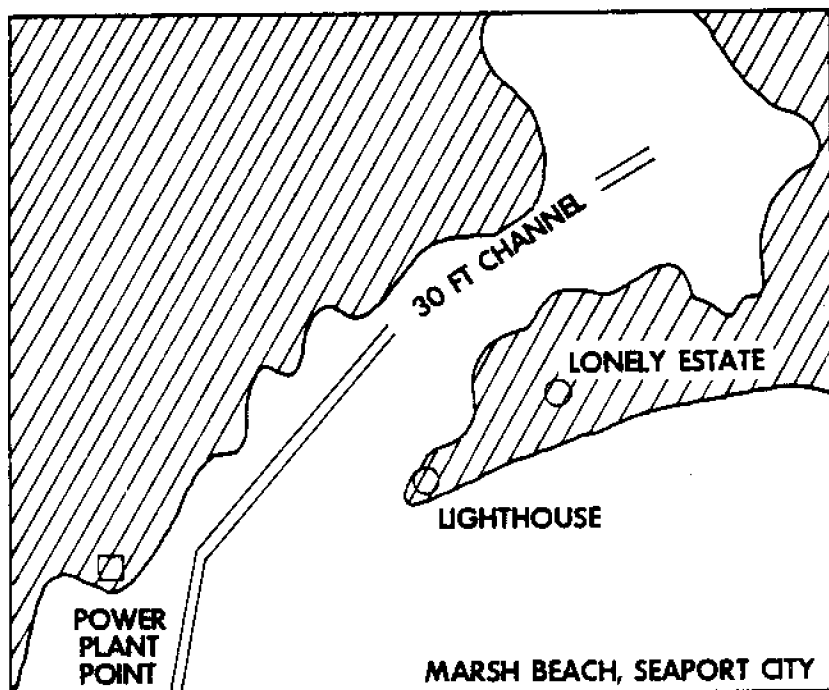


# 4-H MARINE SCIENCE Simulation Game Member's Guide



## Land Use for Marsh Beach

The  
 Alabama  
Cooperative  
Extension Service

"EDUCATION IS OUR BUSINESS"

What is the Best Use for Marsh Beach? \*

by Bobby N. Irby, Man and the Gulf of Mexico. Topic I:  
Marine and Estuarine Ecology, 1980

During this investigation you are going to participate in a simulation game concerning land use in a hypothetical community. You'll analyze what you have done, and present some ideas which will enable you to think critically about real environmental issues in your community. The techniques you are to use are those of simulating real issues, and combining the element of role-playing. You will assume the roles of decision-makers in a simulated environment and compete for certain objectives according to specified procedures and rules. The major problem of this simulation activity will be:

To decide what are some of the possible uses of the 3-mile (1,250 acre) Marsh Beach which the City has recently purchased at a cost of \$3 million. Acreage along the Gulf is sandy beach and dunes and covers one-third of the area. Another third is low brush and pines. The third on the Bay side is marsh.

Part I

For the next 10 minutes you are to read the background information for Seaport City, and list some possible uses of the vacant Marsh Beach area.

The Marsh Beach area, which has been held by the Lonely Estate Trust since its owner died in 1903, has been purchased by Seaport City to prevent it from falling into the hands of developers before the City Planning Board has an opportunity to decide how the property can best benefit the City.

Background Information Sheet: Seaport City

The population is 250,000 and rapidly increasing.

The City's boundaries are being extended, but the suburban fringe is expanding even more rapidly along the coast and up the river with industry moving in adjacent to the interstate highways.

The rapid growth is accompanied by demands for more housing, more jobs, additional municipal services and recreational areas.

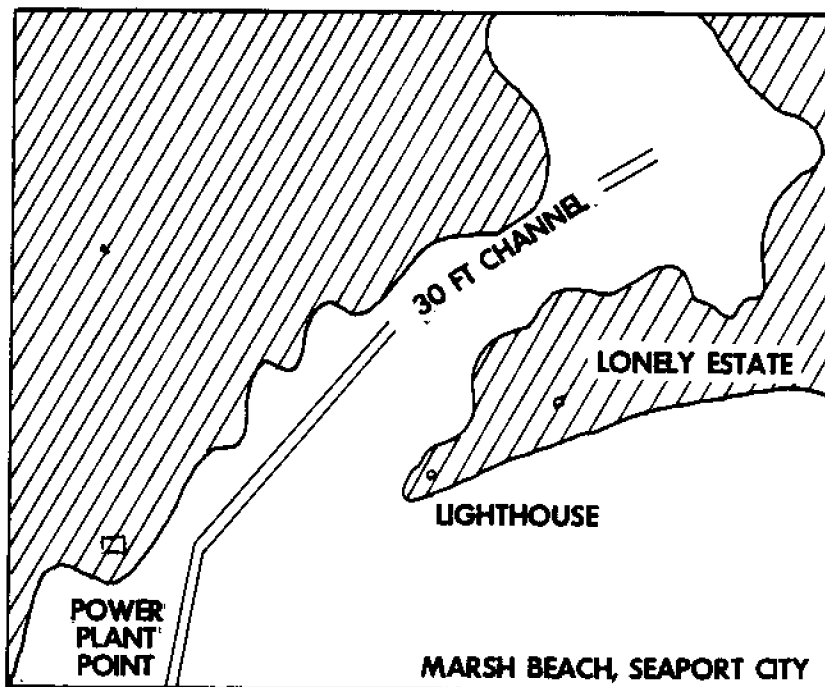
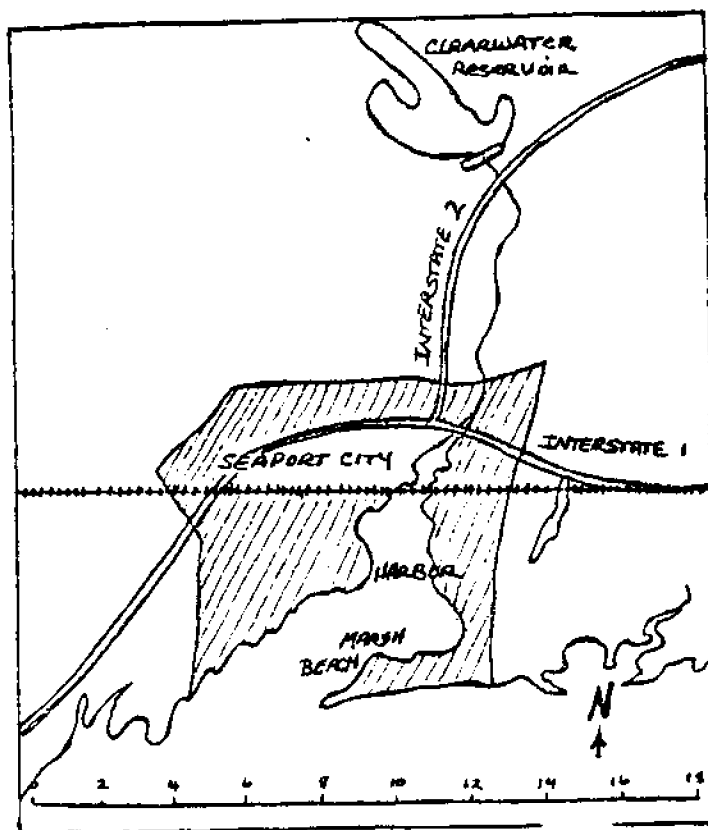
The City's harbor is the best within a hundred miles. Though its present harbor facilities are adequate, with good rail and highway links, the channel must be maintained by dredging and will not accommodate the new supertankers.

The surrounding coastal plain is glacial till and is mostly second growth hardwood forest with little timber value. There are a few scattered dairy and poultry farms, but most agricultural produce is shipped in from other parts of the country. The land to the north is hilly with coniferous (evergreen) forest.

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\* Published in celebration of the Year of the Coast by the Alabama Coastal Area Board, Mississippi-Alabama Sea Grant Consortium and the Alabama Cooperative Extension Service





### Part III

(Note to Leaders: Refer to the agent supplement of this simulation game for instructions about how to proceed.)

Your group will now have 20 minutes to plan a strategy and develop a 3-minute presentation to be made at the next City Planning Board meeting. The presentation should be a proposal for developing the undeveloped Marsh Beach Area. Your group must have a visual display such as a land use map drawing as a part of your presentation, and more than one person in your group must help in making the presentation.

On a separate sheet of paper outline your group's presentation.

### Part IV

Each group select a spokesperson to make your presentation. Keep your presentation to 3 minutes.

### Part V

An adequate discussion of the questions in Part V is one of the most important aspects of the activity because it emphasizes that we need a variety of information and data before we can intelligently make a land management or environmental decision to best meet the needs of people and their environment. This question list has all the elements that need to be considered in studying a local environmental issue or concern.

1. Did new leadership emerge during this session? What factors enabled this to happen? Call on staff observers if used.

2. Did your group work as a team? What did your group do to insure participation by all members of the group?

3. What happened in the groups? How did you feel as a person? What about the criteria used? How did each observer see the interaction in the groups?

4. What additional data would you have liked to have had for your groups? List on board, e.g.: topography, vegetation, economy of area, railroad, shopping center, adjacent land, climate, soil survey, historical information, floor plan, wildlife, interest of board of control, money available, educational needs, regulations by State, existing zoning, political climate, population information (age needs, race, jobs). What elements in the community discussion might support each interest?

### Part VI

One group of people working with simulation games has identified at least three basic characteristics of most simulation games:

- a. There is a problem to be solved.
- b. The factors affecting the decisions are identifiable.

- c. The group or individuals with different interests who will be affected by the decision can be identified.

Let's see if the game we just played had these components.

- a. What was the clearly defined problem in the Land Use Alternatives simulation? \_\_\_\_\_

- b. What factors influenced the decision in the Land Use Alternatives Simulations? \_\_\_\_\_

- c. We assigned groups to fit each role in the Land Use Alternatives Simulation, but we all helped develop those roles from the items we listed on the chart. What group of individual roles were identified? How were they identified?



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