

# SPARTINA BEACH ACTIVITY

The **GOAL** of this activity is to **improve the resilience of Spartina Beach**.

The federal government has given the City of Spartina Beach **\$1,000,000** to improve resiliency and decrease flooding. The Mayor of Spartina Beach has invited stakeholders- small business owners, environmental scientists, public works professionals, homeowners, and large developers- to a special meeting to decide how to use these funds.

## STUDENT INSTRUCTIONS:

1. Review the priorities for the stakeholder group you are a part of, found on the card you've been given about your group.
2. Review the map and description of Spartina Beach on **WORKSHEET 1**.
3. In your group, discuss the **LAND USE TYPES** and **RISK LEVELS** of Spartina Beach. (Risk levels -Low, Medium, High- refer to how likely an area is to flood or be damaged by extreme weather.)
4. Review the **SOLUTIONS CARDS** for different ways to improve resilience. (*Each solution card has \$ symbols and water droplets; \$ represents the cost to use the solution and water droplets represent the positive impact the solution will have on the environment and the community.*)
5. Your group has been given 20 \$ cards worth \$10,000 each. For every \$ symbol listed on a solution card, you must use one \$10,000 bill. (*For example, to build 1 sea wall or hardened shoreline, you must use 4 \$ cards = \$40,000*).
6. Discuss as a group how you want to use your money to improve the resilience of your assigned zone (1-5). (*The objective is to get the greatest number of water droplets using the money you've been given with the interests of your group in mind.*)
7. Fill in the table on **WORKSHEET 2**. Calculate \$ spent (column C) and environmental quality (column E) by multiplying the cost and droplets by the # of times the solution is used.
8. Have your group's spokesperson share the solutions you chose with the class and explain why your group made those choices. Listen to the other stakeholder groups and their perspectives.
9. After hearing from all groups, review your solutions and make any wanted changes. If you want to keep your responses the same, that is fine, but this is your opportunity to make changes.
10. After all groups are finished, there will be a final discussion among all stakeholder groups about the best solutions to increase the resilience of Spartina Beach using the total of \$1,000,000.
11. After the community-wide discussion, your teacher will reveal the **RESILIENCE RATINGS** and calculate how much the City of Spartina improved its resilience.
12. Take a moment to answer and discuss the **REFLECTION QUESTIONS** on the back of this sheet.

## REFLECTION QUESTIONS:

Which solutions were the most used?

Which solutions gave the highest environmental quality rating? Why do you think this is so?