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Coastal Projects In Louisiana Student Sheet

Lesson 6 > Part 1 > Multiple Lines of Defense

Task 1: Identifying Projects

The type of coastal restoration and protection projects vary depending on the needs of a particular area. Use the **Coastal Scenario Maps 1 and 2** (pages 6 and 7) and the **CPRA Coastal Master Plan Project Categories** (page 8) to identify possible projects for Plaquemines Parish and Terrebonne Parish along the Louisiana coast and answer the questions below.

Scenario Map 1 (Plaquemines Parish, Louisiana)

1. Identify the coastal zones and waterways (barrier islands, freshwater marsh, saltwater marsh, bayous, rivers, etc.). How would coastal land loss affect these areas?

Using the CPRA Coastal Master Plan Project Categories on page 8, list five project types that would best benefit the parish and explain how these projects would benefit the area. Mark the possible location of each project on Scenario Map 1 (page 6).



3. Identify the coastal zones and waterways (barrier islands, freshwater marsh, saltwater marsh, bayous, rivers, etc.). How would coastal land loss affect these areas?



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4. Using the **CPRA Coastal Master Plan Project Categories** on page 8, list five project types that would best benefit the parish and explain how these projects would benefit the area. Mark the possible location of each project on Scenario Map 2 (page 7).



Task 2: Comparing to the CPRA Coastal Master Plan

Each parish along the Louisiana coast has identified areas to implement different types of projects as part of the Coastal Master Plan. Use the **CRMS Spatial Viewer** tool to see what types of projects are planned for Plaquemines Parish and Terrebonne Parish.

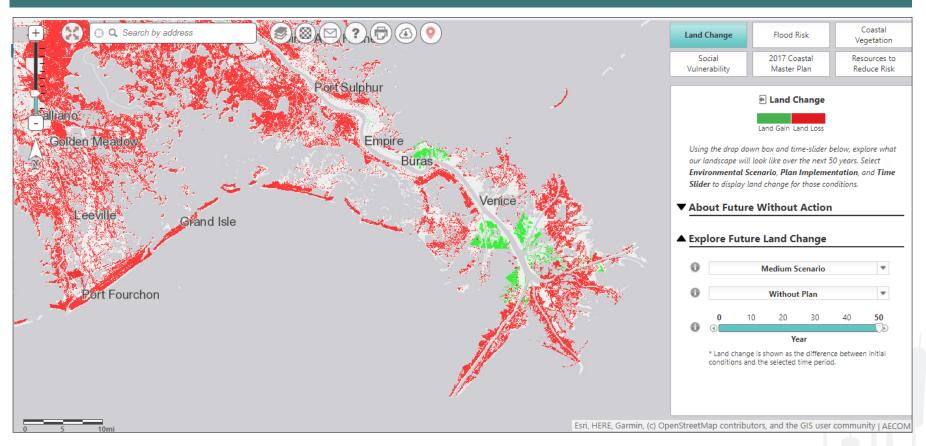
Navigate to the <u>CRMS Spatial Viewer</u> (https://lacoast.gov/crms_viewer/Map/CRMSViewer) on your computer.

- On the layers section of the left panel, turn off the CRMS site layer by unchecking the CRMS box and turn on the Master Plan project layer by checking the box next to the Master Plan.
- Scroll to the bottom of the layers section and click the drop-down arrow next to base layers. Check the box next to World Grayscale.
- On the legend section of the left panel, scroll to the bottom to find the Master Plan project symbols.
- Using the zoom function on the right side of the screen, zoom into Plaquemines Parish.
- 5. What types of Master Plan projects are included for Plaquemines Parish? Is your project list from Scenario Map 1 similar to the Master Plan project map?

6. Zoom back out to see the whole Louisiana coast. Zoom into the area around Houma, Louisiana (Terrebonne Parish). What types of Master Plan projects are included for Terrebonne Parish? Is your project list from Scenario Map 2 similar to the Master Plan project map?



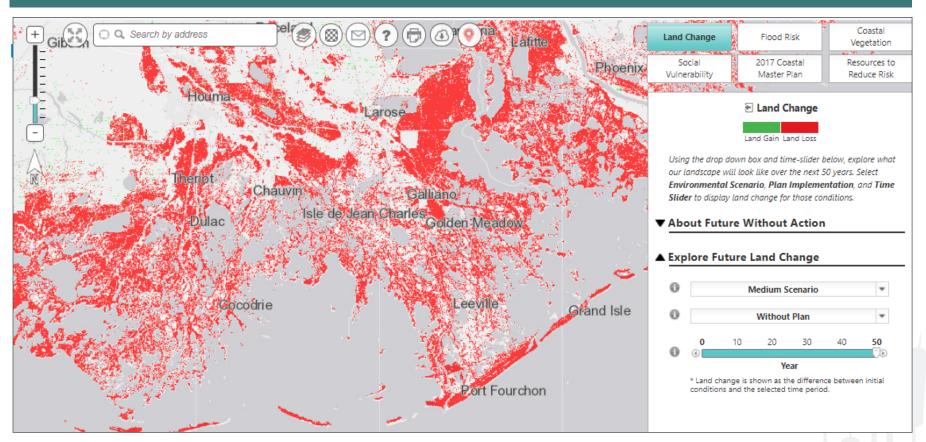
Coastal Protection and Restoration Authority



Mark the possible location of each of your proposed projects on the map above.



Coastal Protection and Restoration Authority



Mark the possible location of each of your proposed projects on the map above.



CPRA Coastal Master Plan Project Categories

Coastal restoration and protection projects are divided into the categories below. Use these categories to determine the appropriate projects for the Scenario Maps.

RESTORATION				RISK REDUCTION
Bank Stabilization	Barrier Island Restoration	Marsh Creation	Diversions	Structural Protection
Maintain shorelines & reduce wave erosion through placement of fill & plantings	Creation & restoration of dune, beach, and back barrier marsh	Creation of new wetlands	Use of channels & structures to divert water from the Mississippi River	Reduce flood risk by acting as physical barriers against storm surge
Ridge Restoration	Shoreline Protection	Hydrologic Restoration	Oyster Barrier Reef	Nonstructural Protection
Restore natural ridge functions through dredging, sediment placement, & planting	Near-shore rock breakwaters reduce wave action on shorelines	Restore natural water flow patterns	Designed to improve oyster populations & serve as breakwaters	Elevate & floodproof building, help property owners prepare for flooding or move out of areas of high flood risk