

Town Hall Meeting

Adapted from: *The Wonders of Wetlands* by Alan S. Kesselheim, Britt Eckhardt Slattery, Susan H. Higgins, and Mark R. Schilling. Produced by Environmental Concern Inc. and The Watercourse, 1998

Grade Level: Basic to Advanced.

Duration: 15 min. introduction then 1-2 class periods on subsequent days.

Setting: Classroom

Summary: Students use their knowledge of wetlands regulations to run a town hall meeting concerning wetlands in their community.

Objectives: Students understand the citizen's role in protecting wetlands in their community.

Vocabulary: stakeholders

Related Module Resources:

- Module Activity "Marsh Madness"

Materials (Included in Module):

- Scenario roles pages
- 3 Scenario pages with maps
- Regulation Review document
- "No Run-of-the-mill Mall" article

Additional Materials (NOT Included in Module):

- None

ACADEMIC STANDARDS:

7th Grade

- 4.1.7.E Describe the impact of watersheds and wetlands on people.
- Explain the impact of watersheds and wetlands in flood control, wildlife habitats and pollution abatement.
- 4.3.7.B. Describe how human actions affect the health of the environment.
- Explain how nonpoint source pollution can affect the water supply and air quality.
- 4.7.7.C. Explain natural or human actions in relation to the loss of species.
- Describe state laws passed regarding threatened and endangered species in Pennsylvania.
- 4.8.7.D. Explain the importance of maintaining the natural resources at the local, state and national levels.
- Define the roles of Pennsylvania agencies that deal with natural resources.
- 4.9.7.A. Explain the role of environmental laws and regulations.
- Identify and explain environmental laws and regulations.
 - Explain the role of local and state agencies in enforcing environmental laws and regulations.

10th Grade

- 4.1.10.E. Identify and describe natural and human events on watersheds and wetlands.
- Identify the effects of humans and human events on watersheds.
- 4.3.10.B. Explain how multiple variables determine the effects of pollution on environmental health, natural processes and human practices.
- Identify local and state environmental regulations and their impact on environmental health.
- 4.9.10.A. Explain why environmental laws and regulations are developed and enacted.
- Understand conflicting rights of property owners and environmental laws and regulations.
 - Analyze the roles that local, state and federal governments play in the development and enforcement of environmental laws.

12th Grade

- 4.1.12.E. Evaluate the trade-offs, costs and benefits of conserving watersheds and wetlands.
- Evaluate the effects of human activities on watersheds and wetlands.
- 4.3.12.B. Analyze the local, regional, and national impacts of environmental health.
- Research and analyze the local, state and national laws that deal with point and nonpoint source pollution evaluate the costs and benefits of these laws.
- 4.7.12.C. Analyze the effects of threatened, endangered or extinct species on human and natural systems.
- Identify laws, agreements or treaties at national or international levels regarding threatened or endangered species.
- 4.9.12.A. Analyze environmental laws and regulations as they relate to environmental issues.
- Compare and contrast environmental laws and regulations that may have a positive or negative impact on the environment and the economy.

BACKGROUND:

Wetlands are important not only because of the habitat, food, improved water quality, and flood control they provide but also because of the recreation, hunting, and fishing opportunities they furnish. Wetlands are beneficial ecologically and, in many cases, economically. However, as our society expands and we develop more and more land, we are faced with trade-offs between wetland protection and economic development.

Wetlands can be taken advantage of in ways that maintain the ecological benefits while also being economically beneficial. Examples include building interpretive or environmental education facilities, installation of bike/running/walking/hiking trails, ecotourism, using wetlands' water purifying properties in lieu of conventional wastewater treatment, etc. These are not, however, the most common types of development that occur near wetlands in Pennsylvania. More often, businesses seek to build their offices or stores and parking lots near wetlands. This development, unfortunately, can be done in such a way as to compromise the wetlands ecologically for economic benefit. Nonetheless, conventional development near wetlands *can* occur without damaging wetlands. Indeed, middle ground can be arrived at where wetlands remain intact and economic growth occurs, but this requires a firm understanding of wetlands and the regulations that protect them, as well as active and vocal involvement of the parties affected by such development.

[It is fairly common for wetlands to face encroachment from developers in Pennsylvania. There is an ongoing case in Allegheny County (Deer Creek Crossing on Rt. 28 in Harmar Township) where all development has been halted while the environmental efforts play out. A new development is on the horizon in Frazer Twp. (in the Allegheny Valley, northeast of Pittsburgh). See the article, "No Run-of-the-mill Mall," included at the end of this activity, for the story of a similar situation in Maryland.]

As we saw in the module activity, "Marsh Madness," there is a plethora of wetland regulations on the books to protect wetlands and to regulate development in and around them. These rules must be obeyed but the extent to which they are implemented (i.e., minimally or more extensively than required by law) varies and can be significantly affected by public discourse. It is extremely important that members of the community who will be affected by wetlands regulations and/or development in and around wetlands voice their opinions and concerns. These individuals, also referred to as **stakeholders**, might be excited about the prospect of new jobs, shopping opportunities, etc. Others might be concerned about the adverse effects the new development might have on the ecological and recreational integrity of the wetland. Local politicians want to do what's best for their community and keep the majority of citizens happy. They, too, are interested in more jobs for their community as well as an increased tax base. On the other hand, their position requires them to be responsive to the wishes of their constituents. Developers want to make a profit, but not at the expense of enraging the local populace. Governmental agencies work to enforce the environmental regulations set in place after years of scientific study. With the input of all of these stakeholders, the final form of a proposed development plan might be very different from the one initially presented by the developer. In the best-case scenario, compromise is reached the interests of all stakeholders are considered and addressed in the development plan.

Citizens are most effective in voicing their concerns when they research the development project as well as the applicable state and federal regulations. Wetlands laws and regulations are found at the federal, state and local level of government. They are meant to preserve and protect wetlands in the interest of public health, species preservation and natural beauty/recreation. Any development project on or adjacent to a wetlands area

requires certain permits prior to construction. Depending on the type of wetland (floodplain, coast, freshwater, etc.), the type of building being constructed (private, federal, public, etc.), and the types of wildlife living in the wetland, the applicable rules and regulations vary. However, in all cases, the developer, along with his site engineer/architect, must submit his or her development plans to the appropriate agency for the relevant permit(s). In some cases, the issue is not clear-cut and one or more of the parties requests a public hearing. At a town hall meeting, any interested party is welcome to voice their viewpoint so that all may be considered prior to making a final decision.

OVERVIEW:

Students will hold a town hall meeting, acting out all the players involved in a proposed development in the community. They will need to understand the wetlands regulations for this exercise to be effective.

PROCEDURE:

Teacher Preparation:

1. Select a scenario and copy the appropriate scenario sheet for students.
2. Make photocopies of “Regulations Review” for your students.
3. Familiarize yourself with relevant wetland regulations, namely the Fish and Wildlife Coordination Act and the Clean Water Act (Sections 401 and 404).

Student Activity:

1. Discuss with students why wetlands are important, how the area in and near them might be developed, how different regulations apply to different scenarios, how different stakeholders might have different opinions on proposed developments and regulations, and how public discourse can affect if a proposed development comes to fruition and the form of the final development.
2. Distribute scenario sheets to the students and read the scenario to the class. Then distribute copies of “Regulations Review” and have them try to determine which regulations apply to the scenario. [The regulations that apply to the scenarios in this exercise include the Fish and Wildlife Coordination Act and the Clean Water Act (Sections 401 and 404).]
4. Explain that each student will be assigned a stakeholder role and should think about how that individual might feel about the proposed development and applicable regulations. Are they for or against or neutral about the development? Why? How would they be affected by the development? They will have one or more days to prepare a short presentation for a Town Hall Meeting on a subsequent day.
5. Assign students to play the following stakeholder roles using the role cards at the end of this activity. Note that each scenario has specific roles.

6. On the day of the Town Hall Meeting, each student must make a presentation expressing his or her opinion on the proposed development. The designated secretary will take minutes of the Town Meeting.
7. After each stakeholder has presented, open the floor up for discussion and compromise.
8. Once a final decision is reached, compare this to the initial development plan and discuss its advantages over the original plan. Is there still room for compromise? How do the different stakeholders feel about the final decision?
9. At the end of the meeting, reveal to students what the final plan was in real life. How does this compare to their final decision?

Real Life Outcomes:

Scenario #1 - In the end, the parties compromised; the building was moved farther down the property and the wetland was mostly kept intact with boardwalks built over it along with educational displays. Some of the wetland was filled, so another wetland was created on the property in a different location. (See the "Scenario #1 – Real Life Outcome" map at the end of this activity.)

Scenario #2 – The wetland was delineated and the parking lot and store building were built beyond the delineated boundaries of the wetland. Trail users are not pleased with the destruction of the rest of the natural area beyond the wetland. No plans for interpretive/educational facilities on the store grounds have yet been made.

Scenario #3 – Mall developers and other parties are stuck in a deadlock and plans for the mall have been stalled for years.

DISCUSSION:

Who were the most influential players in the final outcome? *This answer will depend on the research completed by the individual student(s) and how persuasive they were in their presentation(s).*

Will that player (the most influential one) be the most influential in any wetlands development decision? *Probably not. In many situations, the person with the most influence is the one with the most convincing argument or most substantiated facts.*

Was the developer's idea accepted without any modifications? What affect did the Town Hall Meeting have on the development? *This will depend on the particular class, but there are often modifications required to the original plan. This may cause delays in construction as the developer must revise his plans and perhaps apply for additional permits or conduct additional studies.*

EVALUATION:

- Explain the role of a town meeting in the decision-making of the local government.
- Identify the main players in the decision-making process when development is proposed in proximity to a wetland.
- Describe alternatives to filling wetlands in the path of development.
- Explain how your class outcome differed from the real life outcomes.
- Discussion questions above.

EXTENSIONS AND MODIFICATIONS:

- Require (or give extra credit for) costume and prop for each role played.
- Research real-life situations such as this in your community.
- Create your own similar situation for debate.
- Set up a mock trial based on the same, or similar, scenario.
- Attend a real town hall meeting in your community.
- Contact your local Conservation District or Fish & Boat Commission Office to borrow other videos about wetland controversy. Two good titles from the PA Association of Conservation Districts, Inc. are Wetlands: Our Environment, Whose Property? and Wetlands: Maligned Treasures.

NOTES (PLEASE WRITE ANY SUGGESTIONS YOU HAVE FOR TEACHERS USING THIS ACTIVITY IN THE FUTURE):



TOWN HALL MEETING: SCENARIO #1 ROLES

<u>Scenario #1</u> Mediator	<u>Scenario #1</u> Secretary
<u>Scenario #1</u> Shopping mall developer	<u>Scenario #1</u> Business owner who will have a new store in the mall
<u>Scenario #1</u> Site architect/engineer	<u>Scenario #1</u> Local politician
<u>Scenario #1</u> Local high school biology teacher	<u>Scenario #1</u> Environmentalist
<u>Scenario #1</u> Hobby bird watcher	<u>Scenario #1</u> Outdoor club representative
<u>Scenario #1</u> Concerned citizen	<u>Scenario #1</u> Teenager
<u>Scenario #1</u> Chamber of Commerce representative	<u>Scenario #1</u> Department of Environmental Protection representative



TOWN HALL MEETING : SCENARIO #2 ROLES

<u>Scenario #2</u> Mediator	<u>Scenario #2</u> Secretary
<u>Scenario #2</u> Home improvement store developer	<u>Scenario #2</u> Local hardware store owners
<u>Scenario #2</u> Site architect/engineer	<u>Scenario #2</u> Local politician
<u>Scenario #2</u> Local high school biology teacher	<u>Scenario #2</u> Environmentalist
<u>Scenario #2</u> Hobby bird watcher	<u>Scenario #2</u> Outdoor club representative
<u>Scenario #2</u> Concerned citizen	<u>Scenario #2</u> Home improvement enthusiast
<u>Scenario #2</u> Chamber of Commerce representative	<u>Scenario #2</u> Department of Environmental Protection representative



TOWN HALL MEETING : SCENARIO #3 ROLES

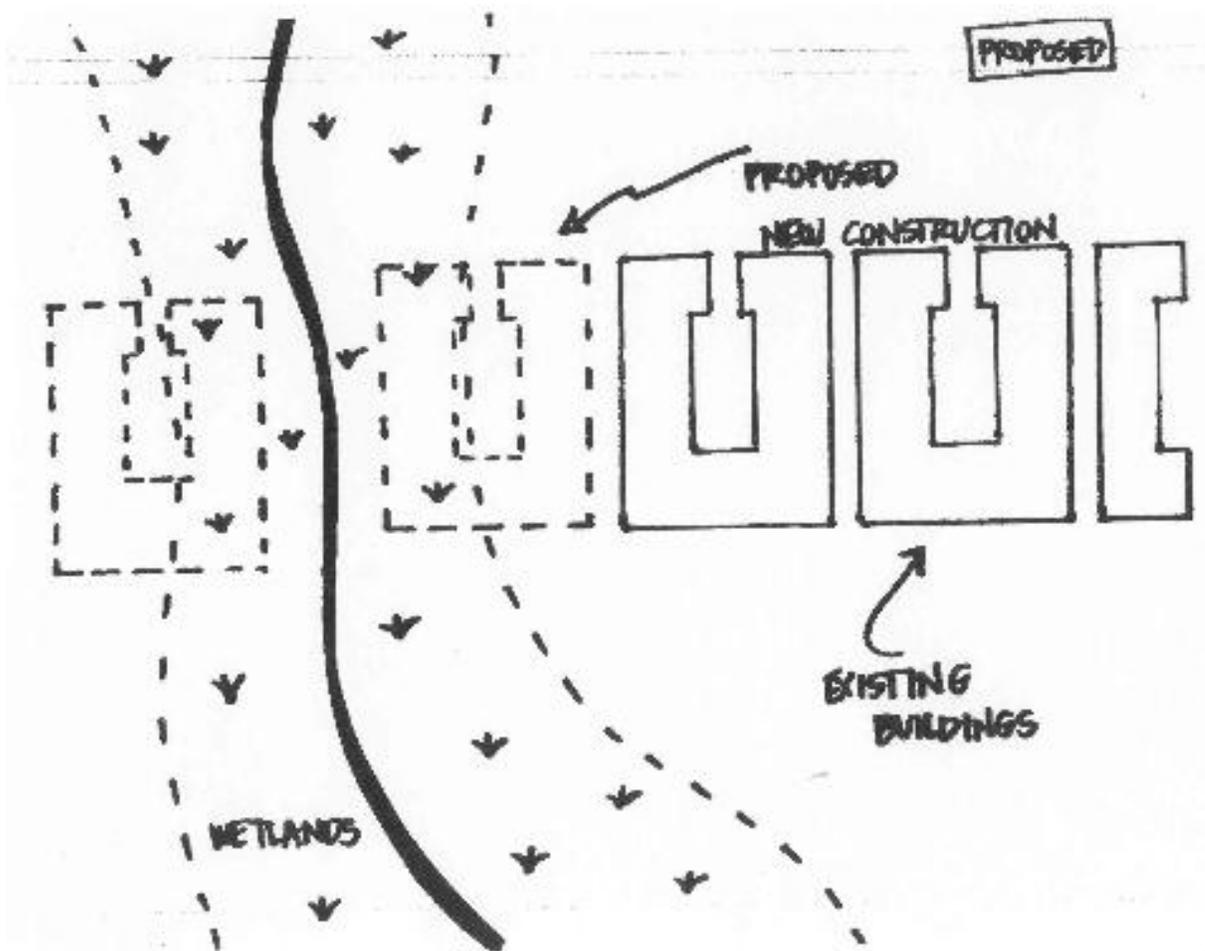
<p><u>Scenario #3</u> Mediator</p>	<p><u>Scenario #3</u> Secretary</p>
<p><u>Scenario #3</u> Mall developer</p>	<p><u>Scenario #3</u> Business owner who would have a store in the new mall section</p>
<p><u>Scenario #3</u> Site architect/engineer</p>	<p><u>Scenario #3</u> Local politician</p>
<p><u>Scenario #3</u> Local high school biology teacher</p>	<p><u>Scenario #3</u> Environmentalist</p>
<p><u>Scenario #3</u> Hobby bird watcher</p>	<p><u>Scenario #3</u> Outdoor club representative</p>
<p><u>Scenario #3</u> Concerned citizen</p>	<p><u>Scenario #3</u> Teenager</p>
<p><u>Scenario #3</u> Chamber of Commerce representative</p>	<p><u>Scenario #3</u> Department of Environmental Protection representative</p>



SCENARIO 1: TOWN HALL MEETING

There is a developer interested in building a large shopping center near Grove City, PA. In the initial stages of development everything goes smoothly and the shopping center is a big success. It is so popular that the developer wishes to expand the facility. Directly in the footprint of the next building is a wetland.

Thus began the debate between the developer and other interested parties.

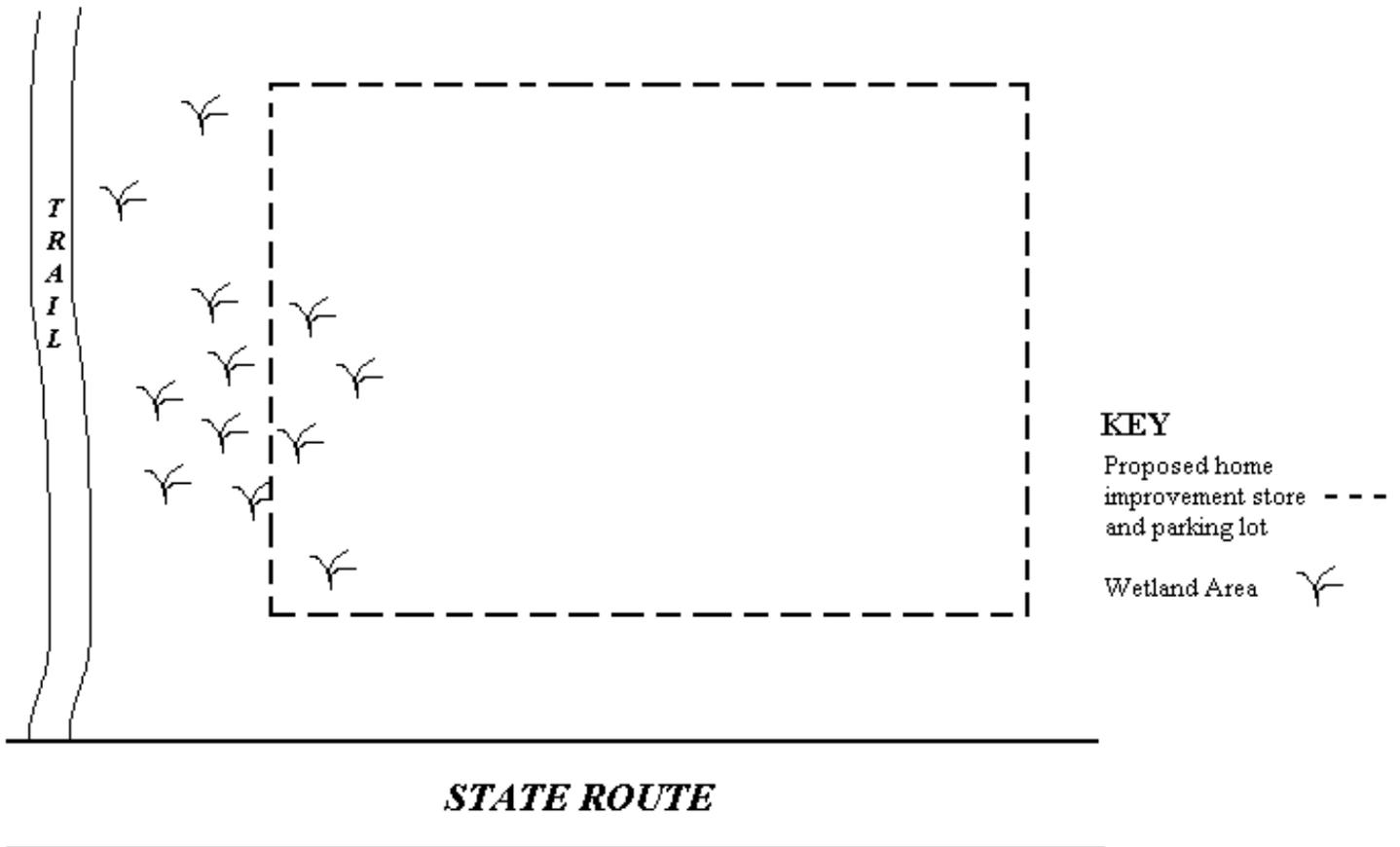




SCENARIO #2: TOWN HALL MEETING

A national chain of home improvement stores wants to build a new store in Meadville, PA. On part of the proposed site of the new store is a wetland. The project site is also adjacent to a nature/bike/walking trail.

Thus began the debate between the developer and other interested parties.

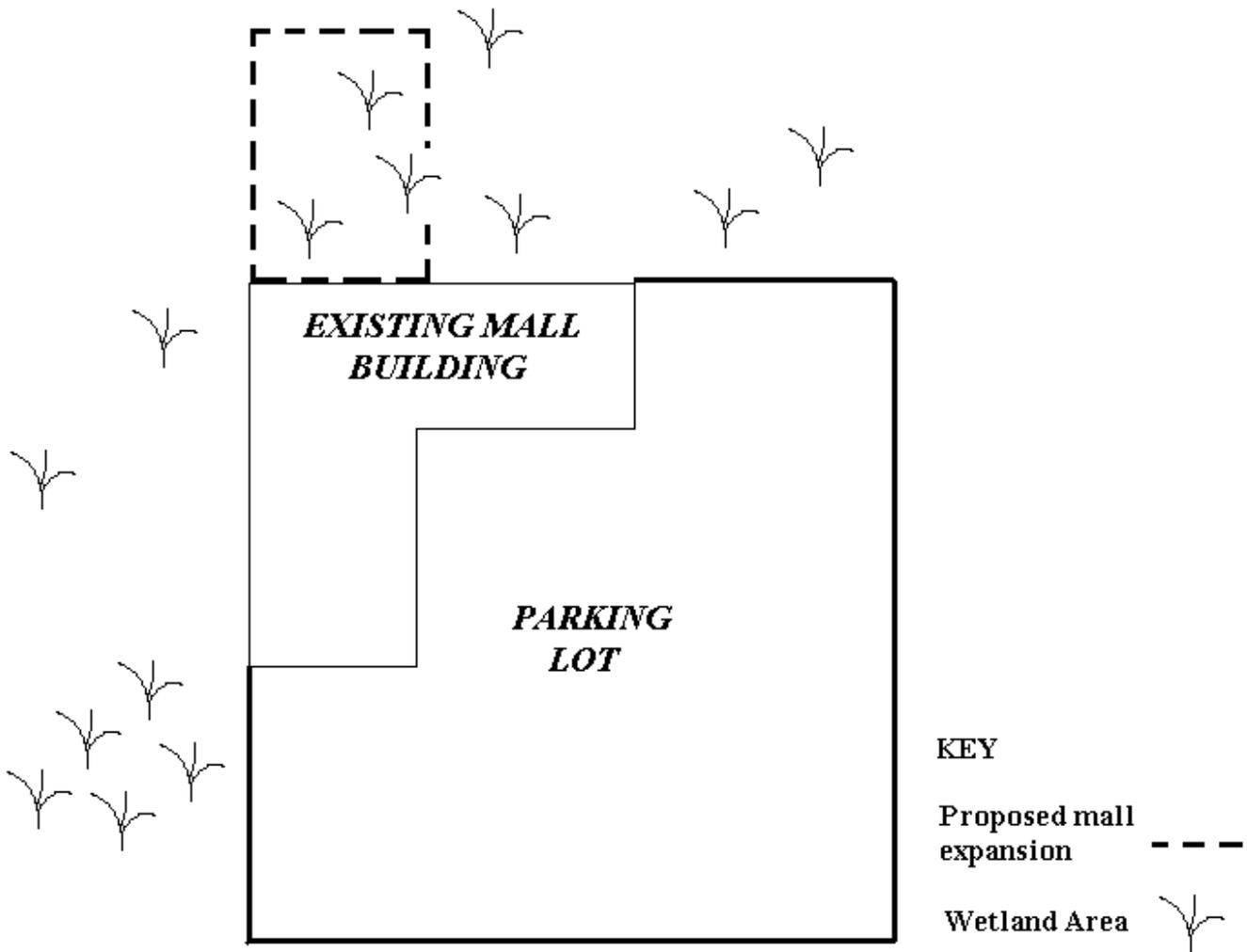




SCENARIO #3: TOWN HALL MEETING

The owners of the Meadville Mall want to expand the mall. The proposed expansion would encroach on a wetland area.

Thus began the debate between the developer and other interested parties.





REGULATION REVIEW : TOWN HALL MEETING

Regulation Review

Basic facts of each law/regulation are listed below. Look at the specific laws for more detailed information.

Clean Water Act, Sections 401 and 402. Administered by the Environmental Protection Agency (EPA) along with state agencies, this act was set up to regulate pollution. It was brought into reality as a response to the deterioration of the nation's surface waters.

Clean Water Act, Section 401. Water Quality Certification. Regulates anything that may discharge pollutants into surface waters or wetlands. Federal/state permits are required and may be revoked for filling wetlands, licensing hydropower plants, or discharging pollution into water.

Clean Water Act, Section 402. National Pollutant Discharge Elimination System (NPDES). Requires permits be issued by EPA or PA DEP for discharge of pollutants from a point source (specific location) into navigable waters.

Clean Water Act, Section 404. This section concerns the dredging and filling of wetlands and regulates construction-related discharges (i.e. dam, bridge, road) by requiring permits for those activities through the U.S. Army Corps of Engineers. It does not cover normal farming and forestry discharges.

National Environmental Policy Act (NEPA). Through this policy, all government agencies are required to take into account the environmental impact of any action they wish to undertake. Environmental Impact Statements (EIS) are required on major federal actions that may affect the quality of the environment. The U.S. EPA is required to review and comment on all Environmental Impact Statements.

Executive Order 11990 (Protection of Wetlands). This executive order was enacted to protect wetlands on federal lands.

Rivers and Harbors Act. This act is enforced by the U.S. Army Corps of Engineers. It gives them the authority to protect wetlands from pollution by prohibiting discharge of solids or construction in waterways. It was in place long before the Clean Water Act came about and is still used to stop polluters, especially in the case of oil or hazardous materials spills.

Food Securities Act of 1985 ("Swampbuster" provisions). This act helps to close a loophole in the Clean Water Act. Agricultural discharges into wetlands were not included in the Clean Water Act. In fact, draining and filling wetlands on farm property was actually encouraged and federal subsidies were issued to farmers for converting wetlands to farmlands. Through this act, the Natural Resources Conservation Service now helps farmers to identify wetlands on their farms.

Executive Order 11988 (Floodplain Protection). This act helps to insure public safety by severely limiting floodplain activities. In the process, it also protects the floodplains and the wetlands within them.

Coastal Zone Management Act. This act requires states to set up regulations concerning coastal zones. The focus of the PA Coastal Zone Management Program is conserving coastal resources, improving public access, protecting natural resources and promoting proper planning. One of the important aspects of the act is controlling nonpoint source pollution

Endangered Species Act. In order to protect endangered and threatened species, this act includes protection of their habitats. Wetland areas that offer homes to these species are protected under this act. Wetland areas associated with inland species fall under protection of the U.S. Fish and Wildlife Service, while the National Marine Fisheries Service protects those associated with marine species. In Pennsylvania, the PA Fish and Boat Commission along with the PA Game Commission help to enforce this act.

Fish and Wildlife Coordination Act. The U.S. Fish and Wildlife Service administer this act. It states that the impact of water-related projects on wildlife must be considered equally with the need for the project. Therefore, all water-related federal projects (such as the construction of dams) must be reviewed for their potential impact on fish and wildlife to decide whether or not to continue with the project.

Transportation Equity Act for the 21st Century (TEA-21). This act authorizes monies to improve the Nation's transportation infrastructure, enhance economic growth and protect the environment. Ten percent of all funds for surface transportation projects (STPs) are set aside for transportation enhancements including environmental and water quality improvement projects (i.e. bicycle and pedestrian pathways, mitigation of water pollution due to highway runoff). In addition, any reconstruction, resurfacing, rehabilitation or restoration projects under STP set aside up to 20% of the cost to be used for environmental enhancements such as stormwater treatment systems and riparian or wetland restoration projects.

Title 25 PA Code, Environmental Protection. Most everything relating to Pennsylvania wetlands is covered in this section of the PA Code. It details the responsibilities of the PA Department of Environmental Protection in protecting and preserving wetlands along with other surface waters. PA DEP is responsible for reviewing applications and issuing permits for all construction projects in and near wetlands. Through different parts of the Code the Clean Streams Law (35 P.S. §§ 691.1-691.1001), the Solid Waste Management Act (35 P.S. §§ 6018.101- 6018.1003), the Surface Mining Conservation and Reclamation Act (52 P.S. §§ 1396.1- 1396.31), the Pennsylvania Sewage Facilities Act (35 P.S. §§ 750.1-750.20), and the Oil and Gas Act (58 P.S. §§ 601.101-601.605) have been enacted to ensure that projects in each of these areas do not adversely affect the water quality in the state's wetlands.

25 PA Code, Chapter 44. Conservation Areas. This chapter of the Code enforces the establishment of conservation areas within the state. The PA DEP is charged to preserve open space, conserve natural resources, and make these areas available for outdoor recreation and environmental education activities. Protection of wetlands is one of the primary uses of this portion of the Code.

25 PA Code, Chapter 61. Land and Water Conservation Fund. The Land and Water Conservation Fund is established through this section of the Code. It provides funding for setting aside areas for special recreation needs, including wetland areas.

25 PA Code, Chapter 77. Non-coal exploration activities. When mining for anything other than coal, regulations state to avoid the disturbance of wetlands areas.

25 PA Code 87, Surface Mining of Coal. When mining for coal, wetland areas must be restored, enhanced or maintained. In addition, fish and wildlife habitats in the area must be protected.

25 PA Code, Chapter 235. Administration of the Storage Tank and Spill Prevention Program. In order to protect state wetlands, no siting permits are issued if the installation is proposed in wetlands.

25 PA Code, Chapter 105. Dam Safety and Waterway Management. Most of the wetland protection regulations can be found in this section of the PA Code. It also outlines the Department of Environmental Protection's definition of a wetland and the functions of a wetland, which are referred to throughout the Code:

“*Wetlands*—Areas that are inundated or saturated by surface water or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions, including swamps, marshes, bogs and similar areas.

Wetland functions—Include, but are not limited to, the following:

- Serving natural biological functions, including food chain production; general habitat; and nesting, spawning, rearing and resting sites for aquatic or land species.
- Providing areas for study of the environment or as sanctuaries or refuges.
- Maintaining natural drainage characteristics, sedimentation patterns, salinity distribution, flushing characteristics, natural water filtration processes, current patterns or other environmental characteristics.
- Shielding other areas from wave action, erosion or storm damage.
- Serving as a storage area for storm and floodwaters.
- Providing a groundwater discharge area that maintains minimum baseflows.
- Serving as a prime natural recharge area where surface water and groundwater are directly interconnected.
- Preventing pollution.
- Providing recreation.”

Wild Resource Conservation Act. This is the Pennsylvania state regulation to preserve and protect threatened and endangered plants and animals. This act, in conjunction with the Fish and Boat Code and the Game and Wildlife Code, identifies and protects those species that are in danger of disappearing from the state mainly due to habitat loss. Through this act, a Wild Resource Conservation Fund was created to collect voluntary contributions to help study the number and range of these species and keep track of their progress.

PA Coastal Zone Management Program. This policy involves the protection of two widely separated coastlines within the Commonwealth. It concerns all aspects of the coast, but in the case of wetlands, it seeks to maintain the natural benefits of wildlife habitat, water quality, flood control and biological diversity by protecting and enhancing coastal wetlands.



TOWN HALL MEETING: SCENARIO #1 REAL LIFE OUTCOME

