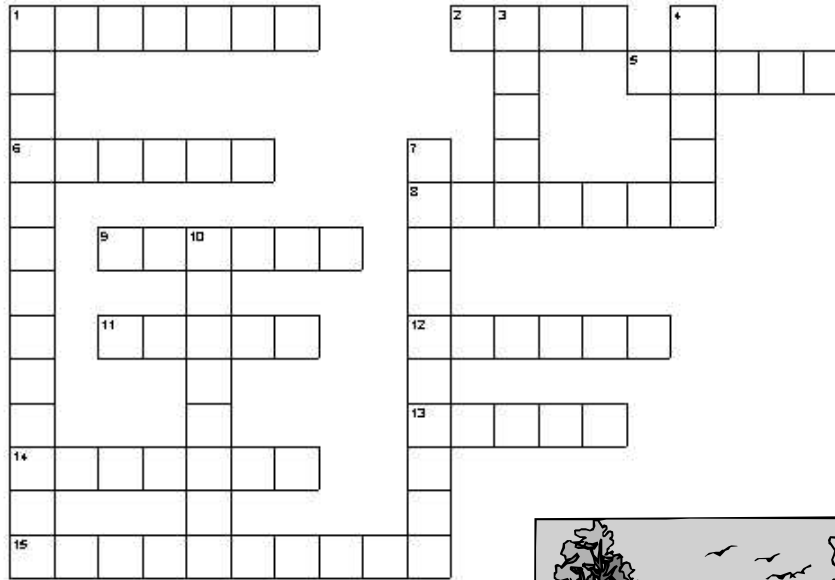
Have students devise a list of questions that they would like to ask of the individual(s) who made the decision. Discuss each question and why the students feel it important to know each piece of information. Do they think that the decision maker thought about the same points? What might some other reasons be? Do they agree? Do they disagree? Why might they view an area in a different light than another individual? Does everyone value land in the same manner? Why or why not?

## Activity #4

Use the attached crossword puzzle to review some of the vocabulary and concepts addressed by this lesson.

# Resource Management Role Play Post-visit Activities

## Resource Management Role Play



### Across

1. Bogs, marshes, swamps, lakes, and rivers are all a form of this.
2. This is a type of area used by people for camping, walking, picnicking, and fishing playgrounds.
5. This type of manager is responsible for protecting this resource from pollution and maintaining a high quality for drinking.
6. This type of manager is responsible for providing materials people need for building houses and making furniture.
8. \_\_\_\_\_ planning is the process of deciding how to develop an area. (2 words)
9. A \_\_\_\_\_ treatment plant is needed to clean used water.
11. A guiding force that determines the choices each individual makes in life.
12. These are used for hiking, running, skiing, and walking through the woods or near lakes and streams.
13. Often found in cold, fast-moving streams and brooks. Erosion causes excessive silt in the water which kills the eggs.
14. This is the process of soil washing into rivers or lakes, often because of rain or disruption of the shoreline.
15. This type of manager is responsible for providing a chance for people to enjoy the outdoors.

### Down

1. This herbivore feeds on grasses, shrubs, and other plants, and beds down in protected forest during the winter. (2 words)
3. This is an important source of pulpwood for paper industry. The trees spread from roots left in the ground or from stumps.
4. This is a high quality wood for furniture and flooring, and is well known for its syrup.
7. A pine \_\_\_\_\_ is rows of pines planted and maintained by humans.
10. This type of manager is responsible for providing food and homes for this resource.

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