



Sea Level Rise Student Sheet

Lesson 3 > Part 1 > Rising Sea Level

The **NOAA Digital Coast Sea Level Rise Viewer** is a model that shows how specific locations along the coast might be affected by rising sea levels over time. Follow the instructions below and use the Sea Level Rise Viewer to answer the questions as you go.

- Open the [NOAA Digital Coast Sea Level Rise Viewer](#) on your computer.
- First, take a moment to learn how the Sea Level Rise Viewer works:
 - On the left side is a water level indicator. The blue circle indicates the water level compared to today. (MHHW = “Mean Higher High Water,” which is the average height of the highest tide recorded each day during the recording period).
 - Listed to the left of the water level indicator are the special map features.
 - At the top is a field where you can enter an address or town/city. Only coastal locations within the continental United States are included.
 - In the top right are options for the map and a key to the colors. Zoom in and out with the buttons in the lower right.
- Now, enter “Terrebonne Parish, LA” into the search and then zoom into the map a bit.
- Change the units on the water level indicator to metric. (The switch is at the bottom of the water level indicator.)

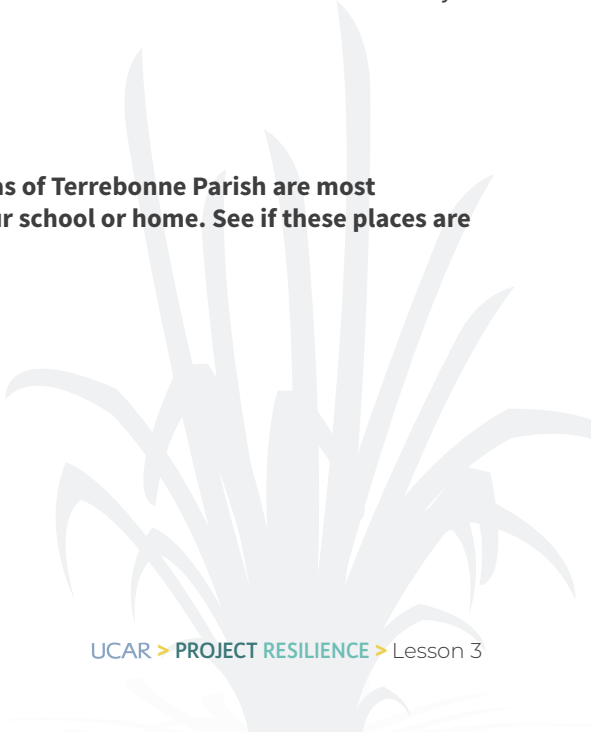
The water level in coastal Louisiana is rising at an average rate of 12.8 mm/yr.

1. Calculate how much sea level rise we should expect by 2060: _____
2. Calculate how much sea level rise we should expect by 2100: _____
Hint: You will need to convert the units to meters by dividing by 1000.
3. Move the water level indicator to view the expected amount of flooding you calculated for 2060 and 2100. How would you rate the change to your community between now and 2100? (circle one)

Mild Moderate Severe

Move the water level indicator in the Sea Level Rise Viewer to visualize what areas of Terrebonne Parish are most vulnerable to sea level rise. Use the zoom tool to find familiar places, such as your school or home. See if these places are vulnerable to sea level rise.

4. List three locations that are vulnerable to flooding in the future.
 1. _____ Water depth: _____
 2. _____ Water depth: _____
 3. _____ Water depth: _____





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5. List three locations that are protected from flooding in the future.
 1. _____ Water depth: _____
 2. _____ Water depth: _____
 3. _____ Water depth: _____

6. Why are some areas more vulnerable to flooding due to sea level rise than others?

Scientists are unable to predict exactly how much sea level rise there will be in the future, but using models like this one helps us to visualize different outcomes.

7. Why might there be uncertainty about how much the sea level will actually rise?

