2nd Grade Student Guide - Sea Level Rise

Pre-Assessment/Pre-Discussion Questions:

1) What do you know about sea level rise?
2) How do you think sea level rise affects the area where you live?
3) Describe flooding you have seen around your home.

Viewing Guide Questions:

1) What is sea level rise?
2) How has the sea level changed over the last 18,000 years?
3) Explain how sea level rise can affect farming.
4) Based on the map - where is sea level rise seen the most? How much more here than in New York?

Answer Key:

1) Sea level rise is the increase in the level of the world's oceans.
2) Sea level has risen by as much as 300 feet.
3) Sea level rise affects farming by flooding the soil with saltwater, which causes plants to die, and there is less land as the water gets higher.
4) NC and Carteret County, 4 more inches in Beaufort than New York.

After Viewing Questions:

1) Does sea level rise benefit anybody? Explain your answer.
2) What is an example of things that may cause sea level rise?
3) What can happen to farm land, beaches, homes, and businesses in Down East if the sea level continues to rise?

Answer Key:

1) No, most people suffer from sea level rise however shipping routes might become easier.
2) Global warming: melting of glaciers and ice sheets.
3) They can be flooded, destroyed, or washed away

Vocabulary Activity:

2nd Grade Sea Level Rise - Fill In The Blank
https://docs.google.com/document/d/1D47n3XMo9_LRLHZI2Q4XxJjGlAAKtg3yFOlY0wm0R6w/edit?usp=sharing

2nd Grade Sea Level Rise - Fill In The Blank ANSWER KEY
https://docs.google.com/document/d/1yppoipN8reXAhGYMOQJS0J26YFWAOI_TZou88_Zfgl g/edit?usp=sharing

Hands-on Activity:

2nd Grade Sea Level Rise Experiment - Melting of Glaciers
https://docs.google.com/document/d/1yIabH0mHmhXkmVgfPhxjLsTGhDE-3BDLcBX8Q2yv1MU/edit?usp=sharing

Final Assessment Questions:

1) What can happen to plants from sea level rise?
2) Where does sea level rise happen most in North Carolina?
3) What are the main reasons that Carteret County suffers from sea level rise?

Answer Key:

1) Higher water levels can cause damp and salty soil, which is bad for plants.
2) Sea level rise is most prominent off the Carteret County coastlines.
3) It is because of how low and close we are to the water.

Going Further Questions:

1) How could we prevent sea level rise from damaging buildings in Down East?
2) How could we prevent flooding from getting worse in Down East?
3) Why should the people in Down East care about the melting of glaciers and ice sheets?

Answer Key:

1) We can prevent sea level rise from damaging buildings by building them stronger or by putting them on stilts.
2) Improved water drainage systems and higher elevated buildings.
3) We should care because both of these events will cause the sea level to rise.

Other Resources:
Sea level rise, explained by kids: https://www.youtube.com/watch?v=dfCsKmbALP0