

Title: Ocean Level Changes Webquest

Introduction: Changes in our climate have already begun to alter the levels of the ocean. Warming temperatures melt glaciers, evaporate water into the air and allow more precipitation to occur. This is a problem for cities located near coastlines that could be flooded if the trends continue. In this webquest, you will look at data collected over a relatively brief period of time. People have only been measuring sea level for a few decades so long range data comes indirectly from evidence on the continental shelves and coastline.

Procedures:

1. Follow the directions below and link to the websites as directed. If the website has an interesting link you may look at it briefly but remember that you do need to finish the assignment before spending too much time there. Answer the questions as you go along.

2. Open the picture at: pubs.usgs.gov/circ/c1075/images/sea.gif

a. What are two conclusions can you draw from looking at this map?

3. Go to this site:

<http://www.arctic.noaa.gov/detect/index.shtml>

On the left hand side, there is a list of “indicators” that chart the changes taking place in the Arctic. Scroll down and look at all the titles.

a. Pick three indicators to open and look for graphs that show the trends. Fill in the chart to summarize your information.

Trend	What does it show?
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- b. Does one factor seem to be the cause for the others? What?
- c. Scroll down to the “Human” indicator and open “Shishmaref”. What is happening to this village?

4. Go to this site. <http://coast.noaa.gov/slr/>
- 5.

Watch as Florida changes.

- a. What choices will citizens of Fort Lauderdale be faced with if sea level rises 5 meters?
- b. Will fresh water plants and land animals survive in the areas flooded by seawater?
6. Go to this site:

<http://coast.noaa.gov/slr/>

- a. What cities in the US should be making plans for possible sea level changes?