



HEAR YE! HEAR YE!

Subjects: Social Studies, Science

Skills: Citizenship, Decision Making, Discussion, Large Group, Listening, Reading, Responsibility, Role-playing

Duration: 3-5 lesson periods

Setting: Classroom

Materials:

- copy of the script for each student or pair of students
- an enlarged copy of sketches of the proposed building project
- any desired props or costumes (paper hats work well)

Michigan Curriculum Framework Content Standards and Benchmarks:

- **Science LEC- III.5 e-4:** Strand III. Using Scientific Life Science Knowledge, Standard 5. Ecosystems (LEC), Benchmark e-4. Describe positive and negative effects of humans on the environment. (Key concepts: Human effects on the environment-garbage, habitat destruction, land management, renewable and non-renewable resources. Real-world contexts: Household wastes, school wastes, waste water treatment, habitat destruction due to community growth, reforestation projects, establishing parks or other green spaces, recycling.)
- **Science II.III.5.MS 6:** LEC Ecosystems, Standard III.5. Describe how materials cycle through an ecosystem. Benchmark MS 6. Describe ways in which humans alter the environment.
- **Social Studies II.2.LE 2:** Strand II. Geographic Perspective, Standard 2. Human/Environment Interaction, Benchmark LE 2. Describe the location, use, and importance of different kinds of resources and explain how they are created and the consequences of their use.
- **Social Studies VI.1.LE 2:** Strand VI. Public Discourse and Decision Making, Standard 1. Identifying and Analyzing Issues, Benchmark LE 2. Explain how a particular public issue became a problem and why people disagree about it.
- **Social Studies VI.1.LE 3:** Strand VI. Public Discourse and Decision Making, Standard 1. Identifying and Analyzing Issues, Benchmark LE 3. Evaluate possible resolutions of a public issue.
- **Social Studies VI.2.LE 1:** Strand VI. Public Discourse and Decision Making, Standard 2. Group Discussion, Benchmark LE 1. Engage each other in conversations which attempt to clarify and resolve issues pertaining to local, state, and national policy.
- **Social Studies VI.3.LE 1:** Strand VI. Public Discourse and Decision Making, Standard 3. Persuasive Writing, Benchmark LE 1. Compose a short essay expressing a decision on a local, state, or national policy issue. [Evaluation Option # 2]
- **Social Studies II.2.MS 4:** Geographic Perspective, Standard 2. Describe, compare, and explain the locations and characteristics of ecosystems. Benchmark MS 4. Explain how humans modify the environment and describe some of the possible consequences of those modifications.

Kent County Collaborative Core Curriculum (KC⁴):

- **Science:** 5:4
- **Social Studies:** 4:4, 4:8, 4:9
6:3, 6:4, 6:5, 6:10
7:3
8:3, 8:9

OVERVIEW

Who has a say about what your community does with its farmland? You do!

Students conduct a mock public hearing concerning a proposed building project on nearby farmland and natural area. The students then play the roles of the project developer, government agency representatives, and citizens. They analyze the issues involved in the project and make a group decision regarding whether or not to permit this building project.

OBJECTIVES

After participating in this activity, students will be able to:

- Describe the process of a public hearing.
- State the core value of “common good” as it is used in land use decision-making.
- Analyze positive and negative effects of a proposed building development on farmland, aquatic habitat, and human communities.
- List several recommendations for improving the proposed project.
- Discuss and decide, as a group, whether or not the project should proceed and in what form.

BACKGROUND

Though the legal process for regulating the use of farmland and natural areas usually accommodates public participation, many citizens are unaware of the importance of their role in environmental decision-making. This introduction to the goings-on at a public hearing may encourage students to attend and participate in this part of the democratic process at some time in their lives. Students will learn that every voice makes a difference.

When someone wants to build on or alter farmland or natural areas, he or she must first apply to both the state and the federal governments for a permit (for permission) to do the work. Representatives of several government agencies (Michigan Department of Natural Resources, United States Environmental

Protection Agency, Michigan Department of Environmental Quality, etc.) will visit the proposed project site, determine where the farmland and natural area habitat boundaries lie, and assess the ecological functions of the land as well as its social and wildlife values.

Before each government agency makes its decision on whether or not to issue a permit for a building project, public notice will be issued describing the proposed project and inviting comment from the public. Public notices may be posted in the local newspaper and will be sent to individuals who have placed their names on a mailing list. If any individual requests it, a hearing will be held to discuss all issues related to the project.

At the hearing, involved agencies are represented and their assessments are presented. Citizens may sign up to testify or give their views on the project as well. Citizens' statements are very important and will become part of the public record! Comments made by citizens and points brought out during the hearing will be used by the agencies in their decision-making.

When teaching students to become ethical citizens, one of the core values of the American constitutional democracy is the "Common Good." This requires that citizens have the commitment to take responsible action to promote the welfare of the community and to work together for the greatest benefit for everyone. This is also the case for the environment. We must take into consideration our needs for healthy environmental ecosystems both now and in the future. When land use decisions are made, there should be compromises in order to obtain an outcome that serves the greatest good for both human and environmental communities.

PROCEDURE

1. Give the class a brief background on public hearings including their purpose and how they are scheduled and conducted. Explain that citizen comments become part of public record and are taken into consideration when regulation agencies make final decisions on building projects.
2. Explain to the students that they are going to conduct a play that depicts a public hearing for a proposed building project on nearby farmland and natural areas. Although this case is fictional, the process of the hearing and the nature of the testimonies are realistic.
3. Review the proposal for the building project and then assign the roles in the play.
4. Students who do not play a part will represent the audience at the public hearing. (They will take the lead in the final decision-making process when they are partnered with government staff or project developers at the end of the play.)
5. Tell students that, at the end of this hypothetical scenario, they will discuss the issues and come to a group decision about the fate of the project. Point out to them that decisions are normally NOT made at hearings. Typically, building project developers and government agencies will continue to work together to improve a proposed project and design a project acceptable to everyone.
6. Have the class perform the play of the public hearing as described on the student pages.
7. After the performance, partner "audience" students with government staff or project developers, and allow them to take the lead in the final decision-making process. Tell them that two months have gone by, and a final decision is needed on the project.
8. Give students time to discuss the case as a group or in small groups, or lead a class discussion. Students should be encouraged to think as project developers or government agency staff people. They should be encouraged to make their own recommendations for the project and to work together to design a solution that achieves the maximum good for all involved. This includes considering the comments that came from the public. There are certainly no right or wrong answers to questions or dilemmas posed by this activity. However, the goal of the deliberation is to come up with a building plan that does the most good for the greatest number of people and the environment—a compromise plan to meet everyone's objectives as fully as possible. During the discussion, try to draw out or state the following ideas or suggestions for improving the project:
 - *Whenever possible, avoid building in the wetland itself.* For example, move the building and parking lot back from the stream area (see diagram). This would make the walk from the building to the parking lot longer, but it would also save most of the wetland area, protect the stream, and give residents a nice view of wildlife. The building may also need to be a bit smaller. This entire plan would cost less, could be less profitable, but would be more beneficial to both the environment and community.



- Follow agency recommendations to reduce the effects of runoff and erosion.
- Install and maintain silt fences during the construction.
- Install infiltration trenches to cool and filter rainwater runoff before it enters the stream;
- *After the building has been completed, develop an interpretive trail around the wetland for community use.* This would allow citizens continued access to the land for fishing, bird-watching, etc. Involve residents of the facility in on-site wetland education programs for area youngsters.
- *Make the long walk from the parking lot to the building pleasant and educational. Landscape to make it attractive, and build a bridge and boardwalk over the stream and wetland. Install a sign or two along the way to point out natural features such as wildlife habitat.*



Adaptations/Extensions

1. Have students attend an actual public hearing. How does it compare to the one they enacted in the classroom?
2. Place your class on a public notice mailing list by writing to your local U.S. Army Corps of Engineers district office. Look in the government listings (blue pages) of the phone book under "United States Government, Department: Army Corps of Engineers." You may need to check the book for the nearest large city to find a district office. You should specify the watershed (the land area surrounding a particular body of water) in which you are interested.
3. Have students use a public notice from the local newspaper and conduct another play about a local land use issue. Allow time to develop and decide possible solutions, and then take the students ideas to the hearing. Report to the students the responses to their ideas.
4. Have the students search newspapers and bring to class a notice for a public hearing.

Have them choose one public hearing notice from the local newspaper to write and perform another play about a local land use issue. Take time to identify recommendations regarding the proposed project. Take the students or the students' ideas to the public hearing. If the students do not attend the hearing themselves, report to them the responses to their ideas.

Computer Extensions

1. Michigan Land Use Institute. [Homepage](http://www.mlui.org/). Mar. 2002. 19 Mar. 2002. <<http://www.mlui.org/>> (The Institute is very involved in land use issues and policies and will be able to offer information and advice. The site contains the latest information on policies in the legislature and a collection of articles on Michigan land use problems and issues.)

9. Have the students make and present their decisions regarding the proposed building project. Their decision could include accepting the project as originally presented, accepting it on the condition that certain revisions or additions are made, or rejecting the proposed project altogether.

ASSESSMENT OPTIONS

1. Observe and critique the students as they perform character roles in the mock public hearing.
2. Ask the students to write down their final decision. Have the students list two-three recommendations for improving the proposed project, if applicable.
3. Ask the students why public hearings are important and how their voice can make a difference. Have them bring in a public notice from the newspaper. Ask them to describe a public hearing.
4. Have the students develop a position on a similar land development project in their own community. Have them write a letter or paper using core democratic values (i.e. "The Common Good") supporting their position on the project.
5. Have the students list two pros and two cons for the proposed building project. Ask them to describe why there are pros and cons for the project.

SOURCE

Hear Ye! Hear Ye! from WOW! *The Wonders of Wetlands* is used with permission from Environmental Concern, Inc. For further information, contact Environmental Concern, Inc. at 410-745-9620 or visit <www.wetland.org>.

ADDITIONAL RESOURCESContacts:

Local City/Township/County/Regional Planning Division
Local Planning Commission
Michigan Department of Environmental Quality (DEQ)
Michigan Department of Natural Resources
Michigan Land Use Institute
U.S. Army Corps of Engineers (the Corps)
U.S. Fish and Wildlife Service (FWS), Public Affairs
U.S. Environmental Protection Agency (EPA), Environmental Education Program
United Growth for Kent County

References and Teacher Resources:

Chesky, Edward. *Habitat Restoration: A Guide to Proactive Schools*. Kitchener, Ontario, Canada: Waterloo County Board of Education, 1993.

Cwikiel, Wilfred. *Michigan Wetlands: Yours to Protect*. Conway, MI: Tip of the Mitt Watershed Council, 1992
Michigan Department of Natural Resources. Poster. *Michigan Wetlands: A Heritage Worth Saving*. Lansing, MI: Nongame Wildlife Fund, Natural Heritage Program.

Mitsch, William J. and James G. Gosselink. *Wetlands*. 2nd ed. New York, NY: Van Nostrand Reinhold, 1993.

Morris, Marya.. *Wetlands Protection: A Local Government Handbook*. Washington, DC.: American Planning Association, 1991.

Additional Activities:

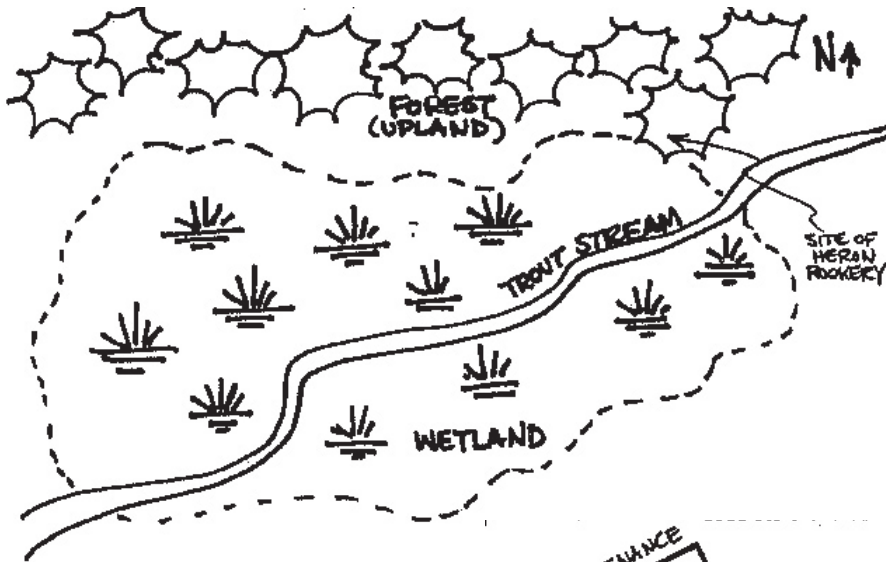
Project Learning Tree: "We Can Work It Out" Pg. 193-196.

Project WILD: "To Zone or Not to Zone" Pg. 266-269, and "Cabin Conflict" Pg. 264-265.

CONCEPTUAL FRAMEWORK REFERENCE

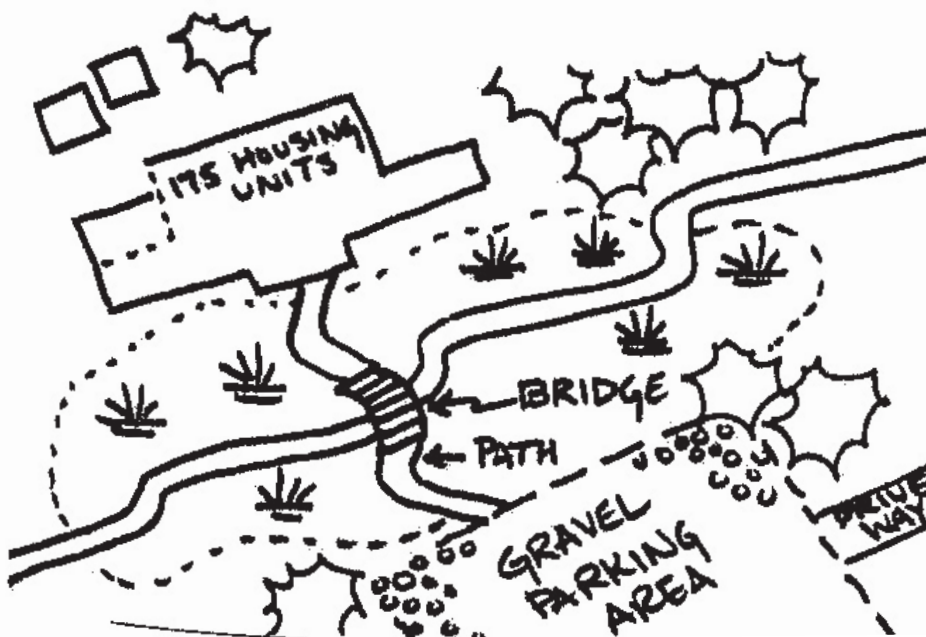
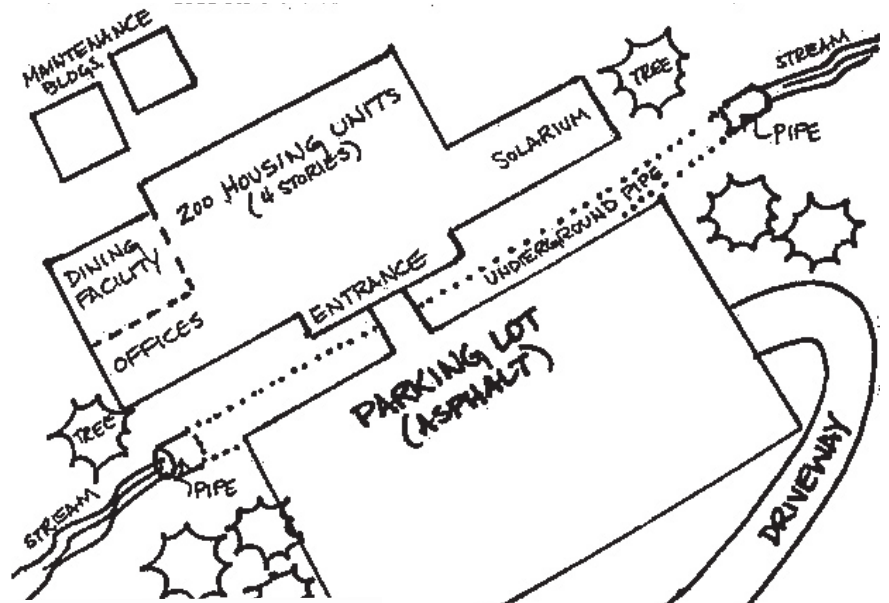
IA1,IB3,IB4,IC1,IC3,IC4,ID2,IE1,IE3, IIA2,IIB2,IID2 IIIA1,IVC,IVD1,IVD2,VC1,VD1,VID1,VIE1

Heron's Rook Rest Home Proposed Project



The Project Site — Existing Natural Features

Planned Building Design



Revised Design Option

Hear Ye! Hear Ye!

A Public Hearing

The Characters:

*The Mediator:

The mediator was hired by the local unit of government to make sure that the meeting runs efficiently and that all participants get to speak their turn.

*Resource and Regulatory Agency Representatives:

Mr. Smith of the Michigan Department of Natural Resources (MDNR)

Mrs. Cleanwater of the Michigan Department of Environmental Quality (DEQ)

Mr. Wolfe of the U.S. Fish and Wildlife Service (FWS)

Mr. Waters of the U.S. Army Corps of Engineers (the Corps)

Ms. Justice of the U.S. Environmental Protection Agency (EPA)

*Citizens and Other Interested Parties:

Mr. Richie, the permit applicant (the future owner of the rest home to be built)

Mr. Carpenter, a builder (contracted by Mr. Richie to build the rest home)

Mr. and Mrs. Johnson, the current owners of the land

Ms. Brown from the Commission on Aging

Mrs. Woodson of the local chapter of the Nature Society

Mr. Wilson, an elderly man and potential resident of the rest home

Mrs. Nimby, a resident of the neighborhood near the project site

Ms. Peterson, an interested citizen who is trained and employed as a wetland and environmental consultant

The Scene:

A large, plain-looking meeting room. There is a long table at the front of the room with several chairs behind it. The rest of the room holds rows of folding chairs for an audience. A table has a sign on it that asks people to write their names in a notebook as they arrive. This notebook will be the record of attendance at the hearing. The sign also asks all those who wish to speak at the hearing to write their names on another list posted on the wall.

[Several people are beginning to file into the room. They stop to read the sign and dutifully scribble their names in the book and on the list posted on the wall. Many are quiet and serious-looking. Others are chatting with each other in whispers. All take their seats as an impressively-dressed woman enters and sits at the table in the center chair. She is the moderator. The agency representatives seat themselves beside her at the table. The moderator speaks:]

The Script:

Moderator: If everyone is ready, I will open the meeting. We are here this evening to talk about the proposed Heron's Rook Rest Home building project. This hearing was requested by a member of the community in response to the public notice. The applicant, Mr. Richie, has asked permission to build the project from the U.S. Corps of Engineers, the Michigan Department of Natural Resources, and the Michigan De-

partment of Environmental Quality. The agencies have indicated that the applications are complete and correct. They have also visited the site. No decisions have been made by these agencies to give Mr. Jones permission to build the rest home. Tonight, we will hear what they think of the project. We will also hear comments from the applicant (Mr. Jones), involved parties, and interested citizens. [She holds up the drawings of the project and building plan. She points to the described features.]



The project site in question is a 7-acre parcel of land. It contains 3 acres of wetland with a trout stream running through it. The application states that the trees on six of the seven acres will be cut down. The wetland and stream are to be filled in with dirt. A pipe would be installed underground to carry water from the stream through the property.

The building will be a rest home with 200 apartments. The building will have a large dining room and a sunroom. The building will have a paved parking lot and driveway. The main building would cover two acres. The parking lot is another one acre, and the driveway covers half an acre.

Are there questions about the project as explained?

[Waits. There are no questions.]

Then I will now invite the government agencies, seated here at the table, to present their testimonies on the case. I will remind the audience that no decisions have been made on the permit applications. The agency representatives are only saying how they

view the proposed project. May we have the first speaker, please?

Mr. Smith: I am Reggie Smith from the Michigan Department of Natural Resources. I am the project manager on this case, and I will be making the decision for the DNR about whether to issue

the permit. Currently, we would deny the permit, BUT we would be more likely to approve the permit if efforts were made to reduce the wetland damage. One option is to move the building back away from the stream. Some wetlands would still be affected, but not as many. The parking lot should also be set back farther away from the wetland area. This would mean a longer walk from the parking area to the building, but it would save a lot of wetlands.

Moderator: Thank you, Mr. Smith. Could we hear from the other state agency now?

Ms. Cleanwater: Yes! I represent the Department of Environmental Quality. We will decide whether to issue the Water Quality Certificate.

We are also concerned about the project because of the harm it could do to the stream. The paved parking lot and the building's rooftop would cause a lot of rainwater to flow into the stream. This would make the stream flow faster. Clearing the plants from the site and filling the wetland would destroy the ability of the land to filter rainwater. Without filtering, sand and mud would flow into the stream. This would dirty the water and harm fish (especially the trout) and water insects.

Mr. Carpenter: Excuse me, please. May I ask a question?

Moderator: Yes, please do, but only a ques-

tion—you must register to speak.

Mr. Carpenter: Yes, thank you, and I believe I will be testifying later. Mrs. Cleanwater, what can I do to keep sand and mud from running into the stream?

Mrs. Cleanwater: Well, usually special filter ponds are used to collect rainwater, sand, and mud. The sand and mud settle to the bottom and the water runs out a pipe at the top of the pond and into the stream. Water sitting in a shallow pond like that would heat up quickly, and this wouldn't be good for a trout stream because they need cool water. A better idea would be to make trenches or boxes that are built into the ground. They allow the rainwater to run down into the ground before it gets into the stream. This actually cools the water off and filters out the sand and mud.

Moderator: Thank you. We should move on now. There are two more federal agencies here tonight.

Mr. Wolfe: Hi. I'm from the U.S. Fish and Wildlife Service. I agree with Ms. Cleanwater about the trout population. Other wildlife also use the site as a feeding and nesting area. Those animals include the black duck, wood duck, great blue heron, spotted and box turtle, spotted salamander, and others. In the last year, two bald eagles were seen in the area. We are losing this kind of habitat, and we need to protect what is left of wetlands like this one. All efforts should be made to protect the wetland. Tonight, I have heard a lot of good ideas of how to do that.

Moderator: The Army Corps of Engineers is another federal agency reviewing the case.

Mr. Waters: I'm Phil Waters from the Army Corps of Engineers. The Corps will make the decision for the federal government under the Clean Water Act. We have not made our

decision, but are taking all of these issues into account, including comments from the public. We will try to arrive at a fair decision. That is all I have to say for now.

Moderator: And finally, Ms. Justice...

Ms. Justice: Good evening. I am from the U.S. Environmental Protection Agency, or EPA. The EPA uses the reports from the other agencies here for information about impacts of this project on the environment. We have the ability to change the Corp's decision, and I feel that we would not allow the Corps to issue a permit at this time. I recommend that the applicant pay careful attention to the suggestions made here tonight. The rest home would be a valuable asset to the community, but only if the project does not harm the environment.

Moderator: Thank you to all the agency representatives. Now I would like to open the floor to those members of the public who have signed up to speak. May we have the first speaker?

Mr. Richie: I am Paul Richie, the applicant. I felt I should make my presence known. I think everyone knows where I stand on this project. I have a lot of money at stake here. We wanted to fill in the wetland to get rid of the mosquitoes and the bad smell. But if you all think that it has some value, I am willing to listen to suggestions to improve the project. I have to, or I will not get my permit.

[The crowd chuckles.]

Mr. Carpenter: I will be the builder of the project. These changes you are talking about to protect the stream and wetland could cost a lot of money and take time. I need to keep costs down for Mr. Richie. I already planned to put up silt fences to catch the eroding soil. I need to

know where it is okay to cut down trees and where I can not drive my equipment.

Mr. and Mrs. Johnson: We are the current owners of the property. We have agreed to sell the land to Mr. Jones. We were going to give the property to our daughter, but she moved to another state for her work. We cannot afford to pay taxes on the land, and we need the money to retire. If Mr. Jones does not get his permits, he will not buy the land, and we will be stuck!

Ms. Brown: I am Louise Brown, and I work for Commission on Aging. Frankly, I think this rest home is a necessity! The housing situation for the elderly in this area is poor. This new facility will provide homes for the elderly. It is something we have needed for a long time.

Mrs. Nimby: I am Helen Nimby. I live on the same road, and I have two small children. The traffic in our area is already bad enough, and bringing more people to the area will make the situation worse. I moved here so my kids could play outside. Now I am worried about them getting hit by a car! And I know how long these construction projects take. We will have to put up with noisy tractors for months! What do I say to this project? Not in MY backyard!

Mrs. Woodson: Hello, everyone. I represent the Nature Society, and we are very worried that this habitat could be destroyed. The rest home should be built in another location, and this land preserved for wildlife. Keep it protected, for the wildlife. I say, stop the project altogether!

Mr. Wilson: [He moves very slowly and takes a while to reach the front of the room.] My name is George Wilson. I am 82 years old. I have been living with my son and his family, but I want a place of my own. I already reserved my place in line for one of those

apartments in Heron's Rook. That would give me back some of my independence. I like the project just as it is. I cannot walk a long way from the parking lot to the building. That long walk to the car would discourage me from going out with people and take away some of my independence. Other than that, just build the place so I have somewhere to live!

Peterson: I am Marcia Peterson. I am here this evening as an interested citizen, but I work as a wetland and environmental consultant. I would like to make a few comments. The best choice would be to put the project somewhere else completely, but building on this site is possible if all parties are willing to work together. First, Mr. Wilson, I realize that you would like the parking lot closer to the building, but there will be a sunroom that has a view of the wetland. Wouldn't you rather have a view of a natural area than a parking lot? Mr. Richie, if you make the building a bit smaller, say 175 units instead of 200, you would save huge areas of wetland. If you don't fill in the wetland, you could save a lot of money on construction costs. Filling wetlands is expensive. A project that preserves the environment may be less profitable, but much more attractive to the people who will live there.

Moderator: Since Ms. Peterson was the last speaker, I will remind everyone that all testimony presented here is now part of the public record and will be used to decide this case. This decision will be made in two months. After that, the public may contact the local government to find out about the outcome of the case. I thank you all for coming. The hearing is adjourned.

THE END