



The Great Marsh Dilemma

Adapted from BTNEP/LSU AgCenter: *Coastal Land Loss and Restoration*

Focus/Overview

This role play helps students understand the many sides to the problem of wetland loss in Louisiana.

Learning Objectives

The learner will...

- take roles of members of the community who have an interest in the future of a large tract of marsh land and meet to make their recommendations.
- take roles of parish police jurors charged with the task of developing a management plan for the land.
- solve the problem of a lawsuit brought against the police jury by a party dissatisfied with the management plan.

Louisiana Grade Level Expectations (Science)

7: GLE-38	Analyze the consequences of human activities on ecosystems (SE-M-A4).
HS Biol: GLE-27	Analyze the positive and negative effects of human actions on ecosystems (SE-H-D4) (SE-H-A7).
HS Env. Sci: GLE-22	Analyze the risk-benefit ratio for selected environmental situations (SE-H-C4).

Materials List

- Role play cards (laminated, if possible)
- Props for police jury debate – students can choose a simple prop to represent their profession or occupation
- Props for courtroom scene
- Flip chart, easel, markers or chalkboard

Advance Preparation

1. Run off and laminate the role play cards.
2. Collect props for police jury debate and courtroom scene.
3. Familiarize yourself with Robert’s Rules of Order for the police jury meeting.
4. Contact a person to serve a subpoena (police officer, judge, principal, etc.)

Background

The activity has three parts. In the first part each student receives a role card describing the position of a community member who will make a position statement at a public meeting. After preparing their statements, the students role play a town meeting at which they take turns to make statements. Each speaker’s recommendations are recorded on a flip chart and allowed and prohibited uses are listed as the meeting progresses.

In the next phase of the activity, the students assume the roles of police jury members (they are no longer playing the special interest roles of the first part of the activity). A mock police jury meeting is held with the teacher or leader as chairperson. At this meeting, the police jury members’ charge is to develop a management plan for the marsh area using the citizens’ recommendations and the list of allowed and

BTNEP Connection

Habitat

Grade Level

7, HS Biol, HS Env. Sci

Duration

2-3 class periods

Subject Area

science

Setting

classroom

Vocabulary

none

Original Source

“Culminating Activity: The Great Marsh Dilemma” in BTNEP/LSU AgCenter: *Coastal Land Loss and Restoration*, Activity 11.



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prohibited uses developed during the first meeting. The main uses are discussed and a plan written. This plan is displayed in the classroom. At this point, the teacher discusses why certain uses were allowed or prohibited and the potential biases that were evident. The idea that, in some cases, compromise is necessary can be discussed, too. The ideas of sustainability and mitigation are central to this discussion.

In the last phase of the activity, a surprise visitor serves the entire police jury with subpoenas to appear in the court to defend their decisions in a suit filed by a party whose special interests were not met in the management plan. Finally, a court scene is acted out. Students are called upon to testify in their original roles of citizens with special interests in the future of the land. To conclude the court scene, the judge, played by the teacher or leader) must decide who has the most convincing arguments: those in favor of plaintiff's suit or those against.

This activity plays out differently with each group of students. The important lesson is that resolving a dilemma such as this one within a community is very complex. During the police jury meeting, individual biases will play a large part; this will be recognized. The students should see how a balance or compromise is often the final outcome, with consideration being given to retaining the functions and values of the wetland while allowing some uses that will economically benefit the parish.

Procedure

1. *Read the introductory paragraphs (below) to the students. Embellish the story and explain the situation in any way you wish to help your students grasp the central dilemma.*

We are members of a coastal community that has recently lost a well-respected friend, Mrs. LaTerre. The LaTerre family has lived in this parish since 1780, when it obtained a Spanish land grant. Although the family was once prominent, Mrs. LaTerre was the last remaining survivor. She loved the parish and the land.

Mrs. LaTerre has bequeathed an 80,000-acre tract of marsh land to a Louisiana coastal parish upon her death. Members of the community are now at odds about how the land should be used. The police jury of the parish has been given the task of deciding the future of the valuable piece of property. Mrs. LaTerre made no stipulations in her will about the land, other than the land should be used to "benefit the residents of the parish." The interpretation of this phrase is what has created the dilemma. Some members of the community and police jury consider the word "benefit" in economic terms only; others disagree with that interpretation, contending that the aesthetic quality of the land must be preserved. Some advocate a complete "hands off" approach in which the land should be made into a wildlife refuge with limited access by residents. A nonprofit organization has shown an interest in purchasing the land from the parish to set it aside for conservation and education purposes only.

The land itself is made up of mostly pristine intermediate marsh habitat, with some freshwater marsh and swamp on the inland side, and some brackish and salt marsh closer to the Gulf of Mexico. It is home to incredible populations of wildlife and acts as a nursery for many seafood species. This coastal parish depends heavily on commercial fishery landings for its income, as well as the presence of many recreational fishers who visit and spend money in stores and at other local businesses. Members of the community are aware of the relationship between healthy marshes and productive fisheries.

The land has been in the ownership of the same family since the 1700s. The only development has been several hunting and fishing camps and a few small oil wells owned by the family. There is suspected to be a fairly large reserve of oil beneath the property that has not yet been exploited. An oil company, having heard about the ownership change, is interested in exploration with a view toward producing the oil and gas from the property.

Discuss the concepts involved so the students understand the big picture concerning the land. Consider posting a USGS topographic map of a suitable marsh area on which you have marked out an 80,000-acre area. This will assist students in understanding the size and location of the land.

2. Our job is to work together to decide what should be done with the land. We have many options. Remember, however, that the land is mostly coastal marsh and unsuitable for urban development. As

you think about the dilemma, bear in mind all the things you have learned about the functions and values of wetlands and the problems of coastal land loss and pollution we have discussed.

3. First we will hold a public meeting at which people with special interests in the area may make statements about how they think the land should be developed. Next, we will hold a police jury meeting. All of you will represent members of the parish police jury. We will discuss proposals of the people who spoke at the town meeting. Our job will be to rank the potential uses of the land and develop a management plan for the land.

Here are 10 role cards. [**Blackline Master #1 – Role Play cards**] If you want to play a role of a special interest group representative, listen to the names as I read them. Raise your hand to volunteer to play that role. *Students can play more than one role, as is the case in real life. You can also create additional roles if desired.*

- Sierra Club, represented by Ms. Scarlet Tanager.
- Shrimp fisherman's union, represented by Ted Trawl.
- Oil and Gas Industry Consortium, represented by Mr. R. Evenue, a member of the parish police jury.
- University researchers, represented by Professor O. Tolith, a marine scientist at Louisiana State University Marine Science Lab.
- Local concerned citizens, represented by Ms. Lindy Lovetree.
- Ducks Unlimited, represented by Mr. Merve Ganzer, a local hunting enthusiast.
- Recreational fishermen, represented by Mr. Red Drum.
- Parish Economic Development Council, represented by public affairs professional with expertise in ecotourism, Ms. Misty Waters
- Archeologist, represented by Ms. Betsy Diggs, who is particularly concerned about the cultural history of the area.
- Businessman and land developer, Mr. Q. Buck.

Allow students time to familiarize themselves with their roles as explained on the role cards.

4. *Conduct a town meeting, with yourself as chairperson, at which the students assume their roles and state their opinions on the appropriate use of the land. Record the citizens' recommendations about use of the land on a flip chart or chalk board. After the positions have been stated, have the students create a list of allowed and prohibited uses and record them on the flip chart.*
5. Now we will hold a police jury meeting to discuss the proposals made at the previous meeting and to develop a management plan for the land. *Hold a parish police jury meeting to develop the management plan for the land. Follow Robert's Rules of Order throughout the meeting.*

Presiding over the police jury meeting is Poll E. Ticker (me). I call this meeting of the Parish Police Jury to order. We will follow Robert's Rules of Order throughout the meeting. Each of you is a member of the parish police jury and you have the right to state your opinion - provided you address the chairperson (me) correctly first.

We will begin with the list of allowed and prohibited uses from our previous meeting. First we will rank the listed uses by taking a vote on each one. You will vote for the proposed land use will indicate that you support the proposed use of the land. The number of votes determines the rank of the proposed land use. We will use this ranked list to write our management plan for the LaTerre land.

6. *After the management plan has been developed, have someone (a local policeperson, judge, the principal, etc.) enter the classroom to serve the police jury members with subpoenas stating that they are being sued by whichever special interest group feels it did not get due consideration during the final police jury vote. [Inform your visitor about particulars of the disgruntled group. You can even prepare simulated subpoenas for the person to hand out to the class.]*
7. *Hold a mock court case with roles of judge, plaintiff's lawyer, defense lawyer and witnesses from the council meeting, including all those who wish to speak. After all the testimony is heard, the judge can make a ruling or the class can serve as a jury to vote on a decision. Again, the teacher or leader may wish to play the role of judge to ensure the role-playing stays on track.*

Blackline Master

1. Marsh Dilemma Role Play Cards

Assessment

- Write a short summary of how the public must work together to solve wetland issues.

Resources

BTNEP Resource:

Portrait of an Estuary, publication by LSU AG and BTNEP

Websites:

Rules Online website, no date, **Robert's Rules of Order Revised, by General Henry M. Robert, 1915 4th Ed., Public Domain**, accessed July 8, 2005 at <http://www.rulesonline.com/>.

Online reference for Robert's Rules of Order.

Holmstrom, Laurel, Sonoma State University, May 13, 2003, **Robert's Rules of Order Made Simple**, accessed July 8, 2005 at http://www.sonoma.edu/Senate/Roberts_Simple.html.

Summary of Robert's Rules of Order.

References:

Sylvester, Nancy. 2004. **The Complete Idiot's Guide to Robert's Rules**. Penguin Group (USA), 352 pp. ISBN: 1592571638.

A book on Robert's Rules that is loaded with understandable and easy to read information.

Jennings, C. Alan. 2004. **Robert's Rules for Dummies** (Dummies Series). Wiley, John & Sons, Inc., 338 pp. ISBN: 0764575740

A book on Robert's Rules that walks readers through assembling a quorum, the order of agenda, the steps for making a motion, nominating and electing officers, and becoming involved in committees.

Marsh Dilemma Role Play cards



Ms. Scarlet Tanager

Sierra Club

We feel truly pristine natural areas are becoming dangerously scarce, jeopardizing the biodiversity of the nation as well as our beautiful state. This has implications for many user groups - the fishermen, hunters, wildlife enthusiasts, scientists, as well as the general public who benefit from sharing their world with nature. This area is one of the last undisturbed wilderness areas of our state. It is home to hundreds of species of birds: migratory water fowl, wading birds, pelicans, egrets and bald eagles. We also believe the parish has a wonderful opportunity in the form of this generous gift of the LaTerre family to contribute to the future of Louisiana. We feel this land should be set aside as a wildlife preserve, managed for the benefit of the wildlife, not for people and financial gain. If we allow oil and gas interests or other commercial developments encroach on this land we will lose an opportunity to save an ecosystem that cannot be replaced.

Dr. O. Tolith

Louisiana State University Marine Lab

At our research and teaching facility we have discussed the need for access to pristine wetland environments. There are few truly undisturbed sites that can be used as control sites for our research on the effects of pollution on the wetlands. We would like to find a site where students could learn about wetland ecology and do field work. The LaTerre land would solve our problem if we could have access to it. Ideally we would like to acquire a small portion to build a field laboratory and dormitories. This would cause limited disturbance to the wetlands. As for large-scale commercial or industrial development on this land, we feel it would do irreparable harm to this unique ecosystem. Therefore, we urge the council not to accept the offers of the oil and gas industry in spite of the economic temptation.

Mr. Ted Trawl

Shrimpers United

My family has been in the shrimping business here for generations. We have seen many changes over the years. When a marsh is affected by erosion or development, the shrimp lose their habitat for the juveniles to grow and mature. If we lose more marsh in this parish, my shrimping business will not survive. Think about the economic impact of all the shrimping in this parish. If we were to lose the shrimp, we would lose a lot. If you like shrimp, you should be for preserving the marsh.

Ms. Lindy Lovetree

School teacher, concerned citizen

I have lived here all of my life and, being a teacher and a mother, my concern is for the next generation. Although I agree that children need opportunities and the community would benefit from economic improvements, let's keep all this in perspective. I cannot see destroying this unique and beautiful place in the name of progress alone. I share Dr. Tolith's views about the educational value of these wetlands, but I feel we must also preserve them because of the ways in which they affect the quality of all of our lives here. To develop the LaTerre land would take away the natural beauty that is so easy to take for granted. I believe we should keep the land in its present state and allow the citizens of our parish and visitors to enjoy the waterways for fishing and bird watching. And let's not forget the values provided the wetlands in terms of flood protection and as a buffer against hurricane damage and as a filter for the pollutants our everyday lives produce.

Mr. R. Evenue

Louisiana Oil and Gas Consortium

Our recent seismic survey showed large reserves of oil and gas beneath the land that this parish now owns. The economic benefits to be gained by the parish from extracting these mineral resources are incredible. The parish is suffering from economic depression and could certainly use these revenues. Visualize new schools for the children of the parish with computers in every classroom and modern teaching equipment, new businesses providing many new jobs for the people of this parish, helping to keep families together. We all use energy - and lots of it. We use it in our cars, boats and in our homes. We need the energy here and throughout the United States. The only wise choice is to develop the potential oil and gas reserves on the LaTerre land. To choose otherwise would be robbing your children of their future in the parish. Today oil and gas extraction can be done with minimal environmental impact. When properly done, we can have the energy and the jobs and protect the environment, too.

Mr. Merve Ganzer

Ducks Unlimited

I represent Ducks Unlimited. We are a national organization concerned with maintaining adequate habitat for water fowl of all kinds. If we fail to protect wildfowl habitats, we will see a decline in duck populations nationwide. The LaTerre land is prime habitat for the ducks and geese that migrate to Louisiana from the north each winter to feed. If this marsh is developed, we will destroy the duck habitat and will have lost an opportunity to develop the potential of this land for duck hunting. Duck hunters can contribute huge amounts to the economy of this parish if you provide access for them during hunting season. I advocate the acquisition of at least 75% of the LaTerre land by Ducks Unlimited for waterfowl protection and hunting. We discourage any development that would alter the hydrology of the land as well as development for oil and gas extraction. We also discourage drainage of marsh waters for construction of any kind.

Mr. Red Drum

Recreational fisherman

Fishing is a big industry here in Louisiana. The recreational fisherman contributes millions of dollars annually to the economy of the state. The LaTerre wetlands, which the parish now owns, are literally a gold mine in terms of fish and the potential for economic gain from encouraging recreational fishing in the area. I see a marina with accommodations for visitors and docks for their boats. I picture big events bringing thousands of visitors here - like the fishing rodeos on Grand Isle. Hotels, restaurants, campgrounds - all of these will benefit if you draw recreational fishermen here. At the same time, you will not need to spoil the beauty of the wetlands themselves. In fact, the more they are left as they are, the better the fishing will be.

Mr. Q. Buck

Businessman

I own a construction business. Buck's Construction is located in this parish and to stay in business and make money, we need to be building things. We can build anything, but the contract has to be there. I can hire the young men of this parish in well-paying jobs once we get the contracts. Real economic development is not in little "warm and fuzzy" projects. We need BIG projects - multi-million dollar projects! We need to extract the minerals that lie beneath the LaTerre marsh or we are cheating ourselves out of a livelihood and schools, stores, shopping malls, big houses, new cars - you name it - we can have it if we are smart. We need to allow the oil industry in to do business in our parish or we will be poor forever.

Ms. Misty Waters

Parish Economic Development Office

We must be realistic. Our parish does not have a sound economic base. We need to proceed carefully and develop the potential of this parish for attracting visitors from far and wide. We have alligators and mysterious swamps. We cook the most delicious food in the nation! We just need to provide good opportunities for tourists and they will come - ready to spend money in our parish! For the LaTerre land, I see a crucial role in strengthening our standing in the tourism industry. We just need to attract investors who are willing to build quality accommodations. Local people will find work as swamp tour guides. We can market the romance of our swamps! Although oil and gas development would bring revenues and business to our parish, do we really want to see ugly oil field equipment trucks rumbling through our town and barges on our waterways? Or do we want to see people enjoying the beauty of our unspoiled wilderness and coming from far and wide to observe the migration of neotropical birds?

Ms. Betsy Diggs

Archeologist

I am just horrified by some of the things I have heard today. I guess none of you has heard of Section 404 of the Clean Water Act. Not one person has mentioned that wetlands can not be developed in any way we please. Before any project involving alteration of a wetland can begin, a permit process must be followed. If the people of the parish have any concern at all for the LaTerre land and the wonderful family who left it to the parish, they will make certain that a full environmental impact statement is conducted before any permits are issued. My job involves documenting past human activities in places that may be altered. I know that this land has Native American burial mounds and shell middens where villages once stood. We should learn about the people who once lived on the land we now claim as ours. We must show respect to them in deciding the fate of the LaTerre land. I urge this council to be cautious in their decisions and not let promises of big shiny cars and beautiful shopping malls blind you.