

# An Environmental Town Meeting



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## Balancing Environmental Decisions and Real-Life Issues

by Laura Bovitz

**W**hen I first began teaching environmental education, I focused my teaching on wildlife conservation, habitat preservation, and demonstrating how human impact can negatively affect wildlife and their habitats. It was a common approach, and after a few years, I realized that middle school students also need to understand the many aspects that go into making decisions about environmental issues and concerns, as well as identifying the players involved in these decisions. They need to learn that coming to a resolution on how to address these issues is not simple and that there are many variables involved.

To address these needs, I developed an environmental town meeting activity that includes opportunities to learn how the viewpoints of environmental professionals, community stakeholders, and community decision makers are important in making decisions that will affect a community's environment. In this

activity, students combine learning about environmental issues in their community with learning about local governmental processes and civic engagement. The activity provides students with an opportunity to research information, develop ideas and viewpoints on the topic presented, and practice public speaking skills and cooperative learning to develop a situation statement and debate their viewpoints. Students practice a variety of life skills, including problem solving, communicating, working in teams, thinking critically, and cooperating. The National Science Education Standards underscore the importance of citizens understanding the science underlying civic issues:

"In a world filled with the products of scientific inquiry, scientific literacy has become a necessity for everyone. Everyone needs to use scientific information to make choices that arise every day. Everyone needs to be able to engage intelligently in public discourse and debate about important issues that involve

science and technology. And everyone deserves to share in the excitement and personal fulfillment that can come from understanding and learning about the natural world (NRC 1996, p.1).”

### **Town meeting preparation and implementation**

This activity requires approximately two and a half to three hours, which includes group preparation and presentation time, and it can be implemented in a single session or multiple sessions. The materials needed for the activity are listed in Figure 1. The activity is geared toward sixth- through eighth-grade students, but it can be adapted for other grades. The goal of the activity is to run a mock town meeting that is convened to address a controversial environmental issue, in this case the proposed construction of a waste-to-energy facility. The meeting begins with a presentation from the corporation proposing the construction and a report from an environmental consulting firm hired by the township to assess ecological impacts. Following these presentations, various stakeholder groups have the opportunity to present their opinions. The town meeting groups are as follows:

- Turtleville Town Council
- W.E.C.A.R.E. Corporation
- Turtleville Chamber of Commerce
- Turtleville Concerned Citizens
- Construction Workers Union Local #123
- Egret Environmental Consultants
- Turtleville High School Environmental Club

To implement the activity, students should be divided into groups representing the various community stakeholders, businesses, and environmental professionals who will weigh in on the proposed construction. Each group should consist of four to five students for an average class of 30, with the largest number of students in the W.E.C.A.R.E. Corporation and Egret Environmental Consultant groups. Each group should be given the town meeting situation statement and general information on their, and only their, group. (See descriptions below.) Students can be given time to research information, gather props, and prepare their position statement. The group can elect a spokesperson or can present as a group. This preparation can be done during class time or assigned as an out-of-class project.

The activity works best when students are given the opportunity to be creative and to develop a sense of enthusiasm for the project. (Students can

create props, role plays, and visuals to add to the activity.) Presentation materials (Figure 1) and resource materials should be provided to each group of students. I usually do not give specific directions to students other than what is listed above. Students are given the situation statement and a tip sheet for their group. Students should be directed to work toward consensus on a point of view regarding the possible development. As noted above, the activity works most effectively when students are given the opportunity to be creative and develop materials and a presentation on the viewpoint of their group. I have always been impressed with the level of creativity and thought that are displayed by students who take part in this activity as most of them get involved in the roles they are playing.

The classroom teacher and additional school staff can represent the town council, or parents can be invited into the classroom to represent members of this group. Actual town council or local officials can also be invited to be a part of this activity. (Note: It is always a good idea to inform and get permission from the school administration before inviting community members into the school. Similarly, the teacher might want to preview what students are going to say to make sure that nothing offensive or too outrageous is done by students.)

To begin the meeting, the town council should call the meeting to order and introduce the groups present. The W.E.C.A.R.E. Corporation should present its proposal on the construction of the facility. Next, the Egret Environmental Consultants should present their scientific assessment of the site, followed by the other stakeholder groups. If time allows, groups can be invited to ask questions regarding presentations given by other groups. At the end of the activity, the town council should present a summary of the presentations by the groups, and students should be given an opportunity to vote on what they believe the town council’s decision should be. The teacher should be sure to establish clear guidelines for appropriate discussion behavior as students’ enthusiasm for their roles can lead to overly confrontational situations.

### **Town meeting situation statement (goes to all groups)**

The town of Turtleville has been approached by the W.E.C.A.R.E. Corporation regarding the construction of a waste-to-energy facility. Turtleville is a small rural town of approximately 20,000 people with little crime and relatively little traffic. The



Town meeting groups make their cases

proposed waste-to-energy facility would be built on approximately 10 wooded acres on the west side of town. The proposed site is 10 miles from the local schools and no closer than 5 miles from any Turtleville homes. This facility would be modeled after larger facilities around the country. The site is adjacent to a 45-acre freshwater wetland. W.E.C.A.R.E. Corporation has promised to set aside the 45-acre wetland as a wildlife preserve and nature center, with boardwalks and observatories.

Trash in Turtleville is currently sent to a sanitary landfill in a nearby county. This landfill is expected to close in the year 2012. Turtleville does have a good recycling program, which is implemented in residential homes, schools, and businesses. The W.E.C.A.R.E. facility would serve the entire county and two surrounding counties. Trash would be hauled in on trucks on new roads that would be constructed.

The economy of Turtleville is ailing, and 15% of its residents are unemployed. The town's school budget has been cut for the third year in a row, and local businesses are suffering. Construction of the waste-to-energy facility would bring approximately 200 immediate jobs to the town (for the construction of the facility, new roads, and homes), and the facility would employ approximately 100 people on a permanent basis. If the plant is built, W.E.C.A.R.E. promises to provide funds for the improvement of schools and to donate monies to the chamber of commerce to support new businesses.

The citizens opposed to the construction of the facility are concerned about the increase in traffic and the pressure on the local roads; the increase of noise, air, and water pollution; the possible increase

**FIGURE 1**

**Materials needed for town meeting activity**

- situation statement and information cards for each group
- flip-chart paper
- pens, pencils, and markers
- poster and construction paper
- large "map" of proposed building site and wetlands (Figure 2)
- masking tape
- background information (reference materials, field guides)
- any skit materials that groups can use to make their presentation more realistic (name tags, construction hats, costumes, etc.)

in crime; and the effects of the plant on wildlife and the wetland environment.

### **Background Information for town meeting Groups (each group is only given the description of its organization)**

#### *W.E.C.A.R.E. Corporation*

The W.E.C.A.R.E. Corporation has proposed the development of a waste-to-energy facility to be constructed on a 10-acre wooded site in Turtleville. W.E.C.A.R.E. maintains that the construction of this facility will be entirely safe and will have little impact on the environment. It plans to turn the adjacent wetland into a wildlife preserve with boardwalks and observatories that will be open to the public. The waste-to-energy facility will have modern technology, and W.E.C.A.R.E. says that it will introduce very little pollution into the environment. The corporation has distributed information on the facility to town residents and has prepared a proposed site plan. W.E.C.A.R.E. maintains that this facility will help the waste management (disposal) problem in the town and surrounding towns, especially because the landfill where Turtleville currently sends its trash is scheduled to close in 2012. The corporation also says that the construction of this facility will help the local economy by bringing in jobs and money to businesses, and providing money for the schools.

*Things to consider/hints: You may want to prepare graphs and charts that would show the positive effects on the economy and the decrease in waste going to landfills.*



### *The Turtleville Town Council*

Composed of teachers and/or parents that are invited into the classroom to observe the activity, this group will function similar to an actual town council, providing a valuable lesson on the operation of local government. The council's role is to oversee the presentation portion of the activity. This includes determining the order of presentations by groups, maintaining a time limit for group presentations, and generating questions to groups following their presentations. If time allows, the council can ask groups to question each other, however this must be kept under control as many groups become very passionate about their viewpoints. Following all presentations and questions, the Town Council can have the groups vote on whether or not the construction of the facility should move forward, or they can summarize what they heard from the presentations and determine whether the groups can come to consensus on their decision.

### *Turtleville Chamber of Commerce*

This group represents the local businesses in Turtleville such as restaurants, gas stations, and retail stores. The local businesses could benefit from the construction of the waste-to-energy facility through improvement in the economy and an increase in the jobs provided by W.E.C.A.R.E. The chamber of commerce is aware that traffic in and out of town will most likely increase, but believe that new people traveling into the town may help local businesses. Their only concern is the possibility of competition from new businesses.

*Things to consider/hints: Each person in this group may want to represent a different type of business and decide how the construction of the facility would affect them. The group may want to prepare visuals (charts, etc.) of how the facility would affect the economy and the current state of the economy (for example, how businesses have been losing money).*

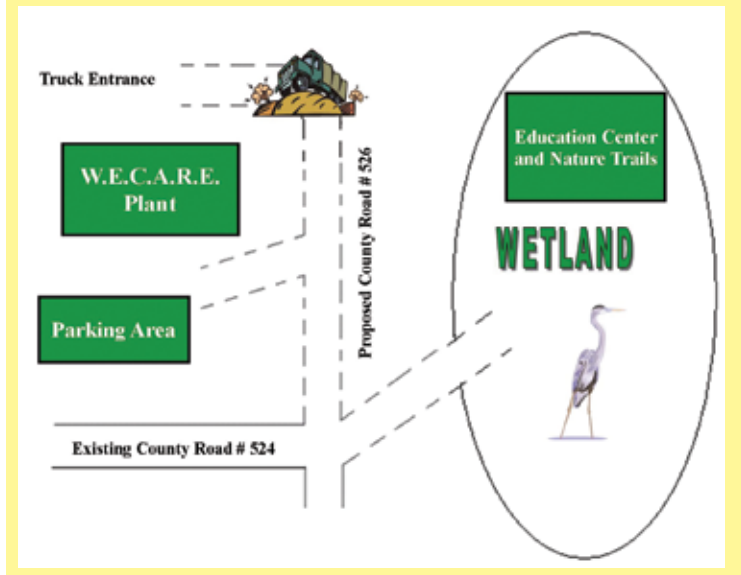
### *Construction Workers Union Local #123*

The construction workers in the Turtleville area have been unemployed or have had very little work for the past three years. Many of these workers have children, and some are currently on welfare. The construction of the facility would provide work for them for one to two years, and the improvements in the town and construction of new homes would provide work for many years to come.

*Things to consider/hints: This group would want to give examples of how the waste-to-energy facility construction would help them and how the poor economy has affected their lives.*

**FIGURE 2**

**Site plan for W.E.C.A.R.E. waste-to-energy facility**



### *Turtleville Concerned Citizens*

The Concerned Citizens is a group of town residents who are concerned about the effect of the new facility on their town. They are concerned about the possibility of an increase in air, water, and noise pollution, and in traffic and crime. They feel that an increase in population in the town may cause taxes to increase. They would like their town to grow and prosper but would rather keep it a small town and not bear the burden of providing trash disposal for the entire county. (If students have varying opinions, there can be concerned citizens for and against the facility.)

*Things to consider/hints: People in this group should take on roles of parents, senior citizens, and other town residents who have concerns for their children, schools, safety, and neighborhoods.*

### *Egret Environmental Consultants*

This company has been hired by the town of Turtleville to study the site of the proposed waste-to-energy facility and surrounding wetlands and to study the impact that the facility would have on the environment and wildlife. This group should present an unbiased, scientific assessment of any effects that the construction of the facility would have on the environment.

*Things to consider/hints: Members of this group are scientists with degrees in wildlife, ecology, geology, and other environmental specialties. This group should*

*make a presentation (may use visuals) on research that they would have done in the area. Be sure to consider the type of wildlife found in wetlands and possible endangered species, effects on the air quality, water pollution, effects of increased traffic, runoff from parking lots, roads, etc.*

### ***Turtleville High School Environmental Club***

This group is made up of high school students who are active in environmental issues. They feel the construction of the facility would have negative effects on the environment and are concerned about the wildlife in surrounding areas. They have been active in helping to protect natural areas in and around their town and are well-spoken on environmental issues.

*Things to consider/hints: Members of this group represent high school students who feel strongly about environmental issues and have a vested interest in protecting the environment. This group should present the possible impacts of the construction of the facility on the environment and how they feel the town council should vote on this issue.*

### **Follow up and discussion**

The following criteria can be used to assess student learning and presentation skills:

- Students expressed an understanding of the balance between conservation of the natural environment and necessary human activity.
- Students adequately understood and presented concerns relating to environmental issues included in the activity, such as waste management, wildlife and habitat conservation, and water and air quality.
- Students were able to use the information provided in the activity to assist with problem solving and group decision making.
- Students worked cooperatively in teams and reached consensus on how to present the viewpoint(s) of the group.
- Students effectively presented their group's viewpoint and were able to support a position with organized, appropriate details; and were focused on the topic while presenting relevant information.

### **Conclusion**

This activity works well when students are given plenty of opportunity to plan, organize, and practice their presentation. Students are often hesitant at first to role play a stakeholder for the town meeting, but with a bit

of encouragement they usually enjoy the presentation experience. Creative students have developed picket signs for construction workers and assumed the roles of grandparents, shop owners, and teachers. This enthusiasm has resulted in an experience that combines education with fun. Students can be polled to determine whether their opinion on the development of the waste-to-energy facility changed from the beginning to the end of the activity.

In most cases, I have found that students are willing to come up with some type of compromise between the construction of the facility and the conservation of the environment. They express an understanding of the need to address waste management and financial concerns, and will support the construction of the facility as long as the original plans are changed to have less impact on the wetland environment. Most groups will recommend a plan to move any road or development as far away from the wetlands as possible.

The activity works well alone or as a supplement to environmental topics introduced in the classroom. However, there are opportunities to expand on what is introduced in the town meeting. Students can do research on other environmental issues in their community, visit a local council meeting, or visit a waste-processing facility or waste-to-energy facility in the area.

### **References**

- National Research Council (NRC). 1996. *National science education standards*. Washington, DC: National Academies Press.
- New Jersey Department of Education (NJDE). 2004. *Core curriculum content standards*. Trenton, NJ: State of New Jersey. Available at <http://education.state.nj.us/cccs>.

### **Resources**

- New Jersey Division of Fish, Game and Wildlife—[www.state.nj.us/dep/fgw](http://www.state.nj.us/dep/fgw)
- Niering, W.A. 1989. *The Audubon Society nature guide: Wetlands*. New York: Alfred A. Knopf.
- U.S. Environmental Protection Agency, Wetlands—[www.epa.gov/owow/wetlands](http://www.epa.gov/owow/wetlands)
- U.S. Fish and Wildlife Service, National Wetlands Inventory—[www.fws.gov/nwi](http://www.fws.gov/nwi)

**Laura Bovitz** ([bovitz@njaes.rutgers.edu](mailto:bovitz@njaes.rutgers.edu)) is a County 4-H Agent for the Rutgers Cooperative Extension in North Brunswick, New Jersey.