

# To Dam or Not to Dam...That is the Question

## **Objective:**

Today you will learn about a dam that is slated to be constructed outside the town of Rocksburg. You will take a look at some of the effects that the construction would have – both positive and negative. Once the background has been presented you will take an assigned role and argue a viewpoint to the Rocksburg County Council. The council will then decide the best solution to the question, “to dam or not to dam.”

## **Situation:**

The town of Rocksburg, population 900, is located along the scenic Jones River, approximately 60 miles from the closest city. The city’s mayor and city council have proposed that a dam be constructed two miles upriver from Rocksburg. In the Environmental Impact Statement written by the city engineers, the following information was identified:

- The dam would meet the area’s electrical power demand for ten or more years.
- The dam would provide some water for irrigation and would help with flood-control.
- The dam would be of rock-earth fill construction, and it would be 75 feet high and 300 feet across. Seven miles of river would be turned into lake.
- The dam construction would take five years to complete and would employ more than 2,000 workers. After the dam was finished, approximately 150 employees would be needed to operate the facility.

Wildlife would be affected in the following ways:

- 20 percent loss to the deer herd that browses the lands alongside the river due to lost forage;
- 20 percent loss to small mammals living in the river valley due to loss of habitat;
- 20 percent loss to the area’s songbird population due to lost riverbank nesting sites;
- blockage of the migration of fish due to the creation of the lake and dam;
- increase in the area’s wintering bald eagle population;
- reduction and possible elimination of fish species adapted to cooler and/or flowing water; including trout, minnows, and darters;
- increase in warmer, non-flowing water habitat suitable for bass, bluegill, and carp;

There is also an expected growth in the economy due to the new tourist industry.

The people of Rocksborg are concerned about the challenges and benefits from the tourists that would come to their town during and after the construction of the dam. For example,

- the addition of 2,000 employees, plus their families, during construction for five years would require accommodations
- there is a potential population increase due to the 150 permanent employees plus their families that would stay after the dam was finished.
- concerns about effects on schools, sewage disposal, roads, home sites, property values and the rural atmosphere, as well as police, fire and hospital emergency capacities exist.

The people of Rocksborg also see potential benefits from the development, such as

- new recreation opportunities for the people of Rocksborg and the city that is only about an hour away (water skiing, sail-boarding, motor boating, swimming, fishing, camping, picnicking, and other lake-related sports).

Other impacts could include:

- flooding of American Indian archeological sites;
- cultural changes for local American Indian tribal people who have fished the river for generations;
- water for irrigation at a lower cost;
- potentially less expensive power when compared to other forms of power production (e.g. nuclear, coal, oil, fossil fuels);
- potential increase in total power bills that may be necessary to pay for construction of the dam; and
- loss of seven miles of prime whitewater; private and commercial raft, kayak, and canoe trips would be gone.

### **Directions:**

Now that you have background information about the dam, you will be assigned a role with a certain viewpoint on the situation. You should take what you have already learned about dams plus the story of Rocksborg you read above to create an argument that benefits your role the most. For example, if you are a kayaker, you don't want the dam to be constructed because you would lose 7 miles of river. You would argue to the city council to not build the dam.

A city council will be formed that will listen to your arguments and deciding as a group the recommendation they will pass on to the Federal Energy Regulatory Commission (FERC), the people in charge of the permit to build the dam. They will work together to form a consensus plan that attempts to compromise the various positions.

Remember, your goal is to present your viewpoint to the best of your ability so that it is considered in the city council's recommendation!

# To Dam or Not to Dam...That is the Question

Name: \_\_\_\_\_ Period: \_\_\_\_\_ Date: \_\_\_\_\_

1. Record your role here:

\_\_\_\_\_

2. Are you for or against the dam? \_\_\_\_\_

3. Why? List at least 3 reasons below:

• \_\_\_\_\_

\_\_\_\_\_

• \_\_\_\_\_

\_\_\_\_\_

• \_\_\_\_\_

\_\_\_\_\_

4. Write a conclusion statement. Summarize what the council should do and why.

\_\_\_\_\_

\_\_\_\_\_

*Now, make sure that you are prepared to share this information with the class by reading through it again and putting it into a smooth argument. Remember, your goal is to convince the city council why your viewpoint is important. Some hints:*

- Introduce yourself (name and what you do, like to do, etc.)
- State your viewpoint first and then talk about supporting details. (“We should not build the dam because..... Or we should build the dam and here are the reasons why...”)
- Make a final conclusion (“City council members, you should do this... because .....”)

*While presenting:*

- Make eye contact with the audience, especially the city council.
- Speak loud – nobody wins by whispering!

**During Presentation:**

Fill out the t-chart with information from each presentation. You should list either a pro or con for each classmate that presents.

Pros (for)	Cons (against)

**Conclusion:** Based on the arguments presented, decide whether or not the dam should be built. Write your personal opinion in a conclusion paragraph below. Be sure to say WHY you came to that conclusion!